APPENDIX O—CONTAMINATION AND TOXICS TECHNICAL APPENIDX

DESKTOP CONTAMINATION SCREENING

A desktop contamination screening was performed to identify whether the Bay Park Sewage Treatment Plant (STP), the three satellite pump stations, and the proposed alignment between the Bay Park STP and the Long Beach Water Pollution Control Plant Water Pollution Control Plan (WPCP) comply with the following United States Department of Housing and Urban Development (HUD) guidance for evaluating site contamination.[1]

Sites known or suspected to be contaminated by toxic chemicals or radioactive materials include but are not limited to sites:

- Listed on a U.S. Environmental Protection Agency (USEPA) Superfund National Priorities or Comprehensive Environmental Response Superfund National Priorities or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) List, or equivalent State list;
- Located within 3,000 feet of a toxic or solid waste landfill site;
- With an underground storage tank.

The primary focus of the screening is to identify the potential for hazardous substances or materials that may affect the health and safety of the users of the property.

DATA SOURCES

USEPA's NEPAssist on-line tool (https://www.epa.gov/nepa/nepassist) was used to identify contaminated sites that have the potential to adversely affect the proposed project site. The following databases were searched: Toxic Release Inventory Database (TRI), Radiation Information Database (RADInfo), Hazardous Waste (RCRAInfo), Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) for sites listed under the CERCLA (otherwise known as Superfund), Brownfields and Toxic Substances Control Act.

The New York State Department of Environmental Conservation (NYSDEC) Remediation Sites database and the Bulk Storage Facilities database were searched for facilities on the project site or located in the vicinity of the site.

Additional sources included: *Long Beach WPCP Consolidation Project – Subsurface Environmental Investigation Report*, Nassau County Department of Public Works (May 22, 2020); and *Phase II Environmental Site Investigation, Long Beach Wastewater Treatment Plant, 2 West Pine Street – Long Beach, NY 11561 Section 59, Block 278, Lot 29,* Tenen Environmental (April 23, 2020).

NYSDEC Remediation Sites

No remediation sites were identified on the Bay Park STP site or the alignment between the Bay Park STP and the Long Beach WPCP. Five facilities within 3,000 feet of the project site were listed on the State Superfund Program database (see **Figure 1**).

[1] https://www.hudexchange.info/programs/environmental-review/site-contamination/.

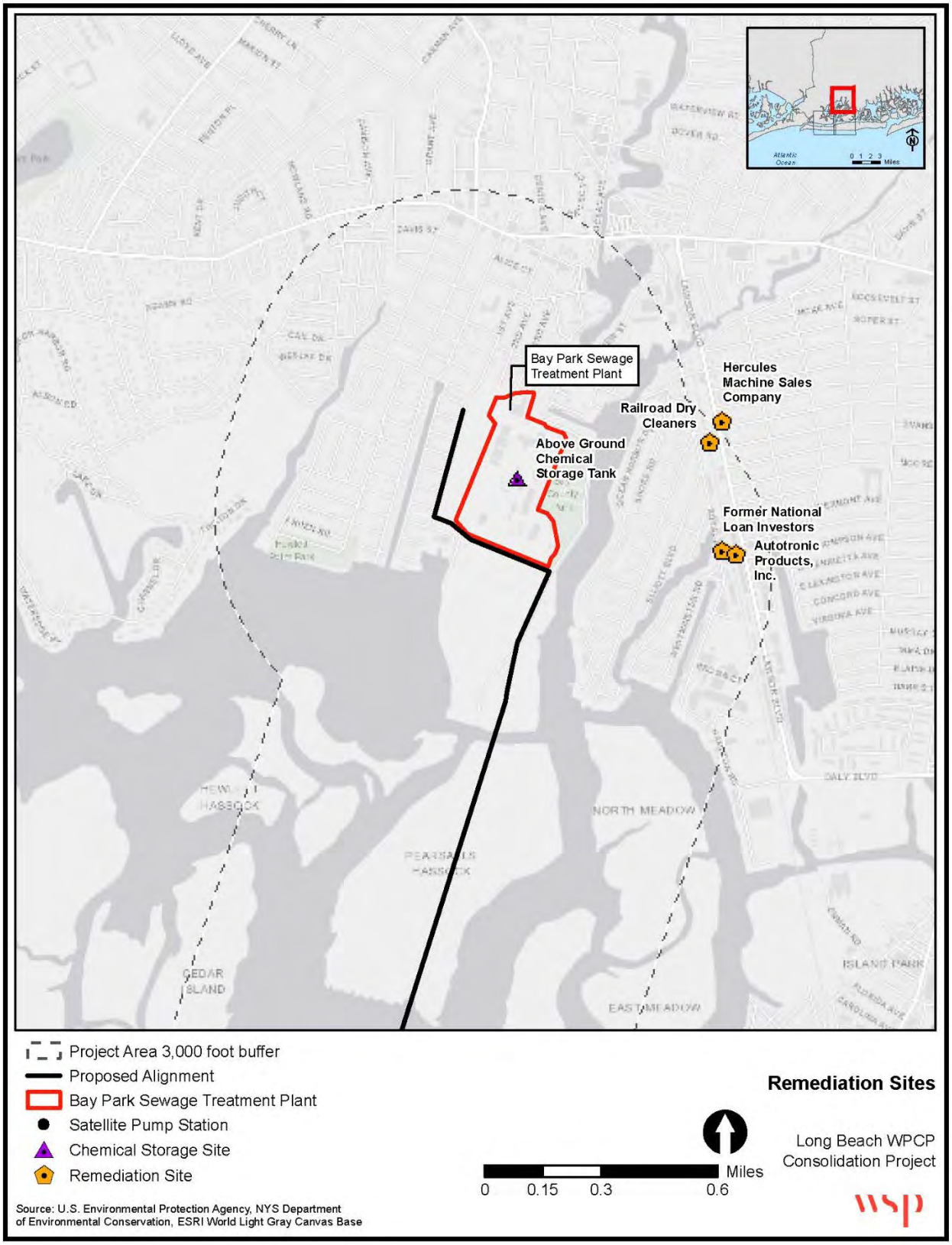

Figure 1a: Remediation Sites

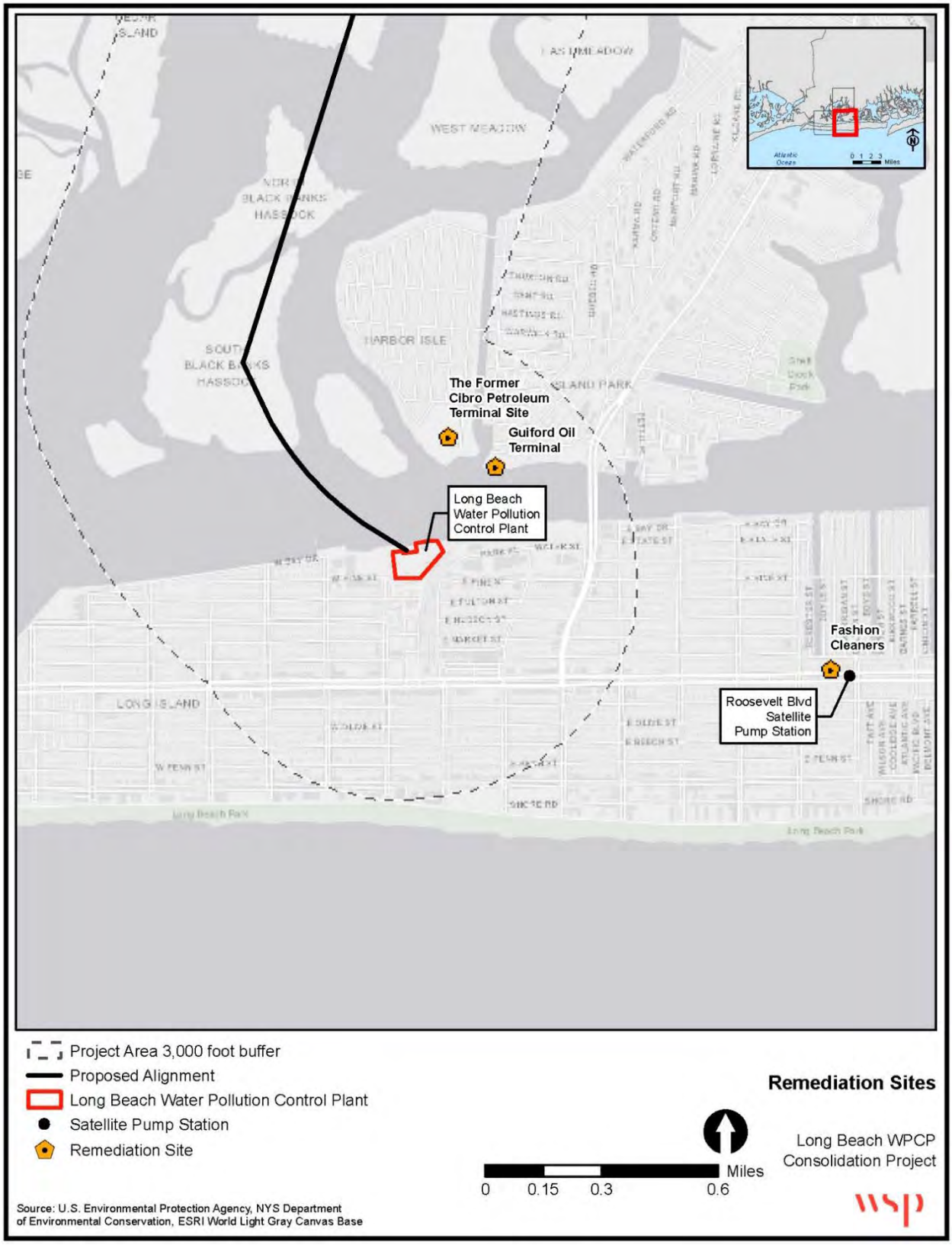

Figure 1b: Remediation Sites

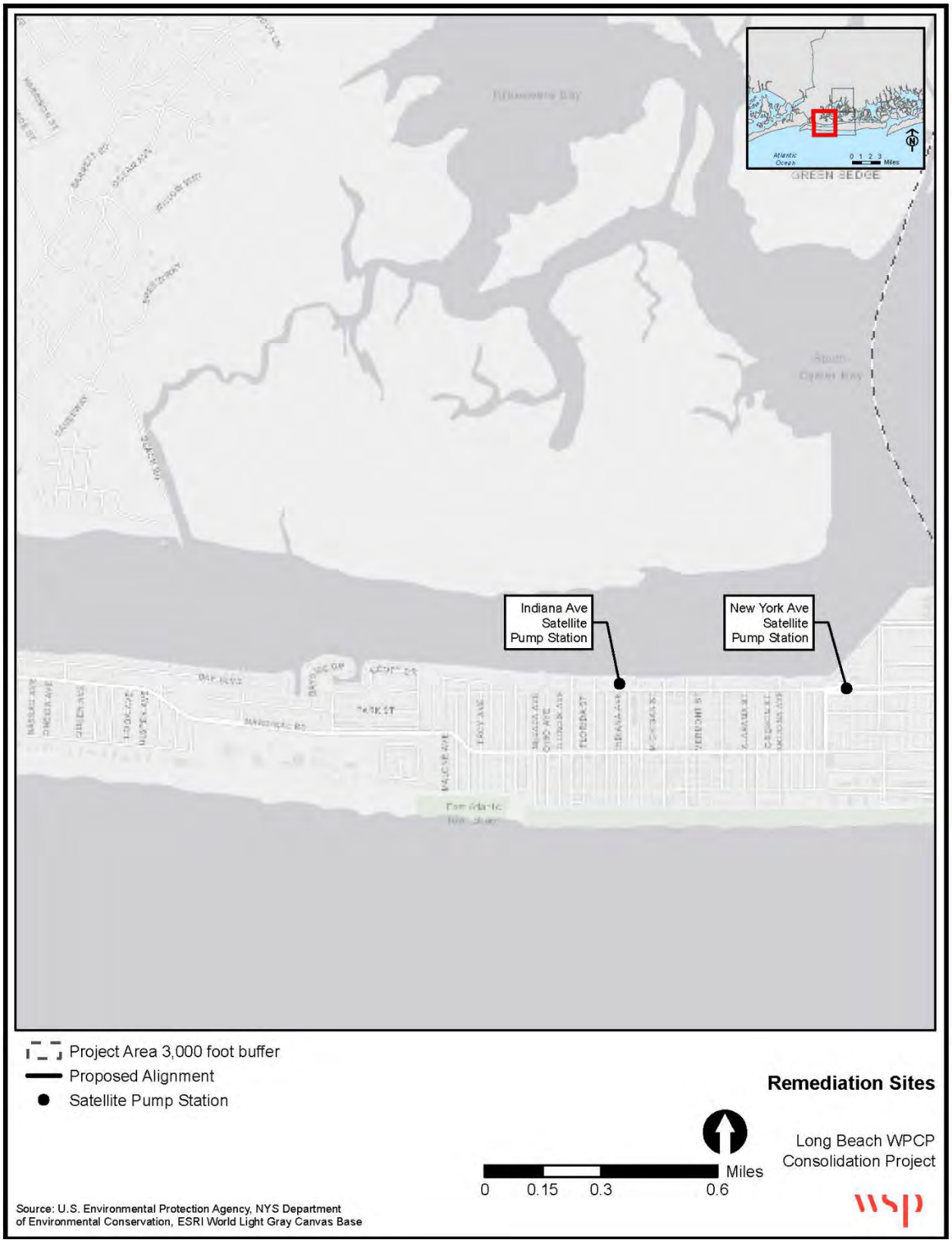

Figure 1c: Remediation Sites

Hercules Machine Sales Company (Site Code: 130083, Classification 02[2]), a site in the State Superfund Program, is located approximately 1,700 feet to the east of the Bay Park STP at 3188 Lawson Boulevard in Oceanside. Based on investigations conducted to date, the primary contaminants of concern include tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (1,2-DCE), and vinyl chloride. Soil sampled from behind and beneath the on-site building contained levels of PCE exceeding the unrestricted use soil cleanup objective (USCO) of 1.3 parts per million (ppm). Maximum PCE concentrations behind and beneath the on-site building were 104 ppm and 13 ppm, respectively. In addition, one soil sample behind the building had a 1,2-DCE concentration of 6.36 ppm, exceeding the USCO of 0.25 ppm. The highest concentrations of on-site groundwater contamination were detected at the water table, assumed to be at a depth of approximately 5 feet below ground surface (bgs). Information regarding depth to the water table is not provided; however, the site is approximately 5 feet above the level of the adjacent Hewlett Bay. Maximum PCE, TCE, and cis-1,2-DCE concentrations in the on-site groundwater were 1,300 parts per billion (ppb), 410 ppb, and 200 ppb, respectively. The New York State groundwater standard for each of these compounds is 5 ppb. The highest concentrations of off-site groundwater contamination were detected between 23 and 59 feet bgs. Maximum PCE, TCE, cis-1,2-DCE and vinyl chloride concentrations in the off-site groundwater were 13,000 ppb, 1,900 ppb, 1,200 ppb, and 79 ppb, respectively. PCE levels in the sub-slab vapor, indoor air and outdoor air at the site were 793 micrograms per cubic meter of air ($\mu g/m^3$), 52 $\mu g/m^3$, and 29 $\mu g/m^3$, respectively. These levels indicate the need for soil vapor mitigation. The site presents a significant threat to human health associated with current and potential exposure to volatile organic compounds (VOCs) and a significant environmental threat associated with the current impacts of contaminants to a sole source aquifer.

Railroad Dry Cleaners (Site Code: 130066, Classification 02), a site in the State Superfund Program, is located approximately 1,680 feet to the east of the Bay Park STP at 3180 Lawson Boulevard in Oceanside. Based on investigations conducted to date, the primary contaminants of concern include PCE, TCE, cis-1,2-DCE, and vinyl chloride. Soil sampled from in front of, behind, and beneath the on-site building contained levels of PCE exceeding the unrestricted use soil cleanup objective of 1.3 ppm. Maximum PCE concentrations in front of, behind, and beneath the on-site building were 24 ppm, 6.5 ppm, and 18 ppm, respectively. The highest concentrations of on-site groundwater contamination were detected between the water table and 39 feet bgs. Maximum PCE, TCE, cis-1,2-DCE, and vinyl chloride concentrations in the on-site groundwater were 6,400 ppb, 1,700 ppb, 760 ppb, and 180 ppb, respectively. The New York State groundwater standard for each of these compounds is 5 ppb, except for vinyl chloride, which has a groundwater standard of 2 ppb. The highest concentrations of off-site groundwater contamination were detected between 23 and 59 feet bgs. Maximum PCE, TCE, cis-1,2-DCE, and vinyl chloride concentrations in the off-site groundwater were 13,000 ppb, 1,900 ppb, 1,200 ppb, and 79 ppb, respectively. The site presents a significant threat to human health associated with current and potential exposure to VOCs and a significant environmental threat associated with the current impacts of contaminants to a sole source aquifer.

[2] Class 02: This classification is assigned to a site at which: the disposal of hazardous waste has been confirmed and the presence of such hazardous waste or its components or breakdown products represents a significant threat to public health or the environment or, hazardous waste disposal has not been confirmed, but the site has been listed on the Federal National Priorities List.

Former National Loan Investors Site, (Site Code: 130168, Classification P[3]), a site in the State Superfund Program and in the Brownfield Cleanup Program (BCP), is located approximately 1,900 feet to the east of the Bay Park STP at 3333 Royal Avenue in Oceanside. Due to the historic release of spent solvents to a site storm drain, site soils, groundwater, and soil vapor were impacted with chlorinated solvents, other VOCs, semi-volatile organic compounds (SVOCs), and metals. Environmental sampling data collected from the storm drain located in the facility's loading dock in 2003 reported elevated levels of tetrachloroethane (1,627 ppm) and trichloroethane (710 ppm), both of which are above the Commercial Use Soil Cleanup Objectives (SCO) of 150 ppm and 200 ppm, respectively. Levels of metal compounds, such as copper (143,241 ppm) and nickel (24,402 ppm) exceeded Commercial Use SCOs of 270 ppm and 310 ppm, respectively. The dry well and surrounding soils were subsequently remediated. Hydrologic investigations conducted in 2003 and 2005 and again in 2010 demonstrated a decreasing trend of chlorinated solvents in groundwater, although some areas on the site contained contamination above standards.

Autotronic Products, Inc. (NYSDEC Site Code: 130030, Classification 3[4]), a site in the State Superfund Program, is located approximately 2,000 feet to the east of the Bay Park STP on Lawson Boulevard in Oceanside. A state-funded Preliminary Site Assessment (PSA), was completed in 1993. It revealed that 1,1,1-trichloroethane, PCE, and derivatives of the compounds existed in the groundwater beneath the site at a total concentration of 910 ppb. These elevated levels were found only in the well located closest to the waste solvent disposal. In the well farther downgradient, these contaminants were either undetected or at much lower concentrations. It is evident that due to the low permeability associated with the site-specific soils and the facility's location (in a groundwater discharge zone and far from any supply wells), the site does not pose a significant threat to the environment.

Fashion Cleaners (NYSDEC Site Code: 130170, Classification 02), a site in the State Superfund Program, is located approximately 200 feet to the northwest of the Roosevelt Boulevard and East Park Avenue satellite pump station site. Investigations have identified significant PCE contamination in on-site soils and groundwater. PCE levels in soil samples were up to 330 ppm. Groundwater samples contained PCE at up to 19,000 ppb and breakdown product trichloroethene (TCE) at up to 45,000 ppb. Approximately 73 tons of soil contaminated by PCE was removed from the interior of the site and from the rear courtyard for off-site treatment and disposal. Sub-slab depressurization systems (systems that ventilate/remove the air beneath the building) have been installed in the on-site building to prevent the indoor air quality of the former Fashion Cleaner commercial space and the two neighboring spaces from being affected by the contamination in soil vapor beneath the building. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

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[3] Class P: NYSDEC offers this information with the caution that it should not be used to form conclusions about site contamination beyond what is implied by the classification of this site, namely, that there is a potential for concern about site contamination. Information regarding a Class P site (potential Registry site) is by definition preliminary in nature and unverified because NYSDEC's investigation of the site is not yet complete. Due to the preliminary nature of this information, significant conclusions or decisions should not be based solely upon this summary.
[4] Class 3: Assigned to a site at which contamination does not presently and is not reasonably foreseeable to constitute a significant threat to public health or the environment. This classification is not to be used for sites where insufficient data are available to make a definitive decision concerning significant threat.

NYSDEC Brownfield Cleanup Program Database

No Brownfield Cleanup Sites were identified on the Bay Park STP site or the alignment between the Bay Park STP and the Long Beach WPCP. Two facilities within 3,000 feet of the project site were listed in the database.

The Former Cibro Petroleum Terminal Site (Site Code C130159, Classification C[5]), is located on the southern shore of Island Park, across Reynolds Channel from and approximately 1,200 feet northeast of the Long Beach WPCP. Remediation of the site is complete. Prior to remediation, the primary contaminants were petroleum-related compounds in soil and groundwater. Measures are in place to prevent contact with residual contamination in soil and groundwater. VOCs in the contaminated groundwater or contaminated soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Soil vapor intrusion is not a current concern because the site is vacant. The potential for soil vapor intrusion to occur will be evaluated prior to occupancy of any buildings constructed on-site.

Guiford Oil Terminal (Site Code C130197, Classification N[6]) is located on the southern shore of Island Park, across Reynolds Channel from and approximately 1,500 feet northeast of the Long Beach WPCP. Contaminants that are known to affect the soil and/or groundwater and/or soil gas are petroleum, other VOCs, and SVOCs. A supplemental investigation of the site is currently being proposed under the BCP to fully define the extent of the previously identified contamination. Site conditions are similar to the former Cibro site (BCP #130153) immediately across "The Basin" just west of the Guiford Oil Terminal site. Information submitted with the BCP application regarding the environmental conditions at the site is currently under review and will be revised as additional information becomes available. Submitted data indicate the presence of VOCs and SVOCs ranging from non-detect to approximately 40,000 ppb in soil. A number of contaminants of concern (COCs) are in concentrations that exceed their respective Recommended Soil Cleanup Objectives (RSCOs). Historically, on-site monitoring and recovery wells had significant floating product.

NYSDEC Bulk Storage Database

This database contains records of facilities that are or have been regulated under one of the Bulk Storage Programs - Petroleum Bulk Storage, Chemical Bulk Storage, and Major Oil Storage Facility. The database compiles records of both aboveground and underground storage tanks. One aboveground

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[5] Class C: Used for sites where NYSDEC has determined that remediation has been satisfactorily completed under a remedial program (i.e., State Superfund, BCP, Environmental Restoration Program, Voluntary Cleanup Program, and RCRA Corrective Action Program). State Superfund (Registry) sites must have completed all active operation, maintenance, or monitoring requirements before they can be delisted and made class C. Non-registry sites may be made a class C after successful completion of all required construction or after a no further action remedy has been selected by the Department. These sites will be issued a Certificate of Completion (COC) but may still require ongoing maintenance and periodic certification of institutional/engineering controls (IC/ECs).

[6] Class N: NYSDEC offers this information with the caution that the amount of information provided for Class N sites is highly variable, not necessarily based on any NYSDEC investigation, sometimes of unknown origin, and sometimes is many years old. Due to the preliminary nature of this information, significant conclusions or decisions should not be based solely upon this summary.

chemical bulk storage tank, located at the Bay Park STP, was identified, but no underground tanks located at the Bay Park STP or the proposed alignment, were identified in a search of this database.

Historical Land Use

According to United State Geological Survey (USGS) topographic maps of the area, the site of the Bay Park STP was a submerged portion of Hewlett Bay until as late as 1945 (however, the 1945 USGS topographic map is a revised printing of the 1903 edition of the map).[7] The Bay Park STP was originally constructed in the late 1940s, and was placed into operation in 1950.[8] Prior to development of the STP, the land was marsh associated with Hewlett Bay.[9]

Development on or adjacent to that portion of the pipeline alignment between Long Beach and Bay Park is limited to a few "bay shacks" that likely supported local use of the marshlands, and a sludge storage facility associated with the Bay Park STP. As far back as 1947,[10] bay shacks are identified on the east side of South Black Bank Hassock. Land modification consistent with the installation of the Bay Park STP pipeline appears on the 1954 map.[11]

Development on the east side of Pearsalls Hassock, approximately 150 feet east of the proposed pipeline alignment, includes two 1.66 million-gallon aboveground sludge storage tanks. The steel tanks, approximately 100 feet in diameter and 35 feet tall, were put into service in February 1964.[12] Sludge was pumped from the Bay Park STP via a force main approximately 1.5 miles in length. The sludge was then transferred to tankers for ocean disposal. In 1976, an explosion in one of the tanks demolished both tanks. The tanks were removed sometime afterward. No records in the NYSDEC or USEPA databases pertaining to this facility were identified.

The Bay Park Golf Course is located adjacent to and directly south of the Bay Park STP. The golf course was developed sometime after 1966.

Excavation and Drilling

Two subsurface investigations were conducted to characterize soil and groundwater in the vicinity of project elements that would require excavation or other in-ground work. The two investigations are summarized below.

<u>Long Beach WPCP Phase II ESI</u>

A Phase II Environmental Site Investigation (ESI) was conducted within the anticipated limits of disturbance for construction of the new pump station and associated improvements at the Long Beach WPCP. The ESI included sampling and testing of soil and groundwater. Acetone, mercury, and pesticide were identified in soil samples from the area proposed for excavation associated with the project. Two polyaromatic hydrocarbons (PAHs) and sodium were detected at levels slightly exceeding standards in groundwater from the same area.

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[7] USGS, Hempstead, NY, 1:62,500 scale, 1945 reprint of 1903 map.
[8] Federal Emergency Management Agency, available at: https://www.fema.gov/bay-park-sewage.
[9] USGS, 7.5 minute quadrangle, Lynbrook, NY, 1954.
[10] USGS, 7.5 minute quadrangle, Lynbrook, NY, 1947 and 1954.
[11] USGS, 7.5 minute quadrangle, Lawrence, NY, 1954.
[12] Report on the Bay Park Sludge Storage Tank Explosion, Nassau County Department of Public Works, August 2976.

In general, the report makes the following conclusions:

While limited, soil impacts are present above the unrestricted use standards. All soil generated from the site should be characterized for disposal, including additional sampling if required by the receiving facility, and disposed of in accordance with all applicable federal, state, and municipal regulations, including 6 New York Codes, Rules and Regulations (NYCRR) Parts 360 and 364. If dewatering is required during construction, groundwater should be disposed of in accordance with all applicable federal, state, and municipal regulations, including the New York State Pollutant Discharge Elimination System (SPDES) program if discharging to surface water.

Subsurface Investigation

An environmental investigation for the alignment of the proposed sewage pipeline (force main) from the Long Beach WPCP to the Bay Park STP. As part of the geotechnical investigation, subsurface environmental sampling program consisted of collecting 94 soil samples for laboratory analysis from 6 soil borings (2 in-water, 2 marsh, and 2 landward) along the proposed force main alignment. Analytical results from the samples showed low-level detections of VOCs, metals, PCBs, and pesticides, and derived waste materials from construction at levels expected to be classified as non-hazardous.

In general, the report makes the following conclusions:

- Additional testing of soils stockpiled on-site and proposed for disposal must be completed during construction;
- The level of contamination in some locations is such that if soils are proposed for reuse as backfill, a clean layer of soils 12-inches in thickness will need to be applied atop contaminated soils in areas that will be accessible to the public; and
- During construction, measures should be taken to minimize the migration of waste material offsite (i.e., runoff from stockpiles, dust plumes). Such measures would include the capture of all drill cuttings from the horizontal directional drilling (HDD) work in containers prior to off-site disposal, periodic water sprinkling to minimize airborne dust, and haybale perimeters to prevent inadvertent runoff.

Excavation for launch and retrieval sites for the horizontal drilling rig would be located in four places along the alignment: within the boundaries of the Long Beach WPCP (see the Phase I Environmental Site Assessment conducted for this facility); at the approximate center of South Black Banks Hassock, on the southern part of Pearsalls Hassock, and in the park area south of the Bay Park Golf Course.

HDD would generate some amount of spoils that would require removal. Portions of the alignment would be excavated using open cut methodology. These excavated soils would be stockpiled on-site and returned to the excavation after the piping is installed. During construction, users of the project site would include those normally employed in the operation of the two facilities and those involved in construction of the pipeline. Only those users engaged in construction activity would be exposed to excavated soils. After the project has been constructed, the project site would revert generally to conditions currently existing.

CONCLUSIONS

The primary focus of the screening is to identify the potential for hazardous substances or materials that may affect the health and safety of the users of the property. No sites listed on the USEPA's Superfund National Priorities or CERCLA List, or the New York State equivalent were identified for the Bay Park STP

or the pipeline alignment north of the Long Beach shoreline. No underground storage tanks were identified at the Bay Park STP or along the alignment north of the Long Beach shoreline.

A chemical bulk storage tank was identified in the NYSDEC database as located at the Bay Park STP. In addition, the Bay Park STP was built on former salt marsh that was drained and filled. Historical fill material has potential for contamination.

RECs were identified within 3,000 feet of the Bay Park STP and the alignment between the Long Beach WPCP and the Bay Park STP. Five sites listed on the NYSDEC Environmental Remediation Sites (state National Priorities List equivalent) involve contamination in soil, groundwater, and soil vapor. Two BCP sites are located on the southwestern part of Island Park. The remediation sites are located more than 1,600 feet from the project site, and the BCP sites are more than 1,200 feet away, and all are separated from the project site by open water. One of the remediation sites is located approximately 200 feet from the satellite pump station at East Park Avenue and Roosevelt Boulevard. Construction at the Roosevelt Boulevard pump station would not include activities that would encounter contamination (if any remains) at the Fashion Cleaners remediation site.

This screening revealed that the project area contains no sites listed on the NYSDEC Environmental Site Remediation Database, and the Phase I Environmental Site Assessment identified no such sites on the Long Beach WPCP. An underground petroleum storage tank was identified on the Long Beach WPCP property; however, no leaks associated with the tank were reported, and site personnel have stated that the tank is tested yearly. The operations at the Long Beach WPCP site, including current wastewater treatment operations and historical Long Island Rail Road freight operations, are considered a *de minimis condition*. The former operation of the sludge storage tanks on Pearsalls Hassock and the subsequent explosion and demolition of the tanks are also considered a *de minimis* condition. Contamination is not expected to be encountered during construction related to installation of the pipeline.

However, accidental discovery of contaminated soils cannot be entirely ruled out. As such, to ensure that humans and wildlife would not be exposed to contaminated soil and sediments during upland excavation, mitigation to address accidental discovery of contaminants would be addressed through the NYSDEC permitting process.

LONG BEACH WPCP PHASE I ESA

Phase I Environmental Site Assessment
Long Beach Water Pollution Control Plant
2 West Pine Street
Long Beach, New York

January 8, 2020

Prepared for: Governor's Office of Storm Recovery
25 Beaver Street
New York, New York 10004

Prepared by: First Environment, Inc.
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FIGURE 1 SITE LOCATION MAP

FIGURE 2 SITE VICINITY MAP

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Executive Summary

First Environment, Inc. (First Environment), on behalf of New York's Governor's Office of Storm Recovery (GOSR, or the "User"), has completed a Phase I Environmental Site Assessment (ESA) of the Long Beach Water Pollution Control Plant (Long Beach WPCP, or the facilities) located at 2 West Pine Street, Long Beach, Nassau County, New York 11561 (the Site). This ESA was conducted to identify, to the extent feasible, recognized environmental conditions (RECs), controlled RECs (CRECS), and historical RECs (HRECs) in connection with the Site; to qualify for landowner liability protection (LLP) under the Federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA); and to understand the potential environmental conditions that could materially impact the operation of business associated with the Site. The ESA was conducted in accordance with the requirements of ASTM E1527-13.

The Site is comprised of approximately six total acres and is improved with eight one-story concrete block buildings with associated asphalt-paved parking lots.

The City of Long Beach (the "City") owns and operates a 7.5 million gallons per day (mgd) WPCP, servicing approximately 33,725 residents within the City and 2,897 residents of the neighboring community of Lido Beach, within the Town of Hempstead. The Plant's northern boundary is Reynolds Channel, the bay area north of the Long Beach barrier island, and its effluent discharges into this receiving waterbody.

The Long Beach WPCP operates under New York State Pollutant Discharge Elimination System (SPDES) Permit No. NY0020567 issued by the New York State Department of Environmental Conservation (NYSDEC). The Long Beach WPCP has periodically discharged effluent in exceedance of SPDES permit limits and has not met the SPDES permit's compliance with regard to the ammonia reduction and total residual chlorine limits.

The proposed diversion of wastewater flow from the WPCP to the Bay Park STP for treatment and discharge would eliminate the need to repair and update the plant to comply with SPDES permit requirements.

The decommissioning and demolition of the remaining Long Beach WPCP facilities and the repurposing/redevelopment of the Long Beach WPCP property are not part of the Project, but

they would be part of future project(s) to be completed by others. This Phase I ESA is being conducted as part of the due diligence for the Site.

RECs are defined as the presence, or likely presence, of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. De Minimis Conditions (DMCs), which generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, are not RECs. This Phase I ESA has revealed evidence of one REC in connection with the Site as identified below.

- REC-1 – Underground Storage Tank

  Based on the Site inspection and review of publicly available information, one 2,500-gallon No. 4 heating oil UST exists on the property at the rear of the main plant building. At the time of this ESA, there have been no reported spills or releases to the environment from the tank; however, there have been numerous tank tightness test failures associated with this UST. According to records received, the most recent tank tightness test was performed in March 2010; however, Site personnel stated the tank is tested yearly for tightness. The current integrity of the tank is unknown; therefore, the conditions of subsurface soils and groundwater is also unknown due to the previously failed tightness tests. No subsurface investigations or remediation have been conducted regarding the former tank tightness test failures.

HRECs include the past release of any hazardous substance or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority, and/or meets the unrestricted use criteria established by a regulatory authority without subjecting the property to any controls or use limitations. This Phase I ESA has revealed no HRECs in connection with the Site.

CRECs include the past release of any hazardous substance or petroleum product that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of engineering controls, institutional controls, and/or activity/use limitations. This Phase I ESA has revealed no CRECs in connection with the Site.

The following issue is not considered a REC; however, it does represent a potential environmental issue related to ongoing operations and use of the Site and is therefore noted as a De Minimis Conditions (DMCs):

- DMC-1 – Historic Site Operations

  Due to the current wastewater treatment and historic LIRR rail lines on the property, these operations are considered a DMC. Although there are no Spill Numbers associated with the current wastewater treatment operations or the former LIRR freight operations, there has been no environmental subsurface investigation (i.e., soil or groundwater) to determine if the subsurface has been impacted by the current and historic operations. Any future construction plans for the Site should consider the possibility of waste disposal (that are typically associated with wastewater treatment and rail freight operations).

Information reviewed from readily available historic databases is discussed herein.

Introduction

First Environment, Inc. (First Environment), on behalf of New York's Governor's Office of Storm Recovery (GOSR, or the "User"), has completed a Phase I Environmental Site Assessment (ESA) of the Long Beach Water Pollution Control Plant (Long Beach WPCP, or the facilities) located at 2 West Pine Street, Long Beach, Nassau County, New York 11561 (the Site). This ESA was conducted to identify, to the extent feasible, recognized environmental conditions (RECs), controlled RECs (CRECS), and historical RECs (HRECs) in connection with the Site to qualify for landowner liability protection (LLP) under the Federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA); and to understand the potential environmental conditions that could materially impact the operation of business associated with the Site. The ESA was conducted in accordance with the requirements of ASTM E1527-13.

Detailed Scope-of-Services

The scope-of-services provided is consistent with the requirements set forth in the ASTM Standard E1527-13 for the completion of Phase I ESAs. The ESA consisted of a site visit which included an inspection of the surrounding area, records review, and interviews with the User and others, as appropriate. In addition, properties within a one-mile radius were evaluated based on the required minimum search distance as specified in the ASTM Standard E1527-13. No additional or out-of-scope services were requested or provided.

Significant Assumptions

The information gathered for the preparation of this report is assumed to be true and accurate. Multiple sources were crosschecked, where available, in an attempt to verify the information; however, for some data only a single source was available. No sampling or intrusive or destructive activity was conducted as part of the ESA; therefore, any discussion of concealed or subsurface conditions is based on our professional judgment and experience with similar sites, as well as review of historic site documents received, as well as FOIL requests submitted to local, county, and State authorities.

Limitations and Exceptions

First Environment performed the ESA in a professional manner using the degree of skill and care exercised for similar projects under similar conditions by reputable and competent

environmental consultants. No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. ESAs must be evaluated based on the reasonableness of judgments made at the time and under the circumstances in which they were made. First Environment does not accept responsibility for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the evaluation was performed.

Special Terms and Conditions, Deviations, and Additional Services

Any and all contractual provisions, special terms, and conditions between First Environment and the User shall be incorporated by reference. Unless otherwise specified in the scope-of-services, purpose, or reason for performing the ESA, no additional services have been bargained for nor consideration provided in the performance of the ESA. First Environment was not required to deviate from ASTM E1527-13 due to time, cost, or other considerations, with the exception of the limitations as discussed above.

User Reliance

This report represents the opinions of First Environment and is for the benefit of the User. It may not be used or relied upon by any other person or entity without the express written consent of First Environment. First Environment does not accept liability or responsibility for any action taken or not taken on account of the information presented in this report.

First Environment will not accept liability for inquiry into considerations beyond the scope of ASTM E1527-13. The User should not rely on the existence or non-existence of "non-scope considerations" or other conditions referenced in the report that are beyond the scope of ASTM E1527-13.

This report does not provide legal and/or business advice or business environmental risk as defined by ASTM E1527-13. First Environment has not been retained in these capacities and should not be relied upon for these evaluations.

User Provided Information

The User did not provide land title records or information related to environmental liens. Any land title information obtained by First Environment is discussed in the Records Review Section.

The User did not impart any specialized knowledge regarding the Site; the User did not communicate any commonly known or reasonably ascertainable information within the local community about the Site. The User did not provide any previous investigative or remedial phase reports regarding the Site.

Site Description

Location and Legal Description

The Site is located in a mixed commercial and residential area of the City of Long Beach and is located at 2 West Pine Street, Long Beach Nassau County, New York 11651, as shown on Figure 1. The Site is located on the eastern portion of Block 278, Lot 290; the Site totals approximately six acres of the larger 12.8-acres lot. The Site is bound by a Municipal Ice Arena building and tennis courts to the west, West Pine Street to the south, Reynolds Channel to the north, and Long Island Rail Road (LIRR) rail lines to the east. A Site Vicinity Map is provided as Figure 2.

Current Site Use

The City of Long Beach owns and operates a 7.5 million gallons per day (mgd) WPCP, servicing approximately 33,725 residents within the City and 2,897 residents of the neighboring community of Lido Beach, within the Town of Hempstead. The Plant's northern boundary is Reynolds Channel, the bay area north of the Long Beach barrier island, and its effluent discharges into this receiving waterbody. In addition to receiving the City's effluent discharge, Reynolds Channel receives the treated discharge from the County's Bay Park STP.

The Long Beach WPCP operates under SPDES Permit No. NY0020567, issued by NYSDEC. The Long Beach WPCP has periodically discharged effluent in exceedance of SPDES permit limits and has failed to achieve compliance with the SPDES permit's ammonia reduction and total residual chlorine limits.

Structures, Roads, and Other Improvements

The Site is improved with eight one-story concrete and brick buildings, each used in the process and operations of treating the wastewater influent into the plant. These buildings include:

- Main Plant Control/Influent Building;
- Primary Clarifier Control Building;
- Secondary Clarifiers Control Building;
- Digesters Control Building;
- Sludge Filter Building;
- Chlorine Treatment Building;

- Aluminum Sulfate Treatment Building; and
- Recirculation Control Building.

Current Uses of Adjoining Properties

The Site is situated in an area comprised of commercial and residential properties. The Site is bound as described in Table 1:

TABLE 1 - Adjoining Properties			
Direction From Site	**Property or Feature**	**Address**	**Operations/Property Use (if known)**
North	Long Island Bay / Reynolds Channel	Not Applicable	Not Applicable
East	LIRR Lines	Not Applicable	Not Applicable
South	West Pine Street	Various	Residential
West	Municipal & Public Properties	150 W Bay Drive	Municipal Ice Arena & Tennis Courts

Geologic, Hydrogeologic, Hydrologic, and Topographic Conditions

Geologic Setting

According to the United States Department of Agriculture (USDA) Web Soil Survey, the soils at the Site are classified as Urban Land with underlying subsurface consisting of mucky-peat soils, with deeper soils consisting of coarse and/or loamy sands and sapric materials. Based on the United States Geological Survey (USGS) Map (Lawrence, NY Quadrangle, 2013), the Site is approximately one foot above Mean Sea Level (aMSL). Geologic bedrock is classified as part of the Cenozoic Era.

Surface Drainage

Surface drainage at the Site consists of runoff from overland flow. Stormwater drains are located in the parking lot areas; as well as trench drains located at the parking lot entrances along West Pine Street. All storm trench drains discharge to the local municipal storm-sewerage connection that lead back into the wastewater treatment plant.

Groundwater

Groundwater data information was not reviewed as part of this Phase I ESA.

Flood Plain

Predominately, most of the Site is situated outside the 500-year flood plain in an area of minimal flooding (Zone X), as indicated by the EDR Radius Map Report provided in Appendix A. However, the main plant building is located within the 100-year flood zone identified as Zone AE.

Records Review

Standard Environmental Record Sources

In accordance with the ASTM requirements, available records for the Sites were evaluated through a database search prepared by Environmental Data Resources, Inc. (EDR). This database search, the EDR Radius Map, is provided in Appendix A. According to EDR, the following types of sites were identified in the surrounding area within the respective ASTM search radii RCRA NonGen/NLR, NY LTANKS, NY UST, SPDES and NY NJ SPILLS. A table listing each database for which a property was found within the ASTM search distance follows:

TABLE 2 - Standard Environmental Record Sources

Source	Agency Data Release Date	Search Distance (miles)	Total Sites
Superfund Enterprise Management System (SEMS)	7/19/19	0.50	0
Superfund Enterprise Management System Archive (SEMS-ARCHIVE)	7/19/19	0.50	0
USEPA Corrective Action Report (CORRACTS)	6/24/19	1.00	0
USEPA Resource Conservation and Recovery Act Information System (RCRAInfo) Treatment, Storage and Disposal Facilities (TSDF) List	6/24/19	0.50	0
USEPA Resource Conservation and Recovery Act Information System (RCRAInfo) Large Quantity Generators (LQG) List	3/01/2018	0.25	0
USEPA Resource Conservation and Recovery Act Information System (RCRAInfo) Small Quantity Generators (SQG) List	6/24/19	0.25	0
USEPA Resource Conservation and Recovery Act Information System (RCRAInfo) Conditionally Exempt Small Quantity Generators (CESQG) List	3/01/18	0.25	0
USEPA Resource Conservation and Recovery Act Information System (RCRAInfo) Very Small Quantity Generators (VSQG) List	3/01/18	0.25	1
USEPA Resource Conservation and Recovery Act Information System (RCRAInfo) Non Generators (RCRA NonGen/NLR) List	6/24/19	0.25	2

TABLE 2 - Standard Environmental Record Sources			
Source	**Agency Data Release Date**	**Search Distance (miles)**	**Total Sites**
USEPA Facility Index System (FINDS)	5/3/19	Target Property	0
NYSDEC Solid Waste Facilities / Landfills (SWF/LF)	7/02/19	0.50	1
NYSDEC Aboveground Storage Tanks (AST) Data	06/24/19	0.25	5
Formerly Used Defense Sites (FUDS) Properties	5/15/19	1.00	2
New York Integrated Compliance Information System (NY ICIS)	11/18/16	Target Property	1
NYSDEC Known Contaminated Sites / State Hazardous Waste Site (SHWS)	5/22/19	1.00	1
NYSDEC Leaking Underground Storage Tank (LTANKS) Listing	8/19/19	0.50	27
NYSDEC Historical Leaking Underground Storage Tank (HIST LTANKS) Listing	9/17/02	0.50	0
NYSDEC Underground Storage Tank (UST) Data	2/15/11	0.25	3
NYSDEC Brownfields	7/9/19	0.50	0
NYSDEC PFAS	6/18/19	0.50	0
NYSDEC Engineering Controls/Institutional Controls Site List (ENG / INST CONTROLS)	4/5/19	0.50	0
NYSDEC SPILLS	6/18/19	0.125	10
NJDEP Hazardous Waste Manifest Information (NJ MANIFEST)	12/31/18	0.25	0
PADEP Hazardous Waste Manifest Information (PA MANIFEST)	6/30/18	0.25	0
NYDEP Hazardous Waste Manifest Information (NY MANIFEST)	1/1/19	0.25	0
NYSDEC Pollutant Discharge Elimination System Dischargers (SPDES)	8/26/19	Target Property	1

Subject/Target Property

The subject property was identified in the EDR database search under four primary databases: Integrated Compliance Information System (ICIS), State Pollutant Discharge Elimination System

(SPDES), NY Spills, and Leaking Underground Storage Tanks. The following provides a summary of the more pertinent information compiled from the EDR database report for the Site:

NY SPDES: New York State Pollutant Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law, the program is known as the SPDES and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwater as well as surface waters.

The Site is listed in SPDES as Long Beach Water Pollution Control Plant at National Boulevard and Bay Street under Permit No. NY0020567. The State Water Region Name: Reynolds Channel, the State Water Region Code is 1, with total design flow equal to 7.5 MGD.

New York Integrated Compliance Information System (NY ICIS)

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

The Site is listed in ICIS due to the inspections and enforcement of the SPDES permit held by the Long Beach WPCP. There are several enforcement actions listed to the Site associated with the SPDES regarding letters of violation or warnings and state administration consent orders.

In July 2019, the Nassau County Legislature approved a $66.4 million (M) bond to be applied towards rerouting sewage to the Bay Park STP, which would remove the discharge of the Long Beach WPCP's effluent into the Reynolds Chanel. A news article, dated July 15, 2019, citing this is provided in Appendix E of this report.

New York Spills

Data collected on spills reported to NYSDEC is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986 as well as spills occurring since this date.

There are several spills listed in the EDR Radius Search document associated with the City of Long Beach and the Long Beach DPW. The causes of these spills are generally listed as equipment failure or spilled oil during DPW activities. These spills are not located on the Long Beach WPCP property; however, they are located in the general vicinity of the Long Beach WPCP either on National Boulevard or West Pine Street where the DPW is located directly adjacent to the Long Beach WPCP.

New York Underground/Aboveground Storage Tank Program (NY UST/AST)

The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

The Site is listed in the NY UST database as Water Pollution Control at 571 National Boulevard associated with a 2,500-gallon active No. 4 heating oil UST.

Additionally, the Site is listed in the NY AST database due to the aboveground tanks associated with the storage of treatment chemicals: two 3,000-gallon chlorine ASTs and two 5,000-gallon aluminum sulfate ASTs.

NY Leaking Underground Storage Tanks (NY LTANKS)

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from April 1, 1986 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures, or tank overfills.

The Site is listed in the NY LTANK database as City of Long Beach Water at National Bouelvard and the Bay under Spill No. 9414655. The NYSDEC Hotline was contacted February 7, 1995 due to a tank tightness test failure of the UST associated with the Long Beach WPCP property. The spill number is reported as closed as of March 3, 1997.

The Site is listed in the NY LTANKS database as Long Beach Water Control at 571 National Boulevard under Spill No. 0411889. The NYSDEC Hotline was contacted February 7, 2005 due to a tank tightness test failure of the UST associated with the Long Beach WPCP property. The spill number is reported as closed as of March 9, 2005; however, no additional information was available regarding the actions taken to close the Spill No.

Off-Site Facilities

A summary of properties in the vicinity of the Site are presented in Table 3. Several of these properties are reported as having minor spills due to heating oil discharges and have been closed in the NYSDEC. The database listings for these sites can be reviewed in the attached EDR Radius Map provided in Appendix A of this Phase I ESA.

The relative elevations presented in Table 3 are taken from the EDR Radius Map and are not always accurate. Although elevation can be an indicator of groundwater flow direction, the elevation and flow direction are not always related.

TABLE 3 - Summary of Off-Site Database Findings						
Facility Name	Address	Distance from Site	Relative Elevation	Database(s)	High Potential to Impact the Site	Explanation
LIRR Trestle & STP	LIRR Trestle & STP, Long Beach, NY	454 ft., ENE	Higher	NY Spills	No	This site is listed in the NY Spills database due to the release of an unknown amount of unknown petroleum oils from a rail car / train while over the train trestle. The spill affected the Reynolds Channel. The spill occurred on March 11, 1987 and was cleaned up and closed the same day under Spill No. 8607527.
Fuentes Residence	115 W Fulton Street, Long Beach, NY	416 ft., SW	Higher	NY Spills	No	This residence is listed in the NY Spills database due to confirmed soil contamination from a leaking 275-gallon UST. Soil excavation occurred. Groundwater was not contaminated. Spill No. 1204912 was closed on April 10, 2015.

Two unmappable (orphan) sites were identified in the EDR Radius Map Report; however, none are located in the immediate vicinity of the Long Beach WPCP.

Additional Environmental Records Sources

As part of the Phase I ESA and in accordance with the ASTM requirements, available records for the Site were evaluated through contact with local and state regulatory agencies. Freedom of Information Law (FOIL) requests were submitted by the lead engineer and design team to the City of Long Beach, Nassau County, and the NYSDEC, respectively.

Responses from all local, county, and state offices to which FOIL requests were sent were not received from the lead engineer and design team. Information obtained at a later date will be included under separate cover if deemed noteworthy.

Physical Setting Source

A current 7.5 Minute USGS Topographic Map (Lawrence, NY Quadrangle) is included as Figure 1.

Historical Use Information on the Site

Land title records were not reviewed as part of this Phase I ESA. According to records reviewed, the Long Beach WPCP has operated at the property since approximately 1952. Prior to the Long Beach WPCP, the property contained several rail lines as part of the LIRR dating back at least to the early 1900s.

Due to the aforementioned property use, EDR's City Directory did not identify any tenants or other operations at the Site.

First Environment's review of historic aerial photography and topographic maps are presented in the table below.

TABLE 4 - Aerial Photographs & Topographic Maps Review	
Record	**Observations**
Aerial Photos: 1943, 1951, 1954, 1962, 1966	In 1943, the Site is depicted with LIRR rail lines entering from the northeast towards the west and the freight house depicted on current day tennis courts area. The surrounding areas are developed with residential structures. Additionally, the rail line is present to the north of the site and a road is present to the south of the site. In 1951, the rail lines are no longer depicted, and the Site appears as under construction for the Long Beach WPCP. The main rail lines are still depicted to the east of the Site with the municipal recreation structures under construction as well to the west. By 1954, the Long Beach WPCP facilities are completed with several more residential structures depicted throughout the remainder of the island. Additionally, the 1954 Aerial depicts the primary clarifier is expanded to include an east and west bank. There is no change to the Site on the 1962 Aerial; however, the municipal ice rink is depicted as under construction still. There are no depicted changes on the 1966 Aerial.
Aerial Photos: 1974, 1980, 1984, 1994, 2006, 2009, 2013, 2017	In 1974, the municipal ice rink is depicted as completed to the west of the tennis courts. No other significant changes can be observed on the aerials from 1984 to 2017.
Historic Topos: 1897, 1898, 1899, 1903, 1947	The scale is too small to depict any exact details on these Topo Maps. In 1897, a rail line is depicted coming onto Long Beach Island from the islands located to the north as part of the LIRR. There are no depicted changes on the 1898, 1899, or 1903 Topo Maps. In 1947, the Site is depicted with rail lines entering the property from the northeast leading to the freight house to the west. The surrounding properties and island appear mostly as residential.
Historic Topos: 1954, 1966, 1979, 2013	In 1954, the Site is developed and depicted with structures that appear much as they do today. Surrounding property features are not depicted. No other significant changes can be observed in the Topos from 1966 to 2013.

TABLE 5 – Sanborn Fire Insurance Maps Review	
Record	**Observations**
Sanborn Maps: 1914, 1922, 1950	The 1914 Sanborn Map depicts the Site as used by the LIRR. Between one and three rail lines are depicted with a freight house depicted to the west of the Site (on what is now the tennis courts). By 1922, several more rail lines are depicted as well as structures used for warehousing of masonry materials. The Long Beach Fuel Oil, Inc. company is depicted directly south of the Site. By 1950, no changes are depicted to the Site. However, the fuel oil company to the south has additional structures associated with its operations.
Sanborn Maps: 1953, 1955, 1966, 1970, 1980	The 1953 Sanborn Map depicts the Site with the Long Beach WPCP constructed already: main control building, primary and secondary clarifiers, digesters and pump house, as well as sludge filter, chlorine treatment and recirculation buildings. There are no rail lines depicted on site anymore; however, they are depicted to the east of the Site now running south into Long Beach. Recreation is depicted to the west of the Site, with residential to the south. There is no change to the Site on the 1955 Map, 1966 or 1970 Maps.

Historical Use Information on Adjoining Properties

No information concerning the historic uses of the adjoining properties was provided by the User.

According to historic documents review, the surrounding areas of the Long Beach WPCP have predominately been residential and condominium areas since the early 1900s. There has been light commercial in the vicinity of the Long Beach WPCP as well; namely the Long Beach Fuel Corporation is depicted south of the Site on the 1922 through 1966 Sanborn Maps.

Site Inspection

Mr. Kenneth Farah, Jr. of First Environment visited the Site on November 12, 2019. All accessible interior and exterior areas were inspected during the site visit. At the time of the inspection, the weather was overcast with periods of light snow and a temperature in the lower-30s Fahrenheit. Mr. Farah was accompanied throughout the facilities during the site visit by the plant manager, Mr. Tyrone Lyons, who made himself available for questioning during and after the site inspection regarding the plant processes and current operations of the property.

Heating and Cooling

The Main Plant Building is heated by both natural gas and an underground heating oil tank. According to Mr. Lyons, the office and kitchen areas of the main building are heated by natural-gas, while the remaining lower portions of the building (i.e., pump rooms, etc.) are heated by No. 4 heating oil from the 2,500-gallon UST located at the rear of the building. The remainders of the facilities are heated by electric space heaters; both floor and ceiling mounted.

Water Supply

Potable water is supplied to the Site by the City of Long Beach municipal pipe lines. No potable wells were identified at the Site nor do historic records reviewed by First Environment indicate any have existed in the past.

Sanitary Sewage Disposal

The facilities currently discharge all domestic sewage wastes to the municipal sanitary sewer system. There was no evidence of a septic system at the facilities nor are there any records that indicate a septic system existed at the facilities in the past. It should be noted that the immediate sanitary sewers loop directly back into the wastewater plant facilities.

Industrial Wastewater

Based on the inspection conducted, no industrial waste is presently generated at the facilities. The Long Beach WPCP treats municipal wastewater generated from Long Beach and its neighboring communities.

Interior Stains/Corrosion

Evidence of major staining was observed within the main plant wastewater inlet room where garbage is separated from the influent wastewater. The staining is associated with the garbage refuse removed and is not associated with spills or releases from hazardous chemicals or materials. Two storm grates are located within the influent wastewater pump room and are connected to the municipal sewer that recirculates back into the Long Beach WPCP. There are no reported spills or releases to the environment from operations in this room. Additionally, minor stains were observed on the poured concrete floors throughout the remainder of the facility buildings: chlorine treatment building, digesters pump room, and sludge filter pump room. These stains are associated with plant operations and repair of equipment. No spills or releases to the environment have been reported to the county or state authorities. Additionally, as noted previously, trench drains and grates are located in these areas as well and discharge into the municipal sewer system that recirculates back into the plant.

Drains or Sumps

During the inspections, floor drain trenches and grates were observed throughout the Site in all of the facilities. One sump was located on the exterior of the main plant building that discharges into the municipal sewer system. Stormwater drains are also located in the parking lot areas of the facilities. As previously mentioned, all storm grates and trench drains, exterior and interior, discharge to the local municipal storm-sewerage connection that circulates back into the plant.

One sump is located in the lowest level of the Main Plant Building due to the building located within a flood zone and having a high groundwater table. The sump discharges to the sewer system on site and circulates back into the facilities.

Hazardous Substances and Chemical Storage Areas

During the inspection, First Environment identified large quantities of paint sprays, lacquers, and other oil-based products in the storage building located on the Site. These products are utilized in the repair of Site equipment (i.e., pumps, turbines, etc.). Minor to mid-staining was observed during the inspection; however, there are no drains located in the vicinity of the storage area. Additionally, as noted previously, the Site utilizes two 3,000-gallon chlorine and two 5,000-gallon aluminum sulfate polyurethane (plastic) ASTs to treat the effluent water prior to discharging into Reynolds Channel.

Unidentified Substance Containers

There were no unidentifiable containers observed during the Site inspection.

Storage Tanks

During the inspections, two 3,000-gallon chlorine and two 5,000-gallon aluminum sulfate polyurethane (plastic) ASTs are used to treat the effluent water prior to discharging into the Reynolds Channel. Each set of tanks is surrounded by a three-foot high concrete berm to collect spillage. There are no drains located within the bermed areas. However, as noted, two storm grates are located in each of these buildings that recirculate back into the Long Beach WPCP.

Additionally, the sand filter building contained several dozen 55-gallon plastic closed top drums that contained the No. 0 sand used in the filtration process in the building.

As discussed previously, one 2,500-gallon No. 4 heating oil UST exists at the rear of the main plant building and services the lower levels of the main plant building only. The tank has failed several tightness tests over the years with spill case numbers opened. However, no investigations or remediations were conducted as part of the spill numbers, and all of the spill numbers have been closed to the satisfaction of the NYSDEC.

Polychlorinated Biphenyls

During the inspections, First Environment observed several floor-mounted transformers; however, they appeared to be in good condition with no evidence of spills or leaking. In total, four interior non-PCB containing (dry-type) transformers were observed throughout the facilities, and one interior PCB containing transformer was observed at the rear of the main plant building. No spills or stains were observed in the vicinity of these transformers.

Two pole-mounted transformers were located on the property on the exterior of the property along West Pine Street. The transformers appeared in good condition with no sign of spills or leaking have occurred. No evidence of leaks or stressed vegetation was observed at the base of the pole.

Odors

Odors were observed during the Site inspection throughout the facilities; however, the odors are attributed to current plant operations and are not a byproduct of a spill or release to the environment.

Pools of Liquid

No pools of liquid were observed during the Site inspections.

Pits, Ponds, Lagoons

No pits, ponds, or lagoons were observed at or adjacent to the facilities during the time of inspections.

Stained Soil or Pavement

No stained soil or pavement was observed during the Site inspections.

Stressed Vegetation

No evidence of stressed vegetation was observed at the time of inspections.

Solid Waste

General refuse is currently generated on site in the form of packaging from shipments to the various facilities (e.g., cardboard, plastic wrapping, wood pallets). General refuse is collected in two dumpsters and one roll-off dumpster staged on the eastern side of the Site.

Monitoring Wells/Groundwater

No dry wells were observed at the facilities. No monitoring wells were observed on or in the immediate vicinity of the Sites.

Potential Vapor Migration

No vapor intrusion information was reviewed by First Environment. Information reviewed regarding former and current on-site activities would suggest there is no potential for vapor migration from the soil or groundwater to the occupied working space of the facility.

Interviews

Interview with Owner

Mr. Farah was accompanied throughout the facilities during the site visit by the plant manager, Mr. Tyrone Lyons, who made himself available for questioning during and after the site inspection regarding the plant processes and current operations of the property.

Interviews with Local Government Officials

No local government officials were interviewed as part of this ESA as no information was made available to First Environment by the project design team from the local or state authorities.

Interviews with Others

No other people beyond those listed above were formally interviewed for this ESA.

Findings and Opinions

Recognized Environmental Conditions

RECs are defined as the presence, or likely presence, of any hazardous substances or petroleum products in, on, or at a property due to any release to the environment; under conditions indicative of a release to the environment; or under conditions that pose a material threat of a future release to the environment. De Minimis Conditions (DMCs), which generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies, are not RECs. This Phase I ESA has revealed evidence of one REC in connection with the Site as identified below.

- REC-1 – Underground Storage Tank

  Based on the Site inspection and review of publicly available information, one 2,500-gallon No. 4 heating oil UST exists on the property at the rear of the main plant building. At the time of this ESA, there have been no reported spills or releases to the environment from the tank; however, there have been numerous tank tightness test failures associated with this UST. According to records received, the most recent tank tightness test was performed in March 2010; however, Site personnel stated the tank is tested yearly for tightness. The current integrity of the tank is unknown; therefore, the conditions of subsurface soils and groundwater is also unknown due to the previously failed tightness tests. No subsurface investigations or remediation have been conducted regarding the former tank tightness test failures.

HRECs include the past release of any hazardous substance or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority, and/or meets the unrestricted use criteria established by a regulatory authority without subjecting the property to any controls or use limitations. This Phase I ESA has revealed no HRECs in connection with the Site.

CRECs include the past release of any hazardous substance or petroleum product that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of engineering controls, institutional controls, and/or activity/use limitations. This Phase I ESA has revealed no CRECs in connection with the Site.

The following issue is not considered a REC; however, it does represent a potential environmental issue related to ongoing operations and use of the Site and therefore is noted as a De Minimis Conditions (DMCs):

- DMC-1 – Historic Site Operations

  Due to the current wastewater treatment and historic LIRR rail lines on the property, these operations are considered a DMC. Although there are no Spill Numbers associated with the current wastewater treatment operations or the former LIRR freight operations, there has been no environmental subsurface investigation (i.e., soil or groundwater) to determine if the subsurface has been impacted by the current and historic operations. Any future construction plans for the Site should consider the possibility of waste disposal (that are typically associated with wastewater treatment and rail freight operations).

Conclusions

First Environment, Inc. (First Environment), on behalf of New York's Governor's Office of Storm Recovery, has completed a Phase I Environmental Site Assessment (ESA) of the Long Beach Water Pollution Control Plant located at 2 West Pine Street, Long Beach, Nassau County, New York 11561. This assessment has identified the following RECs for this Site.

- REC-1 – Underground Storage Tank; and
- DMC-1 – Historic Site Operations.

Responses from all local, county, and state offices to which FOIL requests were sent were not received from the lead engineer and design team. Information obtained at a later date will be included under separate cover if deemed noteworthy.

All documentation received from environmental database resources is provided in Appendix A to this Phase I ESA. A photographic log of specific Site features is presented in Appendix C.

Referenced Documents

In decreasing chronological order:

1. EDR Database Report-Environmental Data Resources, Inc.
2. NYSDEC Spill Database.

Signature of Environmental Professional

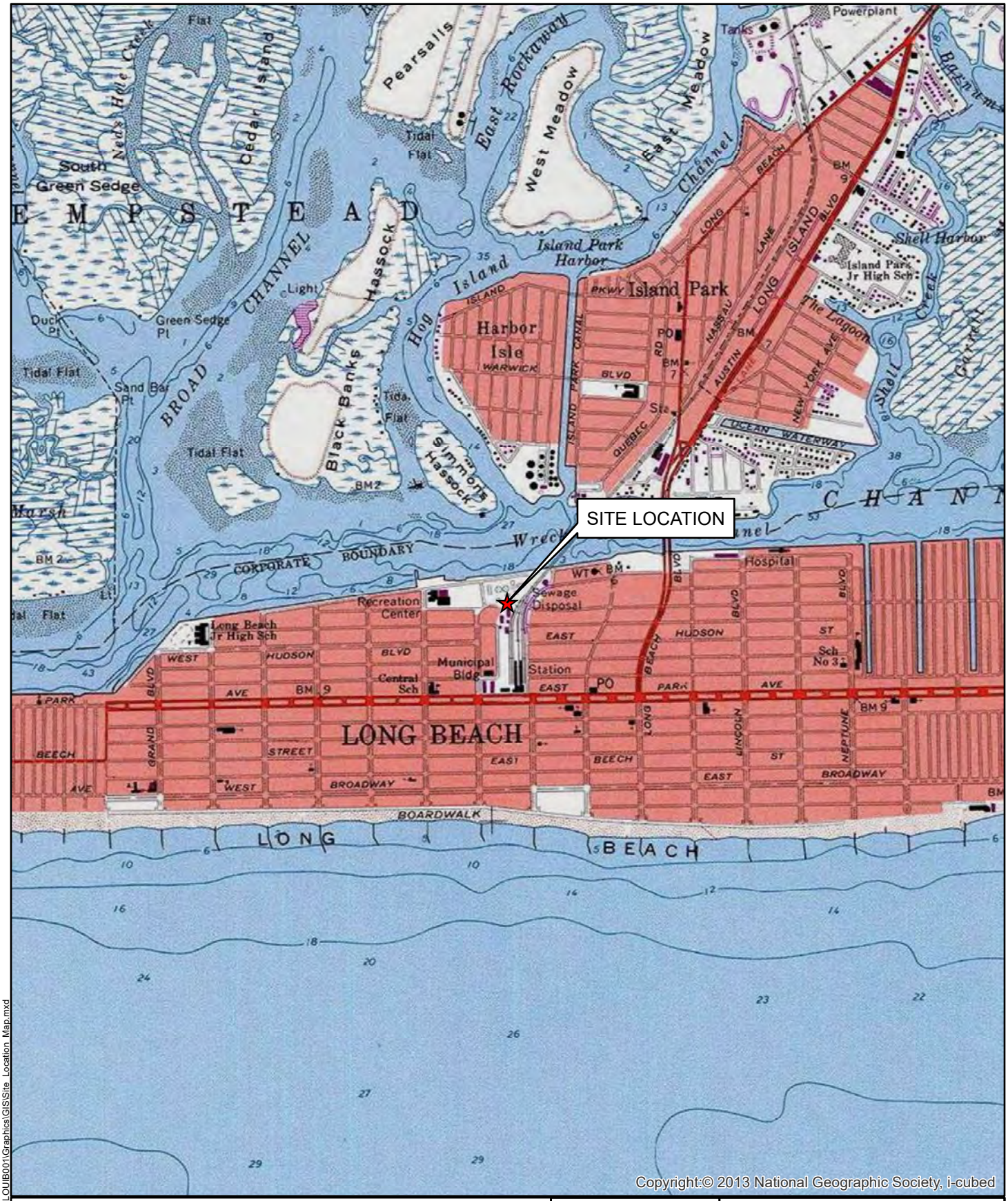
The qualifications of the environmental professional are presented in Appendix D.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312" and 12.13.2. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Kenneth Farah Jr.

Kenneth Farah, Jr., E.I.T.
Project Engineer

FIGURES



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N
W E
S

0 500 1,000 2,000 Feet

1 inch = 2,000 feet

United States Geological Survey, Lawrence NY Topographic Quadrangle, 1967, Photorevised 1981

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

2 WEST PINE STREET
Long Beach, Nassau County, New York

FIGURE 1
SITE LOCATION MAP

Revised	Drawn	Checked	Approved	Date
	LS	KNF	TCB	12/4/2019

Legend

Property Boundary

N W E S

0 50 100 200 Feet

1 inch = 200 feet

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

2 WEST PINE STREET
Long Beach, Nassau County, New York

FIGURE 2
SITE VICINITY MAP

Revised	Drawn	Checked	Approved	Date
	LS	KNF	TCB	12/5/2019

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APPENDIX A

Long Beach WPCP
2 W Pine Street
Long Beach, NY 11561

Inquiry Number: 5846767.2s
October 28, 2019

The EDR Radius Map™ Report with GeoCheck®

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

2 W PINE STREET
LONG BEACH, NY 11561

COORDINATES

Latitude (North):	40.5930240 - 40˚ 35' 34.88''
Longitude (West):	73.6657740 - 73˚ 39' 56.78''
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	612902.4
UTM Y (Meters):	4494224.5
Elevation:	1 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5940613 LAWRENCE, NY
Version Date:	2013

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150610
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
2 W PINE STREET
LONG BEACH, NY 11561

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	LONG BEACH WATER POL	NATIONAL BLVD & BAY	NY SPDES	Higher	1 ft.
A2	LONG BEACH (C) WPCP	NATIONAL BLVD & BAY	ICIS	Higher	1 ft.
A3	LONG BCH SEWERAGE		FUDS	Higher	39, 0.007, ESE
B4	CITY OF LONG BEACH	NATIONAL BLVD	NY Spills	Higher	128, 0.024, WSW
B5	CITY OF LONG BEACH D	NATIONAL BLVD & WEST	NY Spills	Higher	134, 0.025, SW
B6	CITY OF LONG BEACH	NATIONAL BLVD.	NY LTANKS, NY TANKS	Higher	179, 0.034, SW
C7	WATER POLLUTION CONT	571 NATIONAL BLVD	NY UST	Higher	371, 0.070, SW
C8	LONG BEACH WATER CON	571 NATIONAL BLVD	NY LTANKS	Higher	371, 0.070, SW
9	TRANSFORMER POLE W5	29 BIRCH DR	NY Spills	Higher	396, 0.075, South
C10	FUENTES RESIDENCE	115 WEST FULTON ST	NY Spills	Higher	416, 0.079, SW
D11	UNK	LIRR TRESSEL & STP	NY Spills	Higher	454, 0.086, ENE
C12	DIAMONDS RESIDENCE	119 WEST FULTON STRE	NY Spills	Higher	469, 0.089, SW
D13	PARK PLACE W.T.P.	PARK PLACE	NY AST	Higher	483, 0.091, East
D14	PARK PLACE WATER TRE	PARK PLACE	NY CBS AST	Higher	487, 0.092, East
D15	SEWAGE TREATMENT PLA	REYNOLDS CHANNEL	NY Spills	Higher	487, 0.092, East
D16	UNKNOWN STP POSSIBLY	REYNOLDS CHANNEL BY	NY Spills	Higher	487, 0.092, East
17	CHRISTIAN LIGHT BAPT	16 EAST PINE STREET	NY Spills	Higher	499, 0.095, ESE
E18	VISUAL FABRICATIONS	140 W PINE ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	517, 0.098, WSW
E19	LONG BEACH CITY OF	150 W PINE ST	RCRA-VSQG, FINDS, ECHO	Higher	586, 0.111, WSW
E20	PINETOWN HOUSE APART	149 B PINE STREET	NY Spills	Higher	631, 0.120, WSW
F21	VACANT WAREHOUSE	724 PARK PLACE	NY LTANKS	Higher	707, 0.134, East
F22	PARK PLACE WATER TRE	765 PARK PLACE	NY CBS	Higher	721, 0.137, East
F23	LONG BEACH WATER PUR	765 PARK PL	NY UST, NY AST	Higher	721, 0.137, East
24	DOKES RESIDENCE	36 EAST HUDSON STREE	NY LTANKS	Higher	861, 0.163, SE
25	LONG BEACH SENIOR CE	MAGNOLIA & WEST PINE	NY LTANKS	Higher	924, 0.175, WSW
G26	ABANDONED HOUSE	145 WEST MARKET STRE	NY LTANKS	Higher	1018, 0.193, SW
27	PARK AVENUE EXTENDED	425 NATIONAL BLVD	NY UST, NY AST	Higher	1025, 0.194, SSW
G28	RESIDENCE	128 WEST MARKET STRE	NY LTANKS	Higher	1032, 0.195, SSW
H29	MUNICIPAL BUILDING	1 W. CHESTER ST.	NY AST	Higher	1084, 0.205, South
H30	LONG BEACH CITY HALL	1 W CHESTER ST	RCRA NonGen / NLR	Higher	1084, 0.205, South
H31	CITY OF LONG BEACH	1 WEST CHESTER STREE	NY LTANKS, NY CBS, NY AST, NY CBS AST, NY Spills,...	Higher	1084, 0.205, South
32	RITE FUEL	237 WEST FULTON STRE	NY LTANKS, NY Spills	Higher	1387, 0.263, WSW
33	RESIDENCE	469 MAGNOLIA BLVD	NY LTANKS	Higher	1422, 0.269, SW
34	LONG BEACH RECYCLING	ONE CITY HALL	NY SWF/LF	Higher	1440, 0.273, East
35	MOESCHEN RESIDENCE	111 WEST WALNUT STRE	NY LTANKS	Higher	1731, 0.328, SSW
36	ANDYS MARINE	46 ISLAND PARK PLACE	NY LTANKS, NY TANKS, NY Spills	Higher	1738, 0.329, North
37	WINTER RESIDENCE	150 EAST FULTON STRE	NY LTANKS	Higher	1886, 0.357, ESE
38	URI LEMBERGER RESIDE	1 EAST OLIVE STREET	NY LTANKS	Higher	2005, 0.380, SSE
39	ROBERT HASTAVA RESID	40 ISLAND PARK PLACE	NY LTANKS	Higher	2048, 0.388, NNE

MAPPED SITES SUMMARY

Target Property Address:
2 W PINE STREET
LONG BEACH, NY 11561

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	METRO FUEL	601 LONG BEACH ROAD	NY LTANKS, NY Spills, NY MANIFEST	Higher	2153, 0.408, ESE
I41	MERIT S/S	470 LONG BEACH BLVD	NY LTANKS	Higher	2202, 0.417, ESE
J42	FREISER RESIDENCE	129 EAST WALNUT	NY LTANKS	Higher	2212, 0.419, SE
K43	MOVIE THEATER	179 EAST PARK AVENUE	NY LTANKS	Higher	2244, 0.425, SE
I44	HESS STATION #32543	450 LONG BEACH BLVD	NY LTANKS, NY TANKS, NY Spills, NY MANIFEST	Higher	2267, 0.429, ESE
45	ZAPPIA RESIDENCE	31 RADCLIFFE ROAD	NY LTANKS	Higher	2269, 0.430, NE
J46	JAMES SCHAEFER RESID	155 EAST WALNUT STRE	NY LTANKS	Higher	2347, 0.445, SE
K47	MOBIL OIL CO	203 PARK AVENUE/LONG	NY LTANKS	Higher	2362, 0.447, SE
48	RESIDENCE	260 WEST WALNUT	NY LTANKS	Higher	2392, 0.453, SW
K49	NU CLEAR CLEANERS	180 E PARK AVE	RCRA-SQG, NY SHWS, NY MANIFEST, RI MANIFEST	Higher	2399, 0.454, SE
L50	MOBIL OIL CORP SS #K	203 E PARK AVE	NY LTANKS, RCRA NonGen / NLR, FINDS, ECHO	Higher	2415, 0.457, SE
L51	EXXON LONG BEACH AUT	203 EAST PARK AVENUE	NY LTANKS, NY TANKS, NY Spills	Higher	2415, 0.457, SE
52	PAUL TOBELMANN RESID	365 WEST HUDSON STRE	NY LTANKS	Higher	2455, 0.465, WSW
53	LONG BEA FIRE CON ST		FUDS	Higher	3315, 0.628, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ..... Federal Facility Site Information listing
SEMS ..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ..... Land Use Control Information System
US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
NY HIST LTANKS ---------- Listing of Leaking Storage Tanks

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
NY CBS UST ---------- Chemical Bulk Storage Database
NY MOSF UST ---------- Major Oil Storage Facilities Database
NY MOSF ---------- Major Oil Storage Facility Site Listing
NY MOSF AST ---------- Major Oil Storage Facilities Database
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

NY RES DECL ---------- Restrictive Declarations Listing
NY ENG CONTROLS ---------- Registry of Engineering Controls
NY INST CONTROL ---------- Registry of Institutional Controls

State and tribal voluntary cleanup sites

NY VCP ---------- Voluntary Cleanup Agreements
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

NY BROWNFIELDS ---------- Brownfields Site List
NY ERP ---------- Environmental Restoration Program Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

NY SWTIRE ---------- Registered Waste Tire Storage & Facility List
NY SWRCY ---------- Registered Recycling Facility List
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
NY DEL SHWS ---------- Delisted Registry Sites
US CDL ---------- National Clandestine Laboratory Register
NY PFAS ---------- PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

NY HIST UST ---------- Historical Petroleum Bulk Storage Database

NY HIST AST ..... Historical Petroleum Bulk Storage Database

Local Land Records

NY LIENS ..... Spill Liens Information
LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
NY Hist Spills ..... SPILLS Database
NY SPILLS 90 ..... SPILLS 90 data from FirstSearch
NY SPILLS 80 ..... SPILLS 80 data from FirstSearch

Other Ascertainable Records

DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File
ABANDONED MINES ..... Abandoned Mines
UXO ..... Unexploded Ordnance Sites
DOCKET HWC ..... Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ..... EPA Fuels Program Registered Listing
NY AIRS ..... Air Emissions Data
NY COAL ASH ..... Coal Ash Disposal Site Listing
NY DRYCLEANERS ..... Registered Drycleaners
NY E DESIGNATION ..... E DESIGNATION SITE LISTING
NY Financial Assurance ..... Financial Assurance Information Listing
NY HSWDS ..... Hazardous Substance Waste Disposal Site Inventory

EXECUTIVE SUMMARY

NY VAPOR REOPENED..... Vapor Intrusion Legacy Site List
NY UIC..... Underground Injection Control Wells
NY COOLING TOWERS..... Registered Cooling Towers
MINES MRDS..... Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants
EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

NY RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List
NY RGA LF..... Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-VSQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-VSQG list, as provided by EDR, and dated 06/24/2019 has revealed that there is 1 RCRA-VSQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONG BEACH CITY OF EPA ID:: NYR000066167	***150 W PINE ST***	***WSW 0 - 1/8 (0.111 mi.)***	***E19***	***31***

State- and tribal - equivalent CERCLIS

NY SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Environmental Conservation's Inactive Hazardous waste Disposal Sites in New York State.

A review of the NY SHWS list, as provided by EDR, and dated 08/12/2019 has revealed that there is 1 NY SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NU CLEAR CLEANERS Site Code: 513284	***180 E PARK AVE***	***SE 1/4 - 1/2 (0.454 mi.)***	***K49***	***93***

State and tribal landfill and/or solid waste disposal site lists

NY SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the NY SWF/LF list, as provided by EDR, and dated 07/02/2019 has revealed that there is 1 NY SWF/LF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONG BEACH RECYCLING	ONE CITY HALL	E 1/4 - 1/2 (0.273 mi.)	34	55

State and tribal leaking storage tank lists

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 08/12/2019 has revealed that there are 27 NY LTANKS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LONG BEACH Spill Number/Closed Date: 9414655 / 1997-03-03 Site ID: 129818 Spill Date: 1995-02-07	***NATIONAL BLVD.***	***SW 0 - 1/8 (0.034 mi.)***	***B6***	***14***
LONG BEACH WATER CON Spill Number/Closed Date: 0411889 / 2005-03-09 Site ID: 337194 Spill Date: 2005-02-07	571 NATIONAL BLVD	SW 0 - 1/8 (0.070 mi.)	C8	16
VACANT WAREHOUSE Spill Number/Closed Date: 9312008 / 1996-10-17 Site ID: 319731	724 PARK PLACE	E 1/8 - 1/4 (0.134 mi.)	F21	34

Spill Date: 1994-01-11				
DOKES RESIDENCE Spill Number/Closed Date: 9212693 / 1997-07-17 Site ID: 107234 Spill Date: 1993-02-09	36 EAST HUDSON STREE	SE 1/8 - 1/4 (0.163 mi.)	24	37
LONG BEACH SENIOR CE Spill Number/Closed Date: 9511315 / 2001-02-09 Site ID: 115699 Spill Date: 1995-12-07	MAGNOLIA & WEST PINE	WSW 1/8 - 1/4 (0.175 mi.)	25	38
ABANDONED HOUSE Spill Number/Closed Date: 9504974 / 1995-08-23 Site ID: 60862 Spill Date: 1995-07-24	145 WEST MARKET STRE	SW 1/8 - 1/4 (0.193 mi.)	G26	39
RESIDENCE Spill Number/Closed Date: 9407833 / 1998-06-19 Site ID: 235063 Spill Date: 1994-09-12	128 WEST MARKET STRE	SSW 1/8 - 1/4 (0.195 mi.)	G28	40
CITY OF LONG BEACH Spill Number/Closed Date: 9912713 / 2000-03-23 Site ID: 257050 Spill Date: 2000-02-07	***1 WEST CHESTER STREE***	***S 1/8 - 1/4 (0.205 mi.)***	***H31***	***44***
RITE FUEL Spill Number/Closed Date: 9100582 / 1991-04-17 Site ID: 272543 Spill Date: 1991-04-16	***237 WEST FULTON STRE***	***WSW 1/4 - 1/2 (0.263 mi.)***	***32***	***51***
RESIDENCE Spill Number/Closed Date: 9501994 / 1995-05-17 Site ID: 74878 Spill Date: 1995-05-17	469 MAGNOLIA BLVD	SW 1/4 - 1/2 (0.269 mi.)	33	54
MOESCHEN RESIDENCE Spill Number/Closed Date: 9613817 / 1999-03-01 Site ID: 219989 Spill Date: 1997-02-25	111 WEST WALNUT STRE	SSW 1/4 - 1/2 (0.328 mi.)	35	56
ANDYS MARINE Spill Number/Closed Date: 1511759 / 2016-05-24 Site ID: 524540 Spill Date: 2016-03-10	***46 ISLAND PARK PLACE***	***N 1/4 - 1/2 (0.329 mi.)***	***36***	***57***
WINTER RESIDENCE Spill Number/Closed Date: 0203644 / 2002-07-29 Site ID: 211710 Spill Date: 2002-07-06	150 EAST FULTON STRE	ESE 1/4 - 1/2 (0.357 mi.)	37	60
URI LEMBERGER RESIDE Spill Number/Closed Date: 9214190 / 2004-06-14 Site ID: 77874 Spill Date: 1993-03-25	1 EAST OLIVE STREET	SSE 1/4 - 1/2 (0.380 mi.)	38	61
ROBERT HASTAVA RESID Spill Number/Closed Date: 9509636 / 2000-03-01 Site ID: 120739 Spill Date: 1995-10-20	40 ISLAND PARK PLACE	NNE 1/4 - 1/2 (0.388 mi.)	39	62
METRO FUEL	***601 LONG BEACH ROAD***	***ESE 1/4 - 1/2 (0.408 mi.)***	***40***	***63***

Spill Number/Closed Date: 0408029 / 2005-05-19
Spill Number/Closed Date: 0204905 / 2002-11-18
Spill Number/Closed Date: 8709951 / 1991-09-13
Site ID: 332632
Site ID: 184912
Site ID: 184913
Spill Date: 2004-10-20
Spill Date: 2002-08-08
Spill Date: 1988-02-25

MERIT S/S	470 LONG BEACH BLVD	ESE 1/4 - 1/2 (0.417 mi.)	I41	70

Spill Number/Closed Date: 9514217 / 1996-03-22
Site ID: 283147
Spill Date: 1996-02-07

FREISER RESIDENCE	129 EAST WALNUT	SE 1/4 - 1/2 (0.419 mi.)	J42	72

Spill Number/Closed Date: 0508581 / 2007-09-17
Site ID: 354192
Spill Date: 2005-10-18

MOVIE THEATER	179 EAST PARK AVENUE	SE 1/4 - 1/2 (0.425 mi.)	K43	73

Spill Number/Closed Date: 9008381 / 1990-11-30
Site ID: 279762
Spill Date: 1990-10-31

HESS STATION #32543	***450 LONG BEACH BLVD***	***ESE 1/4 - 1/2 (0.429 mi.)***	***I44***	***74***

Spill Number/Closed Date: 9112837 / 1992-04-02
Spill Number/Closed Date: 9416880 / 1995-04-28
Site ID: 218380
Site ID: 245248
Spill Date: 1992-03-17
Spill Date: 1995-03-29

ZAPPIA RESIDENCE	31 RADCLIFFE ROAD	NE 1/4 - 1/2 (0.430 mi.)	45	88

Spill Number/Closed Date: 9401419 / 1994-07-22
Site ID: 98028
Spill Date: 1994-04-29

JAMES SCHAEFER RESID	155 EAST WALNUT STRE	SE 1/4 - 1/2 (0.445 mi.)	J46	90

Spill Number/Closed Date: 9402872 / 1994-06-17
Site ID: 284570
Spill Date: 1994-05-27

MOBIL OIL CO	203 PARK AVENUE/LONG	SE 1/4 - 1/2 (0.447 mi.)	K47	91

Spill Number/Closed Date: 9104787 / 1991-08-26
Site ID: 322530
Spill Date: 1991-08-02

RESIDENCE	260 WEST WALNUT	SW 1/4 - 1/2 (0.453 mi.)	48	92

Spill Number/Closed Date: 0109849 / 2002-01-24
Site ID: 319519
Spill Date: 2002-01-11

MOBIL OIL CORP SS #K	***203 E PARK AVE***	***SE 1/4 - 1/2 (0.457 mi.)***	***L50***	***113***

Spill Number/Closed Date: 9000587 / 2003-07-08
Site ID: 122803
Spill Date: 1990-04-17

EXXON LONG BEACH AUT	***203 EAST PARK AVENUE***	***SE 1/4 - 1/2 (0.457 mi.)***	***L51***	***117***

Spill Number/Closed Date: 8901401 / 1992-03-09
Site ID: 122802

Spill Date: 1989-05-11				
PAUL TOBELMANN RESID Spill Number/Closed Date: 0210424 / 2003-01-16 Site ID: 69934 Spill Date: 2003-01-15	365 WEST HUDSON STRE	WSW 1/4 - 1/2 (0.465 mi.)	52	121

State and tribal registered storage tank lists

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, has revealed that there are 3 NY UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WATER POLLUTION CONT Database: NCFM UST, Date of Government Version: 02/15/2011 Status: Active Location Id: 17207	571 NATIONAL BLVD	SW 0 - 1/8 (0.070 mi.)	C7	16
LONG BEACH WATER PUR Database: NCFM UST, Date of Government Version: 02/15/2011 Status: Removed Location Id: 13765	***765 PARK PL***	***E 1/8 - 1/4 (0.137 mi.)***	***F23***	***36***
PARK AVENUE EXTENDED Database: NCFM UST, Date of Government Version: 02/15/2011 Status: Active Location Id: 962835	***425 NATIONAL BLVD***	***SSW 1/8 - 1/4 (0.194 mi.)***	***27***	***40***

NY CBS: These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

A review of the NY CBS list, as provided by EDR, and dated 06/24/2019 has revealed that there are 2 NY CBS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PARK PLACE WATER TRE Facility Status: Active CBS Number: 1-000136	765 PARK PLACE	E 1/8 - 1/4 (0.137 mi.)	F22	35
CITY OF LONG BEACH Facility Status: Active CBS Number: 1-000151	***1 WEST CHESTER STREE***	***S 1/8 - 1/4 (0.205 mi.)***	***H31***	***44***

EXECUTIVE SUMMARY

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, has revealed that there are 5 NY AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PARK PLACE W.T.P. Database: NASSAU CO. AST, Date of Government Version: 01/09/2017 Facility Id: 001613	PARK PLACE	E 0 - 1/8 (0.091 mi.)	D13	22
LONG BEACH WATER PUR Database: NCFM AST, Date of Government Version: 02/15/2011 Location Id: 13765	***765 PARK PL***	***E 1/8 - 1/4 (0.137 mi.)***	***F23***	***36***
PARK AVENUE EXTENDED Database: NCFM AST, Date of Government Version: 02/15/2011 Location Id: 962835	***425 NATIONAL BLVD***	***SSW 1/8 - 1/4 (0.194 mi.)***	***27***	***40***
MUNICIPAL BUILDING Database: NASSAU CO. AST, Date of Government Version: 01/09/2017 Facility Id: 055358	1 W. CHESTER ST.	S 1/8 - 1/4 (0.205 mi.)	H29	42
CITY OF LONG BEACH Database: AST, Date of Government Version: 06/24/2019 Facility Id: 1-000708	***1 WEST CHESTER STREE***	***S 1/8 - 1/4 (0.205 mi.)***	***H31***	***44***

NY CBS AST: Chemical Bulk Storage Database. Registration data collected as required by 6 NYCRR Part 596. It includes facilities storing hazardous substances listed in 6 NYCRR Part 597, in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size. Includes facilities registered (and closed) since effective date of CBS regulations (July 15, 1988) through the date request is processed.

A review of the NY CBS AST list, as provided by EDR, and dated 01/01/2002 has revealed that there are 2 NY CBS AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PARK PLACE WATER TRE Facility Status: 1 Facility Status: 1 CBS Number: 1-000136	PARK PLACE	E 0 - 1/8 (0.092 mi.)	D14	22
CITY OF LONG BEACH Facility Status: 1 Facility Status: 1 CBS Number: 1-000151	***1 WEST CHESTER STREE***	***S 1/8 - 1/4 (0.205 mi.)***	***H31***	***44***

NY TANKS: This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

A review of the NY TANKS list, as provided by EDR, has revealed that there is 1 NY TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LONG BEACH Database: TANKS NASSAU, Date of Government Version: 01/09/2017	***NATIONAL BLVD.***	***SW 0 - 1/8 (0.034 mi.)***	***B6***	***14***

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Records of Emergency Release Reports

NY Spills: Data collected on spills reported to NYSDEC. is required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

A review of the NY Spills list, as provided by EDR, and dated 08/12/2019 has revealed that there are 10 NY Spills sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CITY OF LONG BEACH Spill Number/Closed Date: 9410504 / 1994-11-08 Site ID: 280849 Spill Date: 1994-11-07	NATIONAL BLVD	WSW 0 - 1/8 (0.024 mi.)	B4	12
CITY OF LONG BEACH D Spill Number/Closed Date: 9309341 / 1994-01-31 Site ID: 178262 Spill Date: 1993-10-28	NATIONAL BLVD & WEST	SW 0 - 1/8 (0.025 mi.)	B5	13
TRANSFORMER POLE W5 Spill Number/Closed Date: 1209748 / 2013-03-01 Site ID: 472818 Spill Date: 2012-11-08	29 BIRCH DR	S 0 - 1/8 (0.075 mi.)	9	17
FUENTES RESIDENCE Spill Number/Closed Date: 1204912 / 2015-04-10 Site ID: 467818 Spill Date: 2012-08-15	115 WEST FULTON ST	SW 0 - 1/8 (0.079 mi.)	C10	18
UNK Spill Number/Closed Date: 8607527 / 1987-03-11 Site ID: 115303 Spill Date: 1987-03-11	LIRR TRESSEL & STP	ENE 0 - 1/8 (0.086 mi.)	D11	20
DIAMONDS RESIDENCE Spill Number/Closed Date: 1113546 / 2014-09-09 Site ID: 461547 Spill Date: 2012-02-29	119 WEST FULTON STRE	SW 0 - 1/8 (0.089 mi.)	C12	21
SEWAGE TREATMENT PLA Spill Number/Closed Date: 9112446 / 1992-04-16 Site ID: 282491 Spill Date: 1992-03-06	REYNOLDS CHANNEL	E 0 - 1/8 (0.092 mi.)	D15	24
UNKNOWN STP POSSIBLY Spill Number/Closed Date: 9305080 / 1993-07-23 Site ID: 70475 Spill Date: 1993-07-23	REYNOLDS CHANNEL BY	E 0 - 1/8 (0.092 mi.)	D16	25
CHRISTIAN LIGHT BAPT Spill Number/Closed Date: 1002371 / 2010-06-02 Spill Number/Closed Date: 1002382 / 2010-07-07 Site ID: 435502 Site ID: 435513 Spill Date: 2010-06-01	16 EAST PINE STREET	ESE 0 - 1/8 (0.095 mi.)	17	26
PINETOWN HOUSE APART	149 B PINE STREET	WSW 0 - 1/8 (0.120 mi.)	E20	33

Spill Number/Closed Date: 9312235 / 1994-10-11
Site ID: 271209
Spill Date: 1994-01-11

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 06/24/2019 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VISUAL FABRICATIONS EPA ID:: NYD060324779	***140 W PINE ST***	***WSW 0 - 1/8 (0.098 mi.)***	***E18***	***28***
LONG BEACH CITY HALL EPA ID:: NYR000220244	1 W CHESTER ST	S 1/8 - 1/4 (0.205 mi.)	H30	42

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 05/15/2019 has revealed that there are 2 FUDS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONG BCH SEWERAGE		ESE 0 - 1/8 (0.007 mi.)	A3	12
LONG BEA FIRE CON ST		SSE 1/2 - 1 (0.628 mi.)	53	122

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 11/18/2016 has revealed that there is 1 ICIS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONG BEACH (C) WPCP FRS ID:: 110019531425	NATIONAL BLVD & BAY	0 - 1/8 (0.000 mi.)	A2	9

EXECUTIVE SUMMARY

NY SPDES: New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

A review of the NY SPDES list, as provided by EDR, and dated 07/29/2019 has revealed that there is 1 NY SPDES site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LONG BEACH WATER POL Limit Set Status Flag: A Permit Number: NY0020567	NATIONAL BLVD & BAY	0 - 1/8 (0.000 mi.)	A1	8

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 2 records.

Site Name	Database(s)
ISLAND PARK LIQUID WASTE DISPOSAL	NY SHWS
LONG BEACH HOLDER	NY VCP

OVERVIEW MAP - 5846767.2S

Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

0 1/4 1/2 1 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Long Beach WPCP	CLIENT: First Environment, Inc.
ADDRESS: 2 W Pine Street Long Beach NY 11561	CONTACT: Kenneth Farah
LAT/LONG: 40.593024 / 73.665774	INQUIRY #: 5846767.2s DATE: October 28, 2019 4:02 pm

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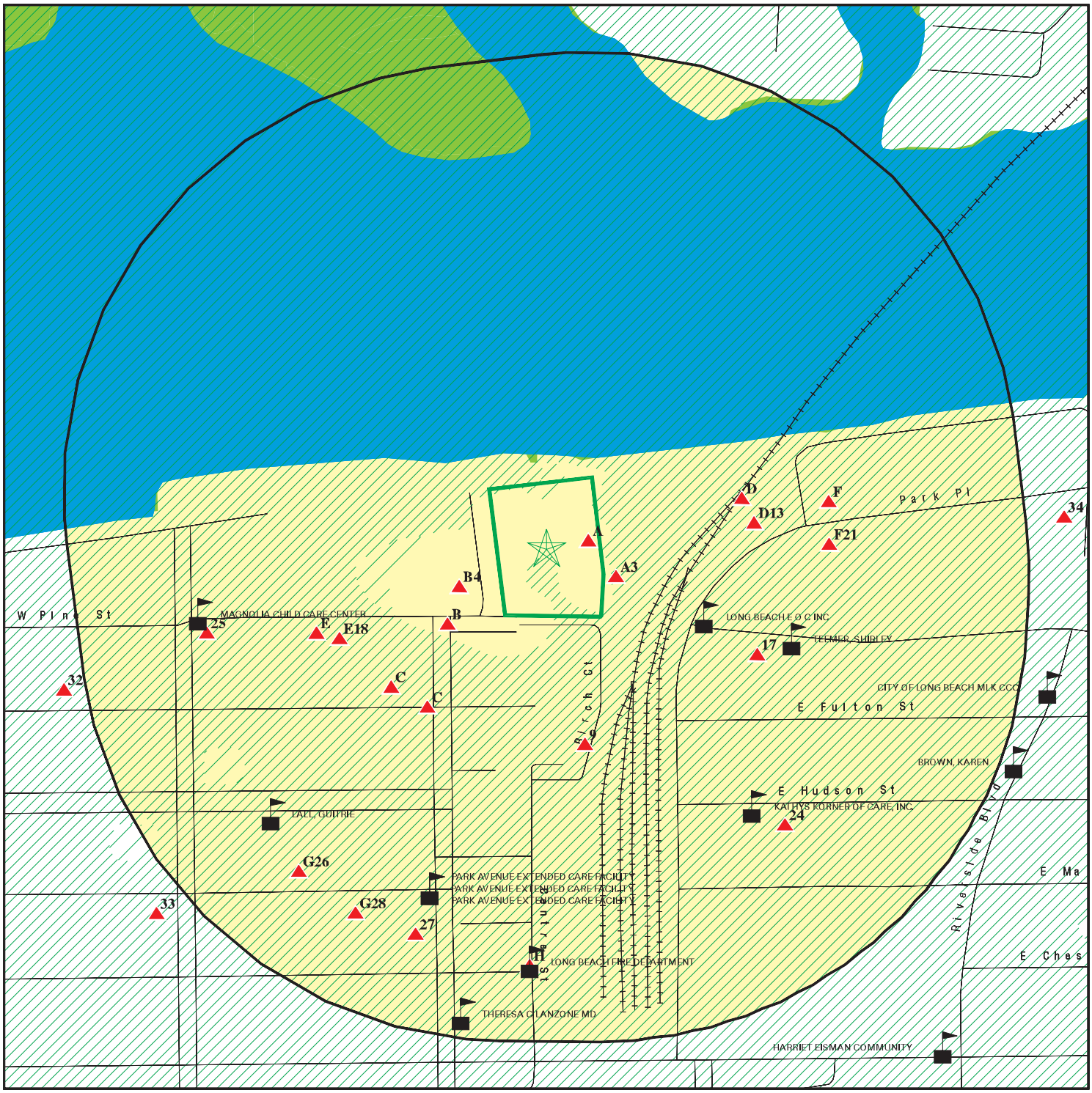
DETAIL MAP - 5846767.2S



0 1/16 1/8 1/4 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Long Beach WPCP	CLIENT: First Environment, Inc.
ADDRESS: 2 W Pine Street Long Beach NY 11561	CONTACT: Kenneth Farah
LAT/LONG: 40.593024 / 73.665774	INQUIRY #: 5846767.2s
	DATE: October 28, 2019 4:03 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		1	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
NY SHWS	1.000		0	0	1	0	NR	1
State and tribal landfill and/or solid waste disposal site lists								
NY SWF/LF	0.500		0	0	1	NR	NR	1
State and tribal leaking storage tank lists								
INDIAN LUST	0.500		0	0	0	NR	NR	0
NY LTANKS	0.500		2	6	19	NR	NR	27
NY HIST LTANKS	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY UST	0.250		1	2	NR	NR	NR	3
NY CBS UST	0.250		0	0	NR	NR	NR	0
NY MOSF UST	0.500		0	0	0	NR	NR	0
NY MOSF	0.500		0	0	0	NR	NR	0
NY CBS	0.250		0	2	NR	NR	NR	2
NY AST	0.250		1	4	NR	NR	NR	5
NY CBS AST	0.250		1	1	NR	NR	NR	2
NY MOSF AST	0.500		0	0	0	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
NY TANKS	0.250		1	0	NR	NR	NR	1
State and tribal institutional control / engineering control registries								
NY RES DECL	0.125		0	NR	NR	NR	NR	0
NY ENG CONTROLS	0.500		0	0	0	NR	NR	0
NY INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
NY VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
NY BROWNFIELDS	0.500		0	0	0	NR	NR	0
NY ERP	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
NY SWTIRE	0.500		0	0	0	NR	NR	0
NY SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
NY DEL SHWS	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
NY PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
NY HIST UST	0.250		0	0	NR	NR	NR	0
NY HIST AST	0.001		0	NR	NR	NR	NR	0
Local Land Records								
NY LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
NY Spills	0.125		10	NR	NR	NR	NR	10
NY Hist Spills	0.125		0	NR	NR	NR	NR	0
NY SPILLS 90	0.125		0	NR	NR	NR	NR	0
NY SPILLS 80	0.125		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	1	NR	NR	NR	2
FUDS	1.000		1	0	0	1	NR	2
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		1	NR	NR	NR	NR	1
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
NY AIRS	0.001		0	NR	NR	NR	NR	0
NY COAL ASH	0.500		0	0	0	NR	NR	0
NY DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NY E DESIGNATION	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY Financial Assurance	0.001		0	NR	NR	NR	NR	0
NY HSWDS	0.500		0	0	0	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
RI MANIFEST	0.250		0	0	NR	NR	NR	0
NY SPDES	0.001		1	NR	NR	NR	NR	1
NY VAPOR REOPENED	0.500		0	0	0	NR	NR	0
NY UIC	0.001		0	NR	NR	NR	NR	0
NY COOLING TOWERS	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
NY RGA HWS	0.001		0	NR	NR	NR	NR	0
NY RGA LF	0.001		0	NR	NR	NR	NR	0
- Totals --		0	21	16	21	1	0	59

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **LONG BEACH WATER POLLUTION CONTROL PLANT** **NY SPDES** **S109318758**
NATIONAL BLVD & BAY ST **N/A**
< 1/8 **LONG BEACH, NY 11561**
1 ft.

Site 1 of 3 in cluster A

Relative: **Higher**

Actual: **1 ft.**

SPDES:

Name:	LONG BEACH WATER POLLUTION CONTROL PLANT
Address:	NATIONAL BLVD & BAY ST
City,State,Zip:	LONG BEACH, NY 11561
Permit Number:	NY0020567
State-Region:	1
Expiration Date:	08/31/2019
Current Major Minor Status:	Major
Primary Facility SIC Code:	4952
State Water Body Name:	REYNOLDS CHANNEL
Limit Set Status Flag:	Active
Total Actual Average Flow(MGD):	7.5
Total App Design Flow(MGD):	7.5
UDF1:	DMR
Lat/Long:	40.593082 / 73.6653047
DMR Cognizant Official:	WILLIAM NOTHOLT, CHIEF OPER
UDF2:	001701
UDF3:	SB
FIPS County Code:	NY059
Non-Gov Permit Affiliation Type Desc:	DMR Mailing Address
Non-Gov Permit Org Formal Name:	CITY OF LONG BEACH
Non-Gov Permit Street Address:	1 W CHESTER ST
Non-Gov Permit Supplemental Location:	Not reported
Non-Gov Permit City:	LONG BEACH
Non-Gov Permit State Code:	NY
Non-Gov Permit Zip Code:	11561
Non-Gov Facility Affiliation Type Desc:	Mailing Address
Non-Gov Facility Org Formal Name:	LONG BEACH (C)
Non-Gov Facility Street Address:	LONG BEACH (C) WPCP
Non-Gov Facility Supplemental Location:	NATIONAL BLVD & BAY DR
Non-Gov Facility City:	LONG BEACH
Non-Gov Facility State Code:	NY
Non-Gov Facility Zip Code:	11561
State Water Body:	02030202040
Region Permit Processed:	C
Dow Discharge Class Code:	05
SPDES Class Description:	EPA Major Municipal
Affiliation Type Description:	Public
Name:	Not reported
Contacts Title:	Not reported
Contacts Email:	Not reported
NOI Submission Date:	Not reported

A2 **LONG BEACH (C) WPCP** **ICIS** **1018305118**
NATIONAL BLVD & BAY DR **N/A**
< 1/8 **LONG BEACH, NY 11561**
1 ft.

Site 2 of 3 in cluster A

Relative:
Higher

Actual:
1 ft.

ICIS:

Enforcement Action ID:	NY-N00001875
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Qncr Comment
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	Under Review
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	UNDREV
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	NY-N00001569
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Administrative Consent Order
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	State Administrative Order of Consent
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	STAOCO
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	NY-N00001382
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Administrative Order
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	State CWA Non Penalty AO
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	SCWAAO
Facility SIC Code:	4952

LONG BEACH (C) WPCP (Continued) **1018305118**

Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	02-N00001486
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Letter Of Violation/Warning Letter
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	Letter of Violation/ Warning Letter
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	LOVWL
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	02-N00001485
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Letter Of Violation/Warning Letter
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	Letter of Violation/ Warning Letter
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	LOVWL
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	02-N00001482
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Letter Of Violation/Warning Letter
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561

LONG BEACH (C) WPCP (Continued) **1018305118**

Enforcement Action Type:	Letter of Violation/ Warning Letter
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Informal
EA Type Code:	LOVWL
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	02-2016-3029
FRS ID:	110019531425
Action Name:	City of Long Beach
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	CWA 309A AO For Compliance
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	309A
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

Enforcement Action ID:	02-1995-N038
FRS ID:	110019531425
Action Name:	LONG BEACH (C) WPCP (Permit NY0020567) Administrative Order
Facility Name:	LONG BEACH (C) WPCP
Facility Address:	NATIONAL BLVD & BAY DR LONG BEACH, NY 11561
Enforcement Action Type:	CWA 309A AO For Compliance
Facility County:	NASSAU
Program System Acronym:	NPDES
Enforcement Action Forum Desc:	Administrative - Formal
EA Type Code:	309A
Facility SIC Code:	4952
Federal Facility ID:	Not reported
Latitude in Decimal Degrees:	40.593083
Longitude in Decimal Degrees:	-73.665306
Permit Type Desc:	NPDES Individual Permit
Program System Acronym:	NY0020567
Facility NAICS Code:	Not reported
Tribal Land Code:	Not reported

A3 ESE < 1/8 0.007 mi. 39 ft. | **LONG BCH SEWERAGE** | **FUDS** | **1024899185** **N/A**

LONG BEACH, NY

Site 3 of 3 in cluster A

Relative: Higher

Actual: 1 ft.

FUDS:

EPA Region:	2
Installation ID:	NY29799F679200
Congressional District Number:	4
Facility Name:	LONG BCH SEWERAGE
FUDS Number:	C02NY0006
City:	LONG BEACH
State:	NY
County:	NASSAU
Telephone:	978-318-8238
USACE Division:	North Atlantic Division (NAD)
USACE District:	New England District (NAE)
Status:	Properties without projects
Current Owner:	Local Government; Private Sector
X Coord:	-73.665000000348996
Y Coord:	40.592777780171303
Latitude:	40.592777779999999
Longitude:	-73.665000000000006

B4 WSW < 1/8 0.024 mi. 128 ft. | **CITY OF LONG BEACH** | **NY Spills** | **S102100611** **N/A**

NATIONAL BLVD
LONG BEACH, NY

Site 1 of 3 in cluster B

Relative: Higher

Actual: 1 ft.

SPILLS:

Name:	CITY OF LONG BEACH
Address:	NATIONAL BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9410504 / 1994-11-08
Facility ID:	9410504
Facility Type:	ER
DER Facility ID:	228062
Site ID:	280849
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C4
SWIS:	3009
Spill Date:	1994-11-07
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1994-11-07
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Affected Persons
Cleanup Ceased:	1994-11-08
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-11-08
Spill Record Last Update:	2017-05-26

CITY OF LONG BEACH (Continued) **S102100611**

Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was NONE "
Remarks:	"CONTAINED ON CONCRETE FLOOR, AT WASTE WATER PLANT, REPAIR MADE & CLEANUP DONE, 1 GAL SPILLED DUE TO FAULTY FILTER, FILTER REPLACED, SPEEDI DRI APPLIED, P/U, NO FLOOR DRAINS AFFECTED, NO RESPONSE"

All Materials:

Site ID:	280849
Operable Unit ID:	1008385
Operable Unit:	01
Material ID:	376369
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

B5
SW
< 1/8
0.025 mi.
134 ft.

CITY OF LONG BEACH DPW **NY Spills** **S102098584**
NATIONAL BLVD & WEST PINE **N/A**
LONG BEACH, NY

Site 2 of 3 in cluster B

Relative:
Higher

Actual:
1 ft.

SPILLS:

Name:	CITY OF LONG BEACH DPW
Address:	NATIONAL BLVD & WEST PINE
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9309341 / 1994-01-31
Facility ID:	9309341
Facility Type:	ER
DER Facility ID:	149726
Site ID:	178262
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	B3
SWIS:	3009
Spill Date:	1993-10-28
Investigator:	NJACAMPO
Referred To:	Not reported
Reported to Dept:	1993-10-29
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Responsible Party
Cleanup Ceased:	1994-01-31
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False

CITY OF LONG BEACH DPW (Continued) **S102098584**

Remediation Phase:	0
Date Entered In Computer:	1993-11-03
Spill Record Last Update:	1994-02-01
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH DPW
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ACAMPORA 01/31/94: CLEAN UP COMPLETE, RECV'D DISPOSAL RECPTS ON 1/31/94. "
Remarks:	"DURING CONSTRUCTION OF PROPOSED CHLORINE CONTACT TANK, CONTRACTOR FOUND LAYER OF PETOLEUM CONT SOIL, APPROX 5' BELOW EXISTING GRADE, APPORX 300' FROM SURFACE WATER"

All Materials:

Site ID:	178262
Operable Unit ID:	990887
Operable Unit:	01
Material ID:	391999
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

B6 **CITY OF LONG BEACH** **NY LTANKS** **S101508853**
SW **NATIONAL BLVD.** **NY TANKS** **N/A**
< 1/8 **LONG BEACH, NY**
0.034 mi.
179 ft. **Site 3 of 3 in cluster B**

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	CITY OF LONG BEACH WATER
Address:	NATIONAL BLVD/THE BAY
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9414655 / 1997-03-03
Facility ID:	9414655
Site ID:	129818
Spill Date:	1995-02-07
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	CAMPBELL
Referred To:	Not reported
Reported to Dept:	1995-02-07
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True

CITY OF LONG BEACH (Continued) **S101508853**

UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1995-02-08
Spill Record Last Update:	1997-07-30
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH WATER
Spiller Address:	NATIONAL BLVD/THE BAY
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	111895
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was CAMPBELL WELL "
Remarks:	"2500 FAILED PETROTIGHT GROSS LEAK, F&N TESTER"

All TTF:

Facility ID:	9414655
Spill Number:	9414655
Spill Tank Test:	1543599
Site ID:	129818
Tank Number:	Not reported
Tank Size:	0
Material:	0008
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	129818
Operable Unit ID:	1008213
Operable Unit:	01
Material ID:	373390
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

TANKS NASSAU:

Facility Name:	CITY OF LONG BEACH
Permit End Date:	09012019
Tank Number:	0003
Decode of Ttype:	Under Ground
Capacity:	00002500

CITY OF LONG BEACH (Continued) **S101508853**

Product Description: OIL, DIESEL FUEL

C7 SW < 1/8 0.070 mi. 371 ft. | **WATER POLLUTION CONTROL** | **NY UST** | **U003848318**
571 NATIONAL BLVD | **N/A**
LONG BEACH, NY

Site 1 of 4 in cluster C

Relative: Higher
Actual: 1 ft.

NCFM UST:

Batt/Dept:	23
Location Id:	17207
Vendor:	UNBRANDED
Unit Type:	HF
Status:	Active
Tank Contents:	30199301
Installed Date:	12/01/1989
Last Test Date:	03/18/2010

C8 SW < 1/8 0.070 mi. 371 ft. | **LONG BEACH WATER CONTROL** | **NY LTANKS** | **S106738000**
571 NATIONAL BLVD | **N/A**
LONG BEACH, NY

Site 2 of 4 in cluster C

Relative: Higher
Actual: 1 ft.

LTANKS:

Name:	LONG BEACH WATER CONTROL
Address:	571 NATIONAL BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0411889 / 2005-03-09
Facility ID:	0411889
Site ID:	337194
Spill Date:	2005-02-07
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	HMCIRRIT
Referred To:	Not reported
Reported to Dept:	2005-02-07
CID:	444
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	False
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	2005-02-07
Spill Record Last Update:	2013-01-28
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	1 WESTCHESTER STREET
Spiller County:	001
Spiller Contact:	RON EBRITE

LONG BEACH WATER CONTROL (Continued) **S106738000**

Spiller Phone:	(516) 431-5691
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	272534
DEC Memo:	""
Remarks:	"TANK SHOULD BE UNCOVERED AND RETESTED AFTER DIVORCED FROM OTHERS:"

All TTF:

Facility ID:	0411889
Spill Number:	0411889
Spill Tank Test:	1548565
Site ID:	337194
Tank Number:	Not reported
Tank Size:	2500
Material:	0008
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	03
Test Method 2:	Horner EZ Check I or II
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Watchdog
Last Modified Date:	Not reported

All Materials:

Site ID:	337194
Operable Unit ID:	1099180
Operable Unit:	01
Material ID:	579497
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	G
Recovered:	.00
Oxygenate:	Not reported

9
South
< 1/8
0.075 mi.
396 ft.

TRANSFORMER POLE W5
29 BIRCH DR
NEW CASTLE, NY

NY Spills **S112229812**
N/A

Relative:
Higher

Actual:
1 ft.

SPILLS:

Name:	TRANSFORMER POLE W5
Address:	29 BIRCH DR
City,State,Zip:	NEW CASTLE, NY
Spill Number/Closed Date:	1209748 / 2013-03-01
Facility ID:	1209748
Facility Type:	ER
DER Facility ID:	427068
Site ID:	472818
DEC Region:	3
Spill Cause:	Storm

TRANSFORMER POLE W5 (Continued) **S112229812**

Spill Class:	C4
SWIS:	6036
Spill Date:	2012-11-08
Investigator:	TDGHIOSA
Referred To:	Not reported
Reported to Dept:	2012-11-08
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Transformer
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	4
Date Entered In Computer:	2012-11-08
Spill Record Last Update:	2012-11-09
Spiller Name:	HAYES
Spiller Company:	CON ED
Spiller Address:	29 BIRCH DR
Spiller Company:	999
Contact Name:	HAYES
DEC Memo:	"11-8-12 To be cleaned up. jc Added on 3/6/2013 from the description in ConEd's spreadsheet: W-5 6 gallons of dielectric oil to soil."
Remarks:	"Spilled onto soil. Cleanup is pending crew availability."

All Materials:

Site ID:	472818
Operable Unit ID:	1222672
Operable Unit:	01
Material ID:	2221406
Material Code:	0020A
Material Name:	transformer oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	6.00
Units:	G
Recovered:	Not reported
Oxygenate:	Not reported

C10
SW
< 1/8
0.079 mi.
416 ft.

Relative:
Higher

Actual:
1 ft.

FUENTES RESIDENCE **NY Spills** **S112148648**
115 WEST FULTON ST **N/A**
LONG BEACH, NY 11561

Site 3 of 4 in cluster C

SPILLS:

Name:	FUENTES RESIDENCE
Address:	115 WEST FULTON ST
City,State,Zip:	LONG BEACH, NY 11561
Spill Number/Closed Date:	1204912 / 2015-04-10
Facility ID:	1204912
Facility Type:	ER
DER Facility ID:	422121
Site ID:	467818
DEC Region:	1

FUENTES RESIDENCE (Continued) **S112148648**

Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3009
Spill Date:	2012-08-15
Investigator:	WJGABIN
Referred To:	Not reported
Reported to Dept:	2012-08-15
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2012-08-15
Spill Record Last Update:	2015-06-08
Spiller Name:	LEE SELINGER
Spiller Company:	FUENTES RESIDENCE
Spiller Address:	115 WEST FULTON ST
Spiller Company:	999
Contact Name:	LEE SELINGER
DEC Memo:	"08/15/12 1310 Hrs: Called Jones- this involved a 275gal tank, but she was NOT certain whether the crew performed any soil borings through or around the tank to confirm there was contaminated soil. She will check with the foreman and call back. DR 08/15/12 1315 Hrs: Jones called- the crew performed a boring through the tank and DID CONFIRM there was contaminated soil, but ARE NOT CERTAIN whether groundwater is impacted. DR Cleanup completed by Windmill. Tank was properly abandoned under DEC supervision. No contaminated soil generated from the site. No further action is required. OK for closure"
Remarks:	"while doing sand abandonment - discovered contamination - cleanup pending"

All Materials:

Site ID:	467818
Operable Unit ID:	1217759
Operable Unit:	01
Material ID:	2216063
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Oxygenate:	Not reported

D11 ENE < 1/8 0.086 mi. 454 ft. | **UNK LIRR TRESSEL & STP LONG BEACH, NY** | **NY Spills** | **S102565357 N/A**

Site 1 of 5 in cluster D

Relative: Higher

Actual: 1 ft.

SPILLS:

Name:	UNK
Address:	LIRR TRESSEL & STP
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	8607527 / 1987-03-11
Facility ID:	8607527
Facility Type:	ER
DER Facility ID:	100475
Site ID:	115303
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	Not reported
SWIS:	3009
Spill Date:	1987-03-11
Investigator:	WXOBRIEN
Referred To:	Not reported
Reported to Dept:	1987-03-11
CID:	Not reported
Water Affected:	REYNOLDS CHANNEL
Spill Source:	Unknown
Spill Notifier:	Citizen
Cleanup Ceased:	1987-03-11
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1987-03-12
Spill Record Last Update:	1987-11-10
Spiller Name:	Not reported
Spiller Company:	UNK
Spiller Address:	Not reported
Spiller Company:	999
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was O'BRIEN 10/10/95: This is additional information about material spilled from the translation of the old spill file: RED MATERIAL."
Remarks:	""

All Materials:

Site ID:	115303
Operable Unit ID:	905268
Operable Unit:	01
Material ID:	473026
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

C12 SW < 1/8 0.089 mi. 469 ft. | **DIAMONDS RESIDENCE**
119 WEST FULTON STREET
LONG BEACH, NY

Site 4 of 4 in cluster C

NY Spills | **S111738201**
N/A

Relative: Higher

Actual: 1 ft.

SPILLS:

Name:	DIAMONDS RESIDENCE
Address:	119 WEST FULTON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	1113546 / 2014-09-09
Facility ID:	1113546
Facility Type:	ER
DER Facility ID:	415991
Site ID:	461547
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3009
Spill Date:	2012-02-29
Investigator:	WJGABIN
Referred To:	Not reported
Reported to Dept:	2012-03-02
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2012-03-02
Spill Record Last Update:	2016-03-09
Spiller Name:	NEVEN DIAMONDS
Spiller Company:	DIAMONDS RESIDENCE
Spiller Address:	119 WEST FULTON STREET
Spiller Company:	999
Contact Name:	NEVEN DIAMONDS
DEC Memo:	"03/02/12 1545 Hrs (A): Called Hall- this involved a porous or dripping tank in a crawlspace. 03/02/12 1545 Hrs (B): THE CRAWLSPACE HAS A DIRT FLOOR. DR Area was properly cleaned up by the contractor. No contaminated soil generated from the site. Tank was properly abandoned with clean sand. No further action is required. OK for closure."
Remarks:	"clean up pending"

All Materials:

Site ID:	461547
Operable Unit ID:	1211631
Operable Unit:	01
Material ID:	2209444
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported

DIAMONDS RESIDENCE (Continued) **S111738201**

Oxygenate: Not reported

D13 **PARK PLACE W.T.P.** **NY AST** **A100128932**
East **PARK PLACE** **N/A**
< 1/8 **LONG BEACH, NY**
0.091 mi.
483 ft. **Site 2 of 5 in cluster D**

Relative:
Higher

Actual:
1 ft.

NASSAU CO. AST:

Facility ID:	001613
Tank ID:	0001
Tank Location:	Indoors, Aboveground
Capacity (Gal):	00005000
Description:	ALUMINUM SULFATE (CAKE ALUM)
Date Permit Ends:	Not reported
Tank ID:	0002
Tank Location:	Indoors, Aboveground
Capacity (Gal):	00005000
Description:	ALUMINUM SULFATE (CAKE ALUM)
Date Permit Ends:	Not reported

D14 **PARK PLACE WATER TREATMENT PLANT** **NY CBS AST** **S102638690**
East **PARK PLACE** **N/A**
< 1/8 **LONG BEACH, NY 11561**
0.092 mi.
487 ft. **Site 3 of 5 in cluster D**

Relative:
Higher

Actual:
1 ft.

CBS AST:

CBS Number:	1-000136
ICS Number:	1-700330
PBS Number:	Not reported
MOSF Number:	Not reported
SPDES Number:	0-020613
Facility Status:	IN SERVICE
Facility Type:	EF
Telephone:	(516) 431-5288
Facility Town:	HEMPSTEAD
Region:	STATE
Expiration Date:	07/05/2003
Total Capacity of All Active Tanks(gal):	10000
Operator:	CITY OF LONG BEACH
Emergency Contact:	FRANK EYE
Emergency Phone:	(516) 431-5604
Owner Name:	CITY OF LONG BEACH
Owner Address:	1 WEST CHESTER STREET
Owner City,St,Zip:	LONG BEACH, NY 11561
Owner Telephone:	(516) 431-5288
Owner Type:	Local Government
Owner Sub Type:	Not reported
Mail Name:	CITY OF LONG BEACH
Mail Contact Addr:	1 WEST CHESTER STREET
Mail Contact Addr2:	Not reported

PARK PLACE WATER TREATMENT PLANT (Continued) **S102638690**

Mail Contact Contact:	FRANK EYE
Mail Contact City,St,Zip:	LONG BEACH, NY 11561
Mail Phone:	(516) 431-5288

Tank Id:	002
CAS Number:	10043013
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	02/70
Tank Closed:	Not reported
Capacity (Gal):	5000
Chemical:	Aluminum sulfate
Tank Location:	Indoors, Aboveground
Tank Type:	Steel/carbon steel
Total Tanks:	2
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	07/05/1989
Certified Date:	05/14/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Rubber Liner
External Protection:	Painted/Asphalt Coating
Pipe Location:	Aboveground
Pipe Type:	Wrapped Steel
Pipe Internal:	None
Pipe External:	Painted/Asphalt Coating
Pipe Flag:	Painted/Asphalt Coating
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	100
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	2820
Lat/Long:	Not reported
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/05/95
Owner Mark:	1
Certificate Needs to be Printed:	False
Fiscal Amt for Registration Fee Correct:	True
Renewal Has Been Printed for Facility:	True
Pre-Printed Renewal App Last Printed:	03/30/2001

Tank Id:	001
CAS Number:	10043013
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	02/70
Tank Closed:	Not reported
Capacity (Gal):	5000
Chemical:	Aluminum sulfate
Tank Location:	Indoors, Aboveground
Tank Type:	Steel/carbon steel

PARK PLACE WATER TREATMENT PLANT (Continued) **S102638690**

Total Tanks:	2
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	07/05/1989
Certified Date:	05/14/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Rubber Liner
External Protection:	Painted/Asphalt Coating
Pipe Location:	Aboveground
Pipe Type:	Wrapped Steel
Pipe Internal:	None
Pipe External:	Painted/Asphalt Coating
Pipe Flag:	Painted/Asphalt Coating
Leak Detection:	None
Overfill Protection:	None
Haz Percent:	100
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	2820
Lat/Long:	Not reported
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/05/95
Owner Mark:	1
Certificate Needs to be Printed:	False
Fiscal Amt for Registration Fee Correct:	True
Renewal Has Been Printed for Facility:	True
Pre-Printed Renewal App Last Printed:	03/30/2001

D15 **SEWAGE TREATMENT PLANT** **NY Spills** **S102091791**
East **REYNOLDS CHANNEL** **N/A**
< 1/8 **LONG BEACH, NY**
0.092 mi.
487 ft. **Site 4 of 5 in cluster D**

Relative:
Higher

Actual:
1 ft.

SPILLS:

Name:	SEWAGE TREATMENT PLANT
Address:	REYNOLDS CHANNEL
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9112446 / 1992-04-16
Facility ID:	9112446
Facility Type:	ER
DER Facility ID:	294860
Site ID:	282491
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	B3
SWIS:	3009
Spill Date:	1992-03-06
Investigator:	RDDECAND
Referred To:	Not reported
Reported to Dept:	1992-03-06
CID:	Not reported
Water Affected:	REYNOLDS CHANNEL
Spill Source:	Institutional, Educational, Gov., Other

SEWAGE TREATMENT PLANT (Continued) **S102091791**

Spill Notifier:	Citizen
Cleanup Ceased:	1992-04-16
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-03-16
Spill Record Last Update:	2019-04-12
Spiller Name:	Not reported
Spiller Company:	SEWAGE TREATMENT PLANT
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DECANDIA 04/16/92: PLANT CHECKED NEAR LOW TIDE NO FOAM OR SEPTIC ODORS NOTICED NEAR DISCHARGE PT. 10/10/95: This is additional information about material spilled from the translation of the old spill file: BLACK LIQUID."
Remarks:	"NCDH NOTIFIED & WILL CHECK"

All Materials:

Site ID:	282491
Operable Unit ID:	966040
Operable Unit:	01
Material ID:	417422
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

D16
East
< 1/8
0.092 mi.
487 ft.

UNKNOWN STP POSSIBLY
REYNOLDS CHANNEL BY STP
LONG BEACH, NY

NY Spills **S102567017**
N/A

Site 5 of 5 in cluster D

Relative:
Higher

Actual:
1 ft.

SPILLS:

Name:	UNKNOWN STP POSSIBLY
Address:	REYNOLDS CHANNEL BY STP
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9305080 / 1993-07-23
Facility ID:	9305080
Facility Type:	ER
DER Facility ID:	66874
Site ID:	70475
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	A3
SWIS:	3009
Spill Date:	1993-07-23
Investigator:	GIBBONS
Referred To:	Not reported

UNKNOWN STP POSSIBLY (Continued) **S102567017**

Reported to Dept:	1993-07-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Citizen
Cleanup Ceased:	1993-07-23
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1993-07-26
Spill Record Last Update:	2007-06-04
Spiller Name:	Not reported
Spiller Company:	UNK STP POSSIBLY
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	""
Remarks:	"BROWN MURKY WATER AND TERRIBLE STINCH, CALLER GOES SWIMMING THERE, SEE 93-05068"

All Materials:

Site ID:	70475
Operable Unit ID:	986675
Operable Unit:	01
Material ID:	395028
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

---

17 ESE < 1/8 0.095 mi. 499 ft. | **CHRISTIAN LIGHT BAPTIST CHURCH RESIDENCE** | **NY Spills** | **S110487983**
16 EAST PINE STREET | **N/A**
LONG BEACH, NY

Relative: Higher
Actual: 1 ft.

SPILLS:

Name:	CHRISTIAN LIGHT BAPTIST CHURCH
Address:	16 EAST PINE STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	1002371 / 2010-06-02
Facility ID:	1002371
Facility Type:	ER
DER Facility ID:	431235
Site ID:	435502
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3009
Spill Date:	2010-06-01
Investigator:	Unassigned

CHRISTIAN LIGHT BAPTIST CHURCH RESIDENCE (Continued) **S110487983**

Referred To:	Not reported
Reported to Dept:	2010-06-01
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2010-06-01
Spill Record Last Update:	2012-11-29
Spiller Name:	ROSEZINER WADE
Spiller Company:	CHRISTIAN LIGHT BAPTIST CHURCH
Spiller Address:	16 EAST PINE ST
Spiller Company:	999
Contact Name:	STEVE DALTON
DEC Memo:	"***SAME AS 1002382*** DR 6/2/2010 CALLED SLOMINS OIL, LEFT MESSAGE AT 15:30,TO CALL BACK, NEED MORE INFORMATION (NH)"
Remarks:	"Caller reporting a spill of approx 15 gallons of #2 fuel oil to soil. clean up pending."

All Materials:

Site ID:	435502
Operable Unit ID:	1186264
Operable Unit:	01
Material ID:	2181045
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	15.00
Units:	G
Recovered:	Not reported
Oxygenate:	Not reported

Name:	CHRISTIAN LIGHT BAPTIST CHURCH RESIDENCE
Address:	16 EAST PINE STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	1002382 / 2010-07-07
Facility ID:	1002382
Facility Type:	ER
DER Facility ID:	431235
Site ID:	435513
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3009
Spill Date:	2010-06-01
Investigator:	wxprzylo
Referred To:	Not reported
Reported to Dept:	2010-06-02
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other

CHRISTIAN LIGHT BAPTIST CHURCH RESIDENCE (Continued) **S110487983**

Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2010-06-02
Spill Record Last Update:	2012-11-29
Spiller Name:	ROSEZINER WADE
Spiller Company:	CHRISTIAN LIGHT BAPTIST CHURCH RESIDENCE
Spiller Address:	16 EAST PINE ST
Spiller Company:	999
Contact Name:	ROSEZINER WADE
DEC Memo:	"***SAME AS 1002371*** DR 06/02/10 @9:00 t/c to Ms Wade, church's trustee, 275 AST leaked, ~2'x2' area of soil in the corner affected, Slomin installed new AST, cleanup procedures discussed, DEC inspection requested. (VP) By VP 06/11/10 @11:00 inspected; ~2 x3 x 1 excavation inspected, end points and bottom free of product, less than 550 lbs of #2 oil contaminated soil removed, disposed with household garbage. Cleanup has been completed, no further action required. "
Remarks:	"loss of product to soil. Fire Marshall was on scene. Caller states that she does not know what she is supposed to do for clean up and needs assistance from DEC."

All Materials:

Site ID:	435513
Operable Unit ID:	1186275
Operable Unit:	01
Material ID:	2181056
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Oxygenate:	Not reported

E18 **VISUAL FABRICATIONS INC** **RCRA NonGen / NLR** **1000423987**
WSW **140 W PINE ST** **FINDS** **NYD060324779**
< 1/8 **LONG BEACH, NY 11561** **ECHO**
0.098 mi.
517 ft. **Site 1 of 3 in cluster E**

Relative:
Higher

Actual:
1 ft.

RCRA NonGen / NLR:

Date form received by agency:	2007-01-01 00:00:00.0
Facility name:	VISUAL FABRICATIONS INC
Facility address:	140 W PINE ST LONG BEACH, NY 11561-1937
EPA ID:	NYD060324779
Mailing address:	W PINE ST LONG BEACH, NY 11561
Contact:	Not reported
Contact address:	W PINE ST LONG BEACH, NY 11561

VISUAL FABRICATIONS INC (Continued) **1000423987**

Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	VISUAL FABRICATIONS INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	212-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	VISUAL FABRICATIONS INC
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	212-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	2006-01-01 00:00:00.0
Site name:	VISUAL FABRICATIONS INC
Classification:	Not a generator, verified

VISUAL FABRICATIONS INC (Continued) **1000423987**

Date form received by agency: 1999-07-08 00:00:00.0
Site name: VISUAL FABRICATIONS INC
Classification: Not a generator, verified

Date form received by agency: 1989-12-11 00:00:00.0
Site name: VISUAL FABRICATIONS INC
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110004362065

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000423987
Registry ID: 110004362065
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004362065

E19 **WSW** **< 1/8** **0.111 mi.** **586 ft.**	**LONG BEACH CITY OF** **150 W PINE ST** **LONG BEACH, NY 11561** **Site 2 of 3 in cluster E**	**RCRA-VSQG** **FINDS** **ECHO**	**1001405160** **NYR000066167**

Relative:
Higher

Actual:
1 ft.

RCRA-VSQG:

Date form received by agency:	2007-01-01 00:00:00.0
Facility name:	LONG BEACH CITY OF
Facility address:	150 W PINE ST LONG BEACH, NY 11561
EPA ID:	NYR000066167
Mailing address:	W PINE ST LONG BEACH, NY 11561
Contact:	DANIE OBRIEN
Contact address:	W PINE ST LONG BEACH, NY 11561
Contact country:	US
Contact telephone:	516-433-1000
Contact email:	Not reported
EPA Region:	02
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	CITY OF LONG BEAC
Owner/operator address:	1 W CHESTER ST LONG BEACH, NY 11561
Owner/operator country:	US
Owner/operator telephone:	516-431-1000
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF LONG BEAC
Owner/operator address:	1 W CHESTER ST LONG BEACH, NY 11561
Owner/operator country:	US
Owner/operator telephone:	516-431-1000
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported

LONG BEACH CITY OF (Continued) **1001405160**

Legal status: Municipal
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2006-01-01 00:00:00.0
Site name: LONG BEACH CITY OF
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 1999-01-27 00:00:00.0
Site name: LONG BEACH CITY OF
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

Violation Status: No violations found

FINDS:

Registry ID: 110004550539

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA

LONG BEACH CITY OF (Continued) **1001405160**

program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001405160
Registry ID:	110004550539
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110004550539

E20 WSW < 1/8 0.120 mi. 631 ft. **PINETOWN HOUSE APARTMENTS** **NY Spills** **S102098909**
149 B PINE STREET **N/A**
LONG BEACH, NY

Site 3 of 3 in cluster E

Relative: Higher

Actual: 1 ft.

SPILLS:

Name:	PINETOWN HOUSE APARTMENTS
Address:	149 B PINE STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9312235 / 1994-10-11
Facility ID:	9312235
Facility Type:	ER
DER Facility ID:	220747
Site ID:	271209
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	C3
SWIS:	3009
Spill Date:	1994-01-11
Investigator:	BPAUSTIN
Referred To:	Not reported
Reported to Dept:	1994-01-18
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Health Department
Cleanup Ceased:	1994-10-11
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-01-18
Spill Record Last Update:	2016-10-05
Spiller Name:	LOUIS/ELLEN
Spiller Company:	REDCOAT MGT
Spiller Address:	3115 LONG BEACH ROAD
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN 3/10/94: T/C W/ MRS HUNTER, SHE DOES NOT NOTICE ANY ODORS IN HER HOUSE,NOR OUTSIDE NEAR FILL, SPILL WAS ON CONCRETE."
Remarks:	"PER CALLER SPILL OF #2 FUEL OIL IN BLDGING DETAILS UNK BY MATTHEWS."

PINETOWN HOUSE APARTMENTS (Continued) **S102098909**

All Materials:

Site ID:	271209
Operable Unit ID:	994243
Operable Unit:	01
Material ID:	391228
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

F21 **VACANT WAREHOUSE** **NY LTANKS** **S100781634**
East **724 PARK PLACE** **N/A**
1/8-1/4 **LONG BEACH, NY**
0.134 mi.
707 ft. **Site 1 of 3 in cluster F**

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	VACANT WAREHOUSE
Address:	724 PARK PLACE
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9312008 / 1996-10-17
Facility ID:	9312008
Site ID:	319731
Spill Date:	1994-01-11
Spill Cause:	Tank Test Failure
Spill Source:	Commercial/Industrial
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	RBC WELL
Referred To:	Not reported
Reported to Dept:	1994-01-11
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1994-01-12
Spill Record Last Update:	2016-01-22
Spiller Name:	JOE CALDERONE
Spiller Company:	SCALAMANDRE CORP
Spiller Address:	157 ALBANY AVENUE
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	257605
DEC Memo:	"BOTH SYSTEMS FAILED RETEST 3/25/1994, BOTH TANKS REMOVED, ONE

VACANT WAREHOUSE (Continued) **S100781634**

6/17/94 & ONE 6/24/94. GW CONTAMINATION FOUND IN BOTH TANK EXCAVATIONS. 119.8 TONS OF FUEL OIL CONTAMINATED SOIL DISPOSED OF AT SUNDIAL ASPHALT ON 7/22/94. 3 WELLS MONITORED FROM 5/17/95 TO 9/19/96, NO RECOVERABLE PRODUCT"

Remarks: "2K (WEST TANK) GROSS LEAK, 2K (MIDDLE TANK) -.250, EXCAVATE, ISOLATE AND RETEST, F&N TESTER"

All TTF:

Facility ID:	9312008
Spill Number:	9312008
Spill Tank Test:	1542362
Site ID:	319731
Tank Number:	Not reported
Tank Size:	0
Material:	0001
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	319731
Operable Unit ID:	990636
Operable Unit:	01
Material ID:	391013
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

F22 **PARK PLACE WATER TREATMENT PLANT** **NY CBS** **S108410700**
East **765 PARK PLACE** **N/A**
1/8-1/4 **LONG BEACH, NY 11561**
0.137 mi.
721 ft. **Site 2 of 3 in cluster F**

Relative:
Higher

Actual:
1 ft.

CBS:

Name:	PARK PLACE WATER TREATMENT PLANT
Address:	765 PARK PLACE
City,State,Zip:	LONG BEACH, NY 11561
CBS Number:	1-000136
Program Type:	CBS
Facility Status:	Active
Expiration Date:	07/05/2021
Dec Region:	1
UTMX:	613174.71212
UTMY:	4494496.91248

F23 **LONG BEACH WATER PURIFICATION PLANT** **NY UST** **U003847091**
East **765 PARK PL** **NY AST** **N/A**
1/8-1/4 **LONG BEACH, NY**
0.137 mi.
721 ft. **Site 3 of 3 in cluster F**

Relative:
Higher

Actual:
1 ft.

NCFM UST:

Batt/Dept:	23
Location Id:	13765
Vendor:	UNB
Unit Type:	HB
Status:	Removed
Tank Contents:	10000000
Installed Date:	01/01/1971
Last Test Date:	10/12/1994
Unit Type:	HB
Status:	Removed
Tank Contents:	30199301
Installed Date:	01/01/1978
Last Test Date:	10/25/1994

NCFM AST:

Location Id:	13765
Batt/Dept:	23
Unit Type:	DG
Vendor:	UNBRANDED
Status:	Active
Contents:	30199301
Installed Date:	Not reported
Last Test Date:	01/19/1995
Location Id:	13765
Batt/Dept:	23
Unit Type:	CX
Vendor:	UNB
Status:	Active
Contents:	30199301
Installed Date:	01/01/1986
Last Test Date:	Not reported
Location Id:	13765
Batt/Dept:	23
Unit Type:	CX
Vendor:	UNB
Status:	Active
Contents:	30199301
Installed Date:	01/01/1986
Last Test Date:	Not reported
Location Id:	13765
Batt/Dept:	23
Unit Type:	DX
Vendor:	UNBRANDED
Status:	Removed
Contents:	10000000
Installed Date:	01/01/1964

LONG BEACH WATER PURIFICATION PLANT (Continued) **U003847091**

Last Test Date: 10/27/1992

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24 SE 1/8-1/4 0.163 mi. 861 ft.

DOKES RESIDENCE
36 EAST HUDSON STREET
LONG BEACH, NY

NY LTANKS **S100492450**
N/A

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	DOKES RESIDENCE
Address:	36 EAST HUDSON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9212693 / 1997-07-17
Facility ID:	9212693
Site ID:	107234
Spill Date:	1993-02-09
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	CAMPBELL
Referred To:	Not reported
Reported to Dept:	1993-02-09
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1993-02-10
Spill Record Last Update:	1997-07-18
Spiller Name:	Not reported
Spiller Company:	DOKES RESIDENCE
Spiller Address:	36 EAST HUDSON STREET
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	94324
DEC Memo:	""
Remarks:	"OIL DELIVERY MADE ON 1/4/93, 550 GALLONS ONLY 4 LEFT, WILL CAP EXISTING FUEL LINE AND SET UP TEMP SYSTEM,"

All Materials:

Site ID:	107234
Operable Unit ID:	977099
Operable Unit:	01
Material ID:	402528
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G

DOKES RESIDENCE (Continued) **S100492450**

Recovered: .00
Oxygenate: Not reported

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25 WSW 1/8-1/4 0.175 mi. 924 ft. **LONG BEACH SENIOR CENTER MAGNOLIA & WEST PINE ST LONG BEACH, NY** **NY LTANKS** **S102233034 N/A**

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	LONG BEACH SENIOR CENTER
Address:	MAGNOLIA & WEST PINE ST
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9511315 / 2001-02-09
Facility ID:	9511315
Site ID:	115699
Spill Date:	1995-12-07
Spill Cause:	Tank Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	RBC WELL
Referred To:	Not reported
Reported to Dept:	1995-12-07
CID:	351
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1995-12-07
Spill Record Last Update:	2001-02-15
Spiller Name:	WALTER WITTENBORN
Spiller Company:	LONG BEACH SENIOR CENTER
Spiller Address:	MAGNOLIA & WEST PINE ST
Spiller County:	001
Spiller Contact:	WALTER WITTENBORN
Spiller Phone:	( ) 432-4439
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	100799
DEC Memo:	""
Remarks:	"550 TANK WAS REMOVED TODAY - HAD MANY HOLES. HEAVY CONTAMINATION WAS FOUND IN SOIL. NEED AN INSPECTION ON MONDAY CALL FAXED FROM REGION 1 ON 12/07/95"

All Materials:

Site ID:	115699
Operable Unit ID:	1021851
Operable Unit:	01
Material ID:	358664
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported

LONG BEACH SENIOR CENTER (Continued) **S102233034**

Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

G26 **ABANDONED HOUSE** **NY LTANKS** **S104514086**
SW **145 WEST MARKET STREET** **N/A**
1/8-1/4 **LONG BEACH, NY**
0.193 mi.
1018 ft. **Site 1 of 2 in cluster G**

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	ABANDONED HOUSE
Address:	145 WEST MARKET STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9504974 / 1995-08-23
Facility ID:	9504974
Site ID:	60862
Spill Date:	1995-07-24
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	B3
Cleanup Ceased:	1995-08-23
SWIS:	3009
Investigator:	SCHULZ
Referred To:	Not reported
Reported to Dept:	1995-07-24
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Local Agency
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1995-07-25
Spill Record Last Update:	2001-02-13
Spiller Name:	Not reported
Spiller Company:	UNK
Spiller Address:	Not reported
Spiller County:	999
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	59342
DEC Memo:	""
Remarks:	"ABANDONED HOUSE TANK OUTSIDE UNK HOW LONG LEAKING,"

All Materials:

Site ID:	60862
Operable Unit ID:	1019730
Operable Unit:	01
Material ID:	366505
Material Code:	0001A
Material Name:	#2 fuel oil

ABANDONED HOUSE (Continued) **S104514086**

Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

27
SSW
1/8-1/4
0.194 mi.
1025 ft.

PARK AVENUE EXTENDED CARE CENTER
425 NATIONAL BLVD
LONG BEACH, NY

NY UST **U003847602**
NY AST **N/A**

Relative:
Higher

Actual:
1 ft.

NCFM UST:

Batt/Dept:	23
Location Id:	962835
Vendor:	Not reported
Unit Type:	HF
Status:	Active
Tank Contents:	30199301
Installed Date:	10/29/1999
Last Test Date:	10/14/2009

NCFM AST:

Location Id:	962835
Batt/Dept:	23
Unit Type:	BG
Vendor:	Not reported
Status:	Active
Contents:	30199301
Installed Date:	10/29/1999
Last Test Date:	10/29/1999

Location Id:	962835
Batt/Dept:	23
Unit Type:	BG
Vendor:	Not reported
Status:	Active
Contents:	30199301
Installed Date:	10/29/1999
Last Test Date:	10/29/1999

G28
SSW
1/8-1/4
0.195 mi.
1032 ft.

RESIDENCE
128 WEST MARKET STREET
LONG BEACH, NY

Site 2 of 2 in cluster G

NY LTANKS **S102619600**
N/A

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	RESIDENCE
Address:	128 WEST MARKET STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9407833 / 1998-06-19
Facility ID:	9407833

RESIDENCE (Continued) **S102619600**

Site ID:	235063
Spill Date:	1994-09-12
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	C3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	BPAUSTIN
Referred To:	Not reported
Reported to Dept:	1994-09-12
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1994-09-14
Spill Record Last Update:	2004-02-19
Spiller Name:	Not reported
Spiller Company:	RESIDENCE
Spiller Address:	128 WEST MARKET STREET
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	193607
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN WELL TANK REMOVED AND SOILS RECOVERING= 35 GALS"
Remarks:	"SMELLED FUMES & FOUND STAIN ON COVER AT BACK OF HOUSE, CALLED COMMANDER"

All Materials:

Site ID:	235063
Operable Unit ID:	1002088
Operable Unit:	01
Material ID:	377294
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

H29 South 1/8-1/4 0.205 mi. 1084 ft. | **MUNICIPAL BUILDING**
1 W. CHESTER ST.
LONG BEACH, NY | **NY AST** | **A100101519**
N/A

Site 1 of 3 in cluster H

Relative: Higher
Actual: 1 ft.

NASSAU CO. AST:

Facility ID:	055358
Tank ID:	0003
Tank Location:	Outdoors, Aboveground
Capacity (Gal):	00002000
Description:	OIL, FUEL #2
Date Permit Ends:	Not reported

H30 South 1/8-1/4 0.205 mi. 1084 ft. | **LONG BEACH CITY HALL**
1 W CHESTER ST
LONG BEACH, NY 11561 | **RCRA NonGen / NLR** | **1018158949**
NYR000220244

Site 2 of 3 in cluster H

Relative: Higher
Actual: 1 ft.

RCRA NonGen / NLR:

Date form received by agency:	2017-04-18 00:00:00.0
Facility name:	LONG BEACH CITY HALL
Facility address:	1 W CHESTER ST LONG BEACH, NY 11561
EPA ID:	NYR000220244
Mailing address:	W CHESTER ST LONG BEACH, NY 11561
Contact:	JIM LACARRUBBA
Contact address:	W CHESTER ST LONG BEACH, NY 11561
Contact country:	US
Contact telephone:	516-431-1011
Contact email:	Not reported
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CITY OF LONG BEACH
Owner/operator address:	Not reported Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	1958-09-15 00:00:00.0
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF LONG BEACH
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported

LONG BEACH CITY HALL (Continued) **1018158949**

Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Operator
Owner/Op start date:	1958-09-15 00:00:00.0
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF LONG BEACH
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	Not reported
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	1958-09-15 00:00:00.0
Owner/Op end date:	Not reported

Owner/operator name:	CITY OF LONG BEACH
Owner/operator address:	Not reported
	Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Municipal
Owner/Operator Type:	Owner
Owner/Op start date:	1958-09-15 00:00:00.0
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	2015-07-01 00:00:00.0
Site name:	LONG BEACH CITY HALL
Classification:	Large Quantity Generator

LONG BEACH CITY HALL (Continued) **1018158949**

Hazardous Waste Summary:

. Waste code: B007
. Waste name: Other PCB wastes, including contaminated soil, solids, sludges, clothing, rags and dredge material.

Violation Status: No violations found

H31 South 1/8-1/4 0.205 mi. 1084 ft. **Site 3 of 3 in cluster H**

Relative: Higher

Actual: 1 ft.

CITY OF LONG BEACH
1 WEST CHESTER STREET
LONG BEACH, NY 11561

NY LTANKS **S100491550**
NY CBS **N/A**
NY AST
NY CBS AST
NY Spills
NY SPDES

LTANKS:

Name:	CITY OF LONG BEACH
Address:	1 WEST CHESTER STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9912713 / 2000-03-23
Facility ID:	9912713
Site ID:	257050
Spill Date:	2000-02-07
Spill Cause:	Tank Failure
Spill Source:	Commercial/Industrial
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	HMCIRRIT
Referred To:	Not reported
Reported to Dept:	2000-02-08
CID:	371
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2000-02-08
Spill Record Last Update:	2003-11-26
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	601 LONG BEACH ROAD
Spiller County:	001
Spiller Contact:	WILLIAM NOTHOLT
Spiller Phone:	(516) 431-5691
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	210481
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was CIRRITO 2/14/00 NOT A T/T/F REASSIGNED TO CIRRITO CBS 1-000151 NO SPILLAGE, TANKS OUT OF SERVICE AND BEING SCHEDULED FOR REPLACEMENT, COPY TO CBS FILE"
Remarks:	"tank failed inspection - caller feels it should not be put back in service until it passes -- storage tank for chemicals for sewer treatment. "

CITY OF LONG BEACH (Continued) **S100491550**

All Materials:

Site ID:	257050
Operable Unit ID:	1091431
Operable Unit:	01
Material ID:	294588
Material Code:	0124A
Material Name:	sodium hypochlorite
Case No.:	07681529
Material FA:	Hazardous Material
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

CBS:

Name:	LONG BEACH WATER POLLUTION CONTROL
Address:	1 WEST CHESTER STREET
City,State,Zip:	LONG BEACH, NY 11561
CBS Number:	1-000151
Program Type:	CBS
Facility Status:	Active
Expiration Date:	07/07/2019
Dec Region:	1
UTMX:	612855.69654
UTMY:	4494056.61677

AST:

Name:	CITY OF LONG BEACH
Address:	1 WEST CHESTER ST.
City,State,Zip:	LONG BEACH, NY 11561
Region:	STATE
DEC Region:	1
Site Status:	Unregistered
Facility Id:	1-000708
Program Type:	PBS
UTM X:	612855.69653
UTM Y:	4494056.61677
Expiration Date:	N/A
Site Type:	Apartment Building/Office Building

Tank Info:

Tank Number:	1
Tank Id:	254452
Tank Location:	Aboveground - contact with impervious barrier... Tank bottom rests on impervious barrier, allowing visual indication of leaks.
Tank Type:	Steel/Carbon Steel/Iron
Tank Status:	Unregistered
Pipe Model:	Not reported
Install Date:	Not reported
Capacity Gallons:	0
Tightness Test Method:	NN
Date Test:	Not reported
Next Test Date:	Not reported
Date Tank Closed:	Not reported

CITY OF LONG BEACH (Continued) **S100491550**

Register:	True
Modified By:	hmcirrit
Last Modified:	04/14/2017
Material Name:	#2 fuel oil (on-site consumption)

CBS AST:

CBS Number:	1-000151
ICS Number:	0-020567
PBS Number:	Not reported
MOSF Number:	Not reported
SPDES Number:	0-020567
Facility Status:	IN SERVICE
Facility Type:	F
Telephone:	(516) 431-5691
Facility Town:	LONG BEACH (C)
Region:	STATE
Expiration Date:	07/07/2003
Total Capacity of All Active Tanks(gal):	6000
Operator:	WILLIAM NOTHOLT
Emergency Contact:	WILLIAM NOTHOLT
Emergency Phone:	(516) 431-5691
Owner Name:	LONG BEACH C DPW WATER POLLUTION CONTROL
Owner Address:	1 WEST CHESTER STREET
Owner City,St,Zip:	LONG BEACH, NY 11561
Owner Telephone:	(516) 431-5691
Owner Type:	Local Government
Owner Sub Type:	Not reported
Mail Name:	LONG BEACH C DPW WATER POLLUTION CONTROL
Mail Contact Addr:	1 WEST CHESTER STREET
Mail Contact Addr2:	Not reported
Mail Contact Contact:	WILLIAM NOTHOLT
Mail Contact City,St,Zip:	LONG BEACH, NY 11561
Mail Phone:	(516) 431-5691

Tank Id:	2
CAS Number:	7681529
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	05/89
Tank Closed:	Not reported
Capacity (Gal):	3000
Chemical:	Sodium hypochlorite
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	2
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	07/07/1989
Certified Date:	05/03/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Double Walled Fiberglass
Pipe Internal:	None
Pipe External:	None

CITY OF LONG BEACH (Continued) **S100491550**

Pipe Flag:	None
Leak Detection:	Concrete Pad w/channels
Overfill Protection:	High Level Alarm
Haz Percent:	15
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	2809
Lat/Long:	40|35|38 / 73|39|59
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1
Certificate Needs to be Printed:	40|35|38 / 73|39|59
Fiscal Amt for Registration Fee Correct:	40|35|38 / 73|39|59
Renewal Has Been Printed for Facility:	40|35|38 / 73|39|59
Pre-Printed Renewal App Last Printed:	40|35|38 / 73|39|59

Tank Id:	1
CAS Number:	7681529
Federal ID:	Not reported
Tank Status:	In Service
Install Date:	05/89
Tank Closed:	Not reported
Capacity (Gal):	3000
Chemical:	Sodium hypochlorite
Tank Location:	Indoors, Aboveground
Tank Type:	Fiberglass coated steel
Total Tanks:	2
Tank Secret:	False
Tank Secondary Containment:	Vault
Tank Error Status:	No Missing Data
Date Entered:	07/07/1989
Certified Date:	05/03/2001
Substance:	Single Hazardous Substance on DEC List
Internal Protection:	Fiberglass Liner (FRP
External Protection:	Fiberglass
Pipe Location:	Aboveground
Pipe Type:	Double Walled Fiberglass
Pipe Internal:	None
Pipe External:	None
Pipe Flag:	None
Leak Detection:	Concrete Pad w/channels
Overfill Protection:	High Level Alarm
Haz Percent:	15
Last Test:	Not reported
Due Date:	Not reported
SWIS Code:	2809
Lat/Long:	40|35|38 / 73|39|59
Is Updated:	False
Renew Date:	04/01/93
Is It There:	False
Delinquent:	False
Date Expired:	07/07/95
Owner Mark:	1

CITY OF LONG BEACH (Continued) **S100491550**

Certificate Needs to be Printed: 40|35|38 / 73|39|59
Fiscal Amt for Registration Fee Correct: 40|35|38 / 73|39|59
Renewal Has Been Printed for Facility: 40|35|38 / 73|39|59
Pre-Printed Renewal App Last Printed: 40|35|38 / 73|39|59

SPILLS:

Name:	CITY OF LONG BEACH
Address:	1 WEST CHESTER ST
City,State,Zip:	LONG BEACH, NY 11561
Spill Number/Closed Date:	1407642 / 2015-02-09
Facility ID:	1407642
Facility Type:	ER
DER Facility ID:	456163
Site ID:	501169
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3020
Spill Date:	2014-10-24
Investigator:	hmcirrit
Referred To:	Not reported
Reported to Dept:	2014-10-24
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Tank Tester
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2014-10-24
Spill Record Last Update:	2015-03-31
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	Not reported
Spiller Company:	999
Contact Name:	JOHN
DEC Memo:	"10/24/14 1105 Hrs: Left message for John. DR 10/24/14 1110 Hrs (A): John called- he said THE CITY'S INSURANCE HAD REQUESTED THE TANK BE TESTED. While on site, the insurance representative noticed the drip and showed it to him. 10/24/14 1110 Hrs (C): John suspects the tank has been dripping for a period of time, but it is against a building and sidewalk so he cannot determine the extent, if any, of any soil contamination. DR 2/6/2015: HC on site. There are no leaks noticed on the above ground tank at this time. A picture of the tank is on DECDOCS. No further action is required."
Remarks:	"2000 agt/slow drip leak/repairs and clean up pending"

All Materials:

Site ID:	501169
Operable Unit ID:	1250571
Operable Unit:	01
Material ID:	2252337
Material Code:	0001A
Material Name:	#2 fuel oil

CITY OF LONG BEACH (Continued) **S100491550**

Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	LONG BEACH MAINTENANCE
Address:	1 WEST CHESTER STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9310360 / 1993-12-01
Facility ID:	9310360
Facility Type:	ER
DER Facility ID:	210481
Site ID:	135098
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3009
Spill Date:	1993-11-23
Investigator:	BPAUSTIN
Referred To:	Not reported
Reported to Dept:	1993-11-23
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	DEC
Cleanup Ceased:	1993-12-01
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1993-11-29
Spill Record Last Update:	2001-12-03
Spiller Name:	Not reported
Spiller Company:	LONG BEACH VEHICLE MAINT
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN 12/01/93: CLEANUP BY SPILLER, 1-2 YDS ADDED TO STP DISPOSAL PILE. "
Remarks:	"SPILL DUE TO RUPTURED FILTER CANSITER OF A DIESEL DISPENSER. SPEEDI DRI APPLIED TO AFFECTED AREA OF SIDEWALK"

All Materials:

Site ID:	135098
Operable Unit ID:	989220
Operable Unit:	01
Material ID:	392976
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	40.00
Units:	G

CITY OF LONG BEACH (Continued) **S100491550**

Recovered:	.00
Oxygenate:	Not reported

Name:	CITY OF LONG BEACH
Address:	1 WEST CHESTER STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9205818 / 2004-03-15
Facility ID:	9205818
Facility Type:	ER
DER Facility ID:	210481
Site ID:	257049
DEC Region:	1
Spill Cause:	Other
Spill Class:	B3
SWIS:	3009
Spill Date:	1992-08-17
Investigator:	CAMPBELL
Referred To:	Not reported
Reported to Dept:	1992-08-20
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1992-08-25
Spill Record Last Update:	2017-07-29
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was CAMPBELL WELL "
Remarks:	"AT CITY HALL, 20K TANK U/G LINE LEAK, F&N ON SITE MAKING REPAIRS,WILL EMPTY REMAINING 3 OR 10K GALLONS"

All Materials:

Site ID:	257049
Operable Unit ID:	973151
Operable Unit:	01
Material ID:	410009
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1000.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

CITY OF LONG BEACH (Continued) **S100491550**

SPDES:

Name:	CITY OF LONG BEACH
Address:	1 WEST CHESTER STREET
City,State,Zip:	LONG BEACH, NY 11561-9002
Permit Number:	NYR20A189
State-Region:	1
Expiration Date:	Not reported
Current Major Minor Status:	Not reported
Primary Facility SIC Code:	Not reported
State Water Body Name:	Not reported
Limit Set Status Flag:	Not reported
Total Actual Average Flow(MGD):	Not reported
Total App Design Flow(MGD):	Not reported
UDF1:	Not reported
Lat/Long:	Not reported
DMR Cognizant Official:	Not reported
UDF2:	Not reported
UDF3:	Not reported
FIPS County Code:	Not reported
Non-Gov Permit Affiliation Type Desc:	Not reported
Non-Gov Permit Org Formal Name:	Not reported
Non-Gov Permit Street Address:	Not reported
Non-Gov Permit Supplemental Location:	Not reported
Non-Gov Permit City:	Not reported
Non-Gov Permit State Code:	Not reported
Non-Gov Permit Zip Code:	Not reported
Non-Gov Facility Affiliation Type Desc:	Not reported
Non-Gov Facility Org Formal Name:	Not reported
Non-Gov Facility Street Address:	Not reported
Non-Gov Facility Supplemental Location:	Not reported
Non-Gov Facility City:	Not reported
Non-Gov Facility State Code:	Not reported
Non-Gov Facility Zip Code:	Not reported
State Water Body:	Not reported
Region Permit Processed:	Not reported
Dow Discharge Class Code:	Not reported
SPDES Class Description:	MS4
Affiliation Type Description:	Not reported
Name:	JACK SCHNIRMAN
Contacts Title:	CITY MANAGER
Contacts Email:	Not reported
NOI Submission Date:	03/06/2003

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32 **RITE FUEL** **NY LTANKS** **S104279048**
WSW **237 WEST FULTON STREET** **NY Spills** **N/A**
1/4-1/2 **LONG BEACH, NY**
0.263 mi.
1387 ft.

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	RITE FUEL
Address:	237 WEST FULTON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9100582 / 1991-04-17
Facility ID:	9100582
Site ID:	272543

RITE FUEL (Continued) **S104279048**

Spill Date:	1991-04-16
Spill Cause:	Tank Overfill
Spill Source:	Tank Truck
Spill Class:	Not reported
Cleanup Ceased:	1991-04-17
SWIS:	3009
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1991-04-16
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1991-04-17
Spill Record Last Update:	1999-12-20
Spiller Name:	Not reported
Spiller Company:	RITE FUEL
Spiller Address:	50 FAIRCHILD COURT
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	221819
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was NONE ***SEE ALSO 9910171 (OVERFILL) AND 9911049 (TANK LEAK?) HERE***"
Remarks:	"FUEL CAME OUT OF VENT, ON DRIVEWAY, SORBENT APPLIED AND PICKED UP. ***SEE ALSO 9910171 (OVERFILL) AND 9911049 (TANK LEAK?) HERE***"

All Materials:

Site ID:	272543
Operable Unit ID:	951717
Operable Unit:	01
Material ID:	426771
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

SPILLS:

Name:	WANNER RESIDENCE
Address:	237 WEST FULTON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9910171 / 2001-02-27
Facility ID:	9910171
Facility Type:	ER
DER Facility ID:	221819
Site ID:	272544

RITE FUEL (Continued) **S104279048**

DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C4
SWIS:	3009
Spill Date:	1999-11-22
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1999-11-22
CID:	371
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1999-11-22
Spill Record Last Update:	2001-02-28
Spiller Name:	Not reported
Spiller Company:	PETRO OIL
Spiller Address:	48 HARBOR PARK DRIVE
Spiller Company:	001
Contact Name:	JONATHAN WANNER
DEC Memo:	""
Remarks:	"spilled 1/4 of 1 gal due to valve problem -- clean up complete. ***SEE ALSO 9100582 (OVERFILL) AND 9911049 (TANK LEAK?) HERE***"

All Materials:

Site ID:	272544
Operable Unit ID:	1084939
Operable Unit:	01
Material ID:	560609
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	G
Recovered:	1.00
Oxygenate:	Not reported

Name:	WANNER RESIDENCE
Address:	237 WEST FULTON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9911049 / 2009-06-29
Facility ID:	9911049
Facility Type:	ER
DER Facility ID:	221819
Site ID:	272545
DEC Region:	1
Spill Cause:	Other
Spill Class:	B3
SWIS:	3009
Spill Date:	1999-12-17
Investigator:	WJGABIN

RITE FUEL (Continued) **S104279048**

Referred To:	Not reported
Reported to Dept:	1999-12-17
CID:	312
Water Affected:	Not reported
Spill Source:	Private Dwelling
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1999-12-17
Spill Record Last Update:	2009-10-22
Spiller Name:	GABRIELLE WANNER
Spiller Company:	WANNER RESIDENCE
Spiller Address:	237 WEST FULTON STREET
Spiller Company:	001
Contact Name:	GABRIELLE WANNER
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was GABIN WELL 12/17/99 TELECON TO MIKE: 275 GAL TANK U/G UNDER STOOP, FOUND PROBLEM DURING ANNUAL MAINTENANCE CHECK, FOUND STAINED SOIL , FOUND STAINS ON WALL INSIDE, GUESS 96 GAL LOSS ***SEE ALSO 9100582 AND 9910171 (BOTH OVERFILLS) HERE*** 6/14/00 FILE REASSIGNED 1/2/03 FILE REASSIGNED"
Remarks:	"SOAKED INTO THE SOIL - OIL COMPANY ON SCENE. ***SEE ALSO 9100582 AND 9910171 (BOTH OVERFILLS) HERE***"

All Materials:

Site ID:	272545
Operable Unit ID:	1085813
Operable Unit:	01
Material ID:	296520
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

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33 **RESIDENCE** **NY LTANKS** **S102670592**
SW **469 MAGNOLIA BLVD** **N/A**
1/4-1/2 **LONG BEACH, NY**
0.269 mi.
1422 ft.

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	RESIDENCE
Address:	469 MAGNOLIA BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9501994 / 1995-05-17
Facility ID:	9501994
Site ID:	74878
Spill Date:	1995-05-17
Spill Cause:	Tank Overfill

RESIDENCE (Continued) **S102670592**

Spill Source:	Private Dwelling
Spill Class:	C4
Cleanup Ceased:	1995-05-17
SWIS:	3009
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1995-05-17
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1995-05-18
Spill Record Last Update:	2001-02-12
Spiller Name:	Not reported
Spiller Company:	COMMANDER
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	70175
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was NONE "
Remarks:	"ALL SPILLS WERE CLEANED UP, BACK PRESSURE IN TANK, NO RESPONSE"

All Materials:

Site ID:	74878
Operable Unit ID:	1016427
Operable Unit:	01
Material ID:	367070
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

34
East
1/4-1/2
0.273 mi.
1440 ft.

LONG BEACH RECYCLING TRANSFER STATION
ONE CITY HALL
LONG BEACH, NY 11561

NY SWF/LF **S123252270**
N/A

Relative:
Higher

Actual:
1 ft.

SWF/LF:

Name:	LONG BEACH RECYCLING TRANSFER STATION
Address:	ONE CITY HALL
City,State,Zip:	LONG BEACH, NY 11561
Flag:	ACTIVE
Region Code:	1
Phone Number:	5164311000

LONG BEACH RECYCLING TRANSFER STATION (Continued) **S123252270**

Owner Name:	City of Long Beach
Owner Type:	Municipal
Owner Address:	One West Chester Street
Owner Addr2:	Not reported
Owner City,St,Zip:	Long Beach, NY 11561
Owner Email:	Not reported
Owner Phone:	5164311000
Contact Name:	Joseph Febrizio
Contact Address:	Not reported
Contact Addr2:	Not reported
Contact City,St,Zip:	NY
Contact Email:	jfebrizio@longbeachny.org
Contact Phone:	5164311000
Activity Desc:	Transfer station - registration
Activity Number:	[30M32R]
Active:	Yes
East Coordinate:	613388
North Coordinate:	4494472
Accuracy Code:	Not reported
Regulatory Status:	Registration
Waste Type:	Concrete;Asphalt;Wood (Clean);Commingled Paper & Containers;Yard Waste;Construction & Demolition Debris;MSW (Residential/Institutional & Commercial);Sludge (Industrial);Metals (Ferrous & Non-Ferrous);Electronics;Corrugated Cardboard;White Goods
Authorization #:	30T10112
Authorization Date:	12/15/2018
Expiration Date:	12/14/2021
Operator Name:	Not reported
Operator Type:	Not reported
Laste Date:	Not reported

35
SSW
1/4-1/2
0.328 mi.
1731 ft.

MOESCHEN RESIDENCE
111 WEST WALNUT STREET
LONG BEACH, NY

NY LTANKS **S102661706**
N/A

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	MOESCHEN RESIDENCE
Address:	111 WEST WALNUT STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9613817 / 1999-03-01
Facility ID:	9613817
Site ID:	219989
Spill Date:	1997-02-25
Spill Cause:	Tank Overfill
Spill Source:	Private Dwelling
Spill Class:	C3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	1997-02-25
CID:	297
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False

MOESCHEN RESIDENCE (Continued) **S102661706**

Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1997-02-25
Spill Record Last Update:	1999-03-02
Spiller Name:	LAURIE HEATH
Spiller Company:	PETRO FUEL
Spiller Address:	522 GRAND BLVD
Spiller County:	001
Spiller Contact:	PETER MOESCHEN
Spiller Phone:	(516) 889-5074
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	181948
DEC Memo:	""
Remarks:	"DRIVER OVERFILLED THE TANK AND THE SPILL WENT ONTO THE LAWN - DIRT IS BEING REMOVED NOW"

All Materials:

Site ID:	219989
Operable Unit ID:	1041381
Operable Unit:	01
Material ID:	338918
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	2.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

36
North
1/4-1/2
0.329 mi.
1738 ft.

ANDYS MARINE
46 ISLAND PARK PLACE
ISLAND PARK, NY 11558

NY LTANKS **S101658034**
NY TANKS **N/A**
NY Spills

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	COMMERCIAL
Address:	46 ISLAND PARK PLACE
City,State,Zip:	ISLAND PARK, NY
Spill Number/Closed Date:	1511759 / 2016-05-24
Facility ID:	1511759
Site ID:	524540
Spill Date:	2016-03-10
Spill Cause:	Tank Test Failure
Spill Source:	Gasoline Station or other PBS Facility
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3020
Investigator:	hmcirrit
Referred To:	Not reported
Reported to Dept:	2016-03-10
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester

ANDYS MARINE (Continued) **S101658034**

Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2016-03-10
Spill Record Last Update:	2019-03-05
Spiller Name:	TOM GARFIELD
Spiller Company:	ANDYS MARINE SERVICE
Spiller Address:	46 ISLAND PARK PLACE
Spiller County:	999
Spiller Contact:	TOM GARFIELD
Spiller Phone:	(516) 603-6459
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	478783
DEC Memo:	"3/10/16 1420 hrs. JF t/c with John Bonanno: Andy's Marina has one 10,000 gal. single wall fiberglass tank for gasoline, sitting in groundwater, and had an issue with water intrusion. Tank test failed around the fill pipe at the top of the tank. The riser will be removed and new riser installed upon approval of proposal. No contamination in vicinity of tank observed. Nassau County Fire Marshal was on-site for the tank test. REPLACED FILL RISER, PASSED RETEST"
Remarks:	"10000 gallon single fiver glass tank . Tank test failure."

All Materials:

Site ID:	524540
Operable Unit ID:	1273505
Operable Unit:	01
Material ID:	2277938
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

TANKS:

Name:	ANDY'S MARIN
Address:	46 ISLAND PARK PLACE
City,State,Zip:	ISLAND PARK, NY 11558
Facility Id:	1-000504
Region:	STATE
DEC Region:	1
Site Status:	Unregulated/Closed
Program Type:	PBS
Expiration Date:	N/A
UTM X:	612929.26759
UTM Y:	4495009.65179

SPILLS:

Name:	ANDYS MARINE
Address:	46 ISLAND PARK PLACE

ANDYS MARINE (Continued) **S101658034**

City,State,Zip:	ISLAND PARK, NY 11558
Spill Number/Closed Date:	9503065 / 2004-03-08
Facility ID:	9503065
Facility Type:	ER
DER Facility ID:	119989
Site ID:	140504
DEC Region:	1
Spill Cause:	Other
Spill Class:	B3
SWIS:	3020
Spill Date:	1995-06-12
Investigator:	WJPARISH
Referred To:	Not reported
Reported to Dept:	1995-06-12
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	True
Remediation Phase:	0
Date Entered In Computer:	1995-06-13
Spill Record Last Update:	2016-03-16
Spiller Name:	Not reported
Spiller Company:	ANDYS MARINE
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was PARISH "
Remarks:	"CLOSING TANK IN PLACE & FOUND CONT SOIL, THEY HAVE FM ON SCENE, 6K UST, ON HOG ISLAND CHANNEL, NOTHING COMING INTO TANK NOTED, TANK CLOSURE REPORT TO BE SENT IN BY TYREE "

All Materials:

Site ID:	140504
Operable Unit ID:	1017652
Operable Unit:	01
Material ID:	368113
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

37 ESE 1/4-1/2 0.357 mi. 1886 ft. | **WINTER RESIDENCE**
150 EAST FULTON STREET
LONG BEACH, NY | **NY LTANKS** | **S105996226**
N/A

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	WINTER RESIDENCE
Address:	150 EAST FULTON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0203644 / 2002-07-29
Facility ID:	0203644
Site ID:	211710
Spill Date:	2002-07-06
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	C3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	BXDONOVA
Referred To:	Not reported
Reported to Dept:	2002-07-06
CID:	199
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2002-07-06
Spill Record Last Update:	2002-07-31
Spiller Name:	WYNDELL WINTER
Spiller Company:	WINTER RESIDENCE
Spiller Address:	150 EAST FULTON STREET
Spiller County:	001
Spiller Contact:	WYNDELL WINTER
Spiller Phone:	(516) 431-0647
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	175443
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was BRIAN D T/C WITH MR. WINTER - ON SAT, SLOW DRIP UNDER TANK. PAN PUT UNDER THE TANK BY WINTER. TEMP PATCH ATTEMPTED THEN IT LEAKED FASTER. TANK PUMPED OVER TO TEMP TANK. 2 X GARBAGE PAILS OF SAND REMOVED BY WINTER. HOMEOWNER EXCAVATED FUEL OIL CONT SOIL INTO A SMALL GARBAGE CAN, EXCAVATION APPROX 2X2X2'D, NO FUEL OIL ODOR IN THE EXCAVATION, BORING TO GW AT 3'D,NO SHEEN/FLOATING PRODUCT/FUEL OIL ODOR AT GW, MILRO WILL PICK UP SOIL FOR DISPOSAL"
Remarks:	"CALLER STATES THERE IS A SMALL HOLE IN THE FUEL TANK - PETRO OIL COMPANY ON SCENE NOW REPLACING TANK - UNK AMOUNT LEAKED FROM TANK TO GROUND - CALLER STATES IT IS NOT MUCH "

All Materials:

Site ID:	211710
Operable Unit ID:	856552
Operable Unit:	01
Material ID:	521465
Material Code:	0001A
Material Name:	#2 fuel oil

WINTER RESIDENCE (Continued) **S105996226**

Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

38
SSE
1/4-1/2
0.380 mi.
2005 ft.

URI LEMBERGER RESIDENCE
1 EAST OLIVE STREET
LONG BEACH, NY

NY LTANKS **S102619558**
N/A

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	URI LEMBERGER RESIDENCE
Address:	1 EAST OLIVE STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9214190 / 2004-06-14
Facility ID:	9214190
Site ID:	77874
Spill Date:	1993-03-25
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	RDDECAND
Referred To:	Not reported
Reported to Dept:	1993-03-25
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Fire Department
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1993-03-29
Spill Record Last Update:	2004-06-15
Spiller Name:	Not reported
Spiller Company:	URI LEMBERGER RESIDENCE
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	72563
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DECANDIA "
Remarks:	"U/G TANK ON RESIDENCE, FUEL DISCOVERED IN BASEMENT, DISCOVERED DUE TO FIRE, SHUT DOWN GAS, OLD UNK SIZE TANK ABANDONED IN 1991,OIL COMING INTO BASEMENT THROUGH FLOOR"

All Materials:

Site ID:	77874
Operable Unit ID:	981558

URI LEMBERGER RESIDENCE (Continued) **S102619558**

Operable Unit:	01
Material ID:	400405
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

39
NNE
1/4-1/2
0.388 mi.
2048 ft.

ROBERT HASTAVA RESIDENCE
40 ISLAND PARK PLACE
ISLAND PARK, NY

NY LTANKS **S118953808**
N/A

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	ROBERT HASTAVA RESIDENCE
Address:	40 ISLAND PARK PLACE
City,State,Zip:	ISLAND PARK, NY
Spill Number/Closed Date:	9509636 / 2000-03-01
Facility ID:	9509636
Site ID:	120739
Spill Date:	1995-10-20
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3000
Investigator:	ACLAMANN
Referred To:	Not reported
Reported to Dept:	1995-11-03
CID:	257
Water Affected:	Not reported
Spill Notifier:	Affected Persons
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1995-11-03
Spill Record Last Update:	2000-03-02
Spiller Name:	Not reported
Spiller Company:	ROBERT HASTAVA RESIDENCE
Spiller Address:	40 ISLAND PARK PLACE
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	104809
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was LAMANNO WELL "
Remarks:	"UST LEAK TANK WAS REMOVED BUT NOT WITNESSED OIL UNDER HOUSE IN CRAWLSPACE. HEAVY VAPORS IN HOUSE NO CLEANUP DONE"

ROBERT HASTAVA RESIDENCE (Continued) **S118953808**

All Materials:

Site ID:	120739
Operable Unit ID:	1023841
Operable Unit:	01
Material ID:	360578
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

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40 ESE 1/4-1/2 0.408 mi. 2153 ft. | **METRO FUEL** | **NY LTANKS** | **S100149847**
601 LONG BEACH ROAD | **NY Spills** | **N/A**
LONG BEACH, NY 11561 | **NY MANIFEST**

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	CITY LONG BEACH MAINT GARAGE
Address:	601 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0408029 / 2005-05-19
Facility ID:	0408029
Site ID:	332632
Spill Date:	2004-10-20
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	HMCIRRIT
Referred To:	Not reported
Reported to Dept:	2004-10-20
CID:	444
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2004-10-20
Spill Record Last Update:	2013-01-28
Spiller Name:	ED RITER
Spiller Company:	CITY LONGBEACH MAINT. GAR
Spiller Address:	601 LONGBEACH ROAD
Spiller County:	001
Spiller Contact:	ED RITER
Spiller Phone:	(516) 431-1717
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	154697
DEC Memo:	"FIBERGLASS 550 UST WAS REMOVED,NO HOLES OR CRACKS IN TANK, NO

METRO FUEL (Continued) **S100149847**

CONTAMINATED SOIL IDENTIFIED"
Remarks: "HORNER EZ CHECK 2-RECOMMEND TO TAKE OUT OF SERVICE, UNTIL REPAIRED OR REMOVED"

All TTF:

Facility ID:	0408029
Spill Number:	0408029
Spill Tank Test:	1548265
Site ID:	332632
Tank Number:	Not reported
Tank Size:	550
Material:	0022
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Watchdog
Last Modified Date:	Not reported

All Materials:

Site ID:	332632
Operable Unit ID:	1094862
Operable Unit:	01
Material ID:	574994
Material Code:	0022
Material Name:	waste oil/used oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	CITY OF LONG BEACH GARAGE
Address:	601 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0204905 / 2002-11-18
Facility ID:	0204905
Site ID:	184912
Spill Date:	2002-08-08
Spill Cause:	Tank Test Failure
Spill Source:	Commercial/Industrial
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	T/T/F
Referred To:	Not reported
Reported to Dept:	2002-08-08
CID:	282
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported

METRO FUEL (Continued) **S100149847**

Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	2002-08-08
Spill Record Last Update:	2002-11-21
Spiller Name:	ED RITTER
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	601 LONG BEACH ROAD
Spiller County:	001
Spiller Contact:	MICHAEL SEPE
Spiller Phone:	(631) 586-4900
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	154697
DEC Memo:	""
Remarks:	"TANK FAILED THE TEST "

All TTF:

Facility ID:	0204905
Spill Number:	0204905
Spill Tank Test:	1527366
Site ID:	184912
Tank Number:	1
Tank Size:	4000
Material:	0009
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	03
Test Method 2:	Horner EZ Check I or II
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	184912
Operable Unit ID:	857560
Operable Unit:	01
Material ID:	519127
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	CITY OF LONG BEACH
Address:	601 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	8709951 / 1991-09-13
Facility ID:	8709951

METRO FUEL (Continued) **S100149847**

Site ID:	184913
Spill Date:	1988-02-25
Spill Cause:	Tank Test Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Not reported
Cleanup Ceased:	1991-09-13
SWIS:	3009
Investigator:	JEHAAS
Referred To:	Not reported
Reported to Dept:	1988-02-25
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1988-02-29
Spill Record Last Update:	1997-07-09
Spiller Name:	Not reported
Spiller Company:	CITY OF LONG BEACH
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	154697
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was HAAS WELL 09/13/91: NO PUBLIC HEALTH THREAT, NO DOWN GRAIDENT RECEPTORS EXCEPT CONT OF GW LOW. NO FURTHER ACTION TO BE TAKEN. "
Remarks:	"2K DIESEL FAILED AT -.333 AND 4K GASOLINE FAILED AT -.610. TYREE TESTER"

All TTF:

Facility ID:	8709951
Spill Number:	8709951
Spill Tank Test:	1533318
Site ID:	184913
Tank Number:	Not reported
Tank Size:	0
Material:	0009
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	184913
Operable Unit ID:	914885

METRO FUEL (Continued) **S100149847**

Operable Unit:	01
Material ID:	461740
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Site ID:	184913
Operable Unit ID:	914885
Operable Unit:	01
Material ID:	461739
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

SPILLS:

Name:	SPILL NUMBER 0204872
Address:	601 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0204872 / 2002-08-08
Facility ID:	0204872
Facility Type:	ER
DER Facility ID:	74210
Site ID:	80020
DEC Region:	1
Spill Cause:	Traffic Accident
Spill Class:	B4
SWIS:	3009
Spill Date:	2002-08-07
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	2002-08-07
CID:	405
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2002-08-07
Spill Record Last Update:	2002-08-09
Spiller Name:	Not reported
Spiller Company:	MODEL TOWING
Spiller Address:	341 NASSAU AVENUE

METRO FUEL (Continued) **S100149847**

Spiller Company:	001
Contact Name:	AL CIRINO
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was NONE SPOKE W/FIRE MARSHAL ON THE SCENE - APPARENTLY ~1 1/2 GALLONS FOT INTO A NEARBY DRAIN ALONG W/WATER AND FOAM. FM WANTED TO MAKE SURE IT WAS OKAY TO CLEAN OUT DRAIN, I APPROVED."
Remarks:	"caller states that minor traffic accident caused the spill - all being cleaned up at this time - it is contained - location is a bus garage - ny reg - k17475 is the plate on the vehicle involved"

All Materials:

Site ID:	80020
Operable Unit ID:	857528
Operable Unit:	01
Material ID:	519095
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	20.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	CITY OF LONG BEACH
Address:	601 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0505732 / 2007-03-13
Facility ID:	0505732
Facility Type:	ER
DER Facility ID:	74210
Site ID:	350812
DEC Region:	1
Spill Cause:	Human Error
Spill Class:	B3
SWIS:	3009
Spill Date:	2005-08-10
Investigator:	HMCIRRIT
Referred To:	AIR UNIT
Reported to Dept:	2005-08-10
CID:	444
Water Affected:	Not reported
Spill Source:	Institutional, Educational, Gov., Other
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2005-08-10
Spill Record Last Update:	2013-05-07
Spiller Name:	ROGER ROMANCE
Spiller Company:	APPOLLO FUEL
Spiller Address:	500 KINGLSAND AVENUE
Spiller Company:	999
Contact Name:	ROGER ROMANCE

METRO FUEL (Continued) **S100149847**

DEC Memo: "8/10/05 9:30 TELECON TO ROGER ROMANCE, APPOLLO CELL #646-772-5889,NO SERVICE 10:00 TELECON FROM BOB HARE, NCFM ESTIMATED 80-100 GALLON SPILL, SURFACE SPILL,NO DRAINS AFFECTED, SOME ONTO ROOF FROM VENT BUT HAS EVAPORATED, APPOLLO FUEL PLANS TO CLEAN IN HOUSE, ADVISED FM THAT THE PROPER 364 PERMIT IS NEEDED TO HAUL MATERIAL OFF SITE, WILL HAVE APPOLLO CALLED WHEN THEY ARRIVE 11:00 TELECON FROM ROGER, APPOLLO FUEL, ON SITE TO CLEAN SPILL WITH SPEEDI DRI, DOES NOT HAVE 364 PERMIT, PLANS TO HIRE MILRO OR TYREE FOR DISPOSAL, WILL CALL BACK WHEN ARRANGEMENTS ARE MADE CONTAMINATED MATERIAL TO BE PLACE IN DRUMS, NO DRAINS AFFECTED. DRIVER WAS GIVEN THE TANK CHART FOR THE DIESEL TANK AND THOUGHT THE GASOLINE DELIVERY WOULD FIT TANK WAS OVERFILLED AND VAPOR RECOVERY LINE WAS RUPTURED REFERRED TO AIR UNIT"

Remarks: "BUILDING SUPER GAVE OIL CO WRONG READING FROM TANK CAUSING SPILL: ALL CONTAINED: CREW ENOUTE TO CLEAN UP: LONG BEACH FIRE ON SCENE"

All Materials:

Site ID:	350812
Operable Unit ID:	1108356
Operable Unit:	01
Material ID:	2098291
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	45.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

NY MANIFEST:

Name:	METRO FUEL
Address:	601 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY 11561
Country:	USA
EPA ID:	NYP000959189
Facility Status:	Not reported
Location Address 1:	601 LONG BEACH ROAD
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	LONG BEACH
Location State:	NY
Location Zip:	11561
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYP000959189
Mailing Name:	METRO FUEL
Mailing Contact:	ROGER ROMANCE‘
Mailing Address 1:	500 KINGSLAND AVENUE
Mailing Address 2:	Not reported
Mailing City:	BROOKLYN
Mailing State:	NY
Mailing Zip:	11222
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	7183831400

METRO FUEL (Continued) **S100149847**

NY MANIFEST:

Document ID:	NYG3732552
Manifest Status:	Not reported
seq:	Not reported
Year:	2005
Trans1 State ID:	NYD064743263
Trans2 State ID:	Not reported
Generator Ship Date:	08/10/2005
Trans1 Recv Date:	08/10/2005
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	08/11/2005
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	NYP000959189
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD082785429
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00950
Units:	P - Pounds
Number of Containers:	006
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	01.00

Click this hyperlink while viewing on your computer to access
-1 additional NY MANIFEST: record(s) in the EDR Site Report.

I41 **MERIT S/S** **NY LTANKS** **S102232592**
ESE **470 LONG BEACH BLVD** **N/A**
1/4-1/2 **LONG BEACH, NY**
0.417 mi.
2202 ft. **Site 1 of 2 in cluster I**

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	MERIT S/S
Address:	470 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY

MERIT S/S (Continued) **S102232592**

Spill Number/Closed Date:	9514217 / 1996-03-22
Facility ID:	9514217
Site ID:	283147
Spill Date:	1996-02-07
Spill Cause:	Tank Test Failure
Spill Source:	Gasoline Station or other PBS Facility
Spill Class:	B4
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	T/T/F
Referred To:	Not reported
Reported to Dept:	1996-02-07
CID:	196
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1996-02-07
Spill Record Last Update:	1996-03-26
Spiller Name:	ANDY FORD
Spiller Company:	MERIT OIL
Spiller Address:	470 LONG BEACH BLVD
Spiller County:	001
Spiller Contact:	ANDY FORD
Spiller Phone:	(610) 527-7900
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	229658
DEC Memo:	""
Remarks:	"tank to be retested on 02/08/96"

All Materials:

Site ID:	283147
Operable Unit ID:	1028747
Operable Unit:	01
Material ID:	354350
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

J42 SE 1/4-1/2 0.419 mi. 2212 ft. | **FREISER RESIDENCE 129 EAST WALNUT LONG BEACH, NY** | **NY LTANKS** | **S107416991 N/A**

Site 1 of 2 in cluster J

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	FREISER RESIDENCE
Address:	129 EAST WALNUT
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0508581 / 2007-09-17
Facility ID:	0508581
Site ID:	354192
Spill Date:	2005-10-18
Spill Cause:	Tank Test Failure
Spill Source:	Private Dwelling
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	WJGABIN
Referred To:	Not reported
Reported to Dept:	2005-10-18
CID:	444
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	False
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2005-10-18
Spill Record Last Update:	2013-05-07
Spiller Name:	MR FREISER RESIDENCE
Spiller Company:	FREISER RESIDENCE
Spiller Address:	129 EAST WALNUT
Spiller County:	001
Spiller Contact:	MR FREISER
Spiller Phone:	(516) 528-3030
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	301525
DEC Memo:	"10/18/05 10:30 TELECON WITH HOMEOWNER MR FREISER, CLEARVIEW ENV WAS CONTRACTED TO REMOVE THE UST 550 GAL ON THURSDAY (10/20/05) 3/3/06 FILE REASSIGNED"
Remarks:	"RECOMMEND SOIL TETING:"

All TTF:

Facility ID:	0508581
Spill Number:	0508581
Spill Tank Test:	1549411
Site ID:	354192
Tank Number:	1
Tank Size:	550
Material:	0001
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	03
Test Method 2:	Horner EZ Check I or II

FREISER RESIDENCE (Continued) **S107416991**

Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Watchdog
Last Modified Date:	Not reported

All Materials:

Site ID:	354192
Operable Unit ID:	1111622
Operable Unit:	01
Material ID:	2101658
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	G
Recovered:	.00
Oxygenate:	Not reported

K43
SE
1/4-1/2
0.425 mi.
2244 ft.

MOVIE THEATER **NY LTANKS** **S100151397**
179 EAST PARK AVENUE **N/A**
LONG BEACH, NY

Site 1 of 3 in cluster K

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	MOVIE THEATER
Address:	179 EAST PARK AVENUE
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9008381 / 1990-11-30
Facility ID:	9008381
Site ID:	279762
Spill Date:	1990-10-31
Spill Cause:	Tank Failure
Spill Source:	Institutional, Educational, Gov., Other
Spill Class:	Not reported
Cleanup Ceased:	1990-11-30
SWIS:	3009
Investigator:	KAKISPER
Referred To:	Not reported
Reported to Dept:	1990-10-31
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Police Department
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1990-11-01
Spill Record Last Update:	1990-12-04
Spiller Name:	Not reported
Spiller Company:	MOVIE THEATER
Spiller Address:	179 EAST PARK AVENUE
Spiller County:	001
Spiller Contact:	Not reported

MOVIE THEATER (Continued) **S100151397**

Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	227183
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was KISPERT 11/30/90: TANK IN BASEMENT FAILED.MOST OF CONTENTS PUMPED FROM FLOOR TO A NEW TANK. CHECKED DRAINAGE PIPE ON BASEMENT WALL, NOT AFFECTED.O'CONNER BROS DOING CLEANUP.NO FURTHER ACTION REQUIRED. "
Remarks:	"POLICE OFFICER ON SCENE. TANK IN BASEMENT LEAKING, OIL ON CONCRETE"

All Materials:

Site ID:	279762
Operable Unit ID:	945586
Operable Unit:	01
Material ID:	432213
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	200.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

I44 ESE 1/4-1/2 0.429 mi. 2267 ft. **HESS STATION #32543** **NY LTANKS** **S101508906**
450 LONG BEACH BLVD **NY TANKS** **N/A**
LONG BEACH, NY 11561 **NY Spills**
NY MANIFEST

Site 2 of 2 in cluster I

Relative: Higher
Actual: 1 ft.

LTANKS:

Name:	MERIT GAS STATION
Address:	450 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9112837 / 1992-04-02
Facility ID:	9112837
Site ID:	218380
Spill Date:	1992-03-17
Spill Cause:	Tank Test Failure
Spill Source:	Commercial/Industrial
Spill Class:	C3
Cleanup Ceased:	1992-04-02
SWIS:	3009
Investigator:	T/T/F
Referred To:	Not reported
Reported to Dept:	1992-03-17
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1992-03-18
Spill Record Last Update:	2019-04-22
Spiller Name:	AL FERRIOLA

HESS STATION #32543 (Continued) **S101508906**

Spiller Company:	MERIT GAS STATION
Spiller Address:	450 LONG BEACH ROAD
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	180665
DEC Memo:	"PER ENZO AT GI REPAIRS ARE BING MADE 3/19/92. TANK RETESTED AND PASSED PROBLEM IN VENT, INFO BEING SENT PER AL"
Remarks:	"550 FAILED PETROTITE, GAS INSTALLATIONS TESTER"

All TTF:

Facility ID:	9112837
Spill Number:	9112837
Spill Tank Test:	1539758
Site ID:	218380
Tank Number:	Not reported
Tank Size:	0
Material:	0009
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	218380
Operable Unit ID:	966442
Operable Unit:	01
Material ID:	559080
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	MERIT GAS
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9416880 / 1995-04-28
Facility ID:	9416880
Site ID:	245248
Spill Date:	1995-03-29
Spill Cause:	Tank Test Failure
Spill Source:	Gasoline Station or other PBS Facility
Spill Class:	B3
Cleanup Ceased:	1995-04-28

HESS STATION #32543 (Continued) **S101508906**

SWIS:	3009
Investigator:	T/T/F
Referred To:	Not reported
Reported to Dept:	1995-03-29
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1995-03-30
Spill Record Last Update:	1995-05-01
Spiller Name:	Not reported
Spiller Company:	MERTI GAS
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	201462
DEC Memo:	""
Remarks:	"6K FAILED AT 2 1/2 GAL/HR, CROMPCO TESTER"

All TTF:

Facility ID:	9416880
Spill Number:	9416880
Spill Tank Test:	1543706
Site ID:	245248
Tank Number:	Not reported
Tank Size:	0
Material:	0066A
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	245248
Operable Unit ID:	1010673
Operable Unit:	01
Material ID:	368505
Material Code:	0066A
Material Name:	unknown petroleum
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00

HESS STATION #32543 (Continued) **S101508906**

Oxygenate: Not reported

TANKS NASSAU:

Facility Name:	SPEEDWAY #7846
Permit End Date:	Not reported
Tank Number:	1538
Decode of Ttype:	Under Ground
Capacity:	00020000
Product Description:	GASOLINE, UNLEADED REGULAR

Facility Name:	SPEEDWAY #7846
Permit End Date:	Not reported
Tank Number:	1539
Decode of Ttype:	Under Ground
Capacity:	00008000
Product Description:	GASOLINE, UNLEADED PREMIUM

Facility Name:	SPEEDWAY #7846
Permit End Date:	Not reported
Tank Number:	1540
Decode of Ttype:	Under Ground
Capacity:	00012000
Product Description:	OIL, DIESEL FUEL

SPILLS:

Name:	HESS STATION #32543
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0402491 / 2005-12-29
Facility ID:	0402491
Facility Type:	ER
DER Facility ID:	201462
Site ID:	245243
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	C3
SWIS:	3009
Spill Date:	2004-06-07
Investigator:	KJGOMEZ
Referred To:	Not reported
Reported to Dept:	2004-06-07
CID:	406
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-06-07
Spill Record Last Update:	2016-01-26
Spiller Name:	DAVID LEE
Spiller Company:	AMERADA HESS

HESS STATION #32543 (Continued) **S101508906**

Spiller Address:	1 HESS PLAZA
Spiller Company:	001
Contact Name:	DAVID LEE
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN LEFT MESSAGE FOR LEE AT HESS 6/20/05 FILE REASSIGNED IMPACTED DRYWELL PUMPED OUT, NFA"
Remarks:	"Material spilled into a contained sump. Unknown cause at this time. Clean up is complete. No sensative receptors have been impacted. "

All Materials:

Site ID:	245243
Operable Unit ID:	886227
Operable Unit:	01
Material ID:	552289
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	30.00
Units:	G
Recovered:	30.00
Oxygenate:	Not reported

Name:	GAS STATION HESS #32543
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0402703 / 2005-12-29
Facility ID:	0402703
Facility Type:	ER
DER Facility ID:	201462
Site ID:	245244
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	C3
SWIS:	3009
Spill Date:	2004-06-10
Investigator:	KJGOMEZ
Referred To:	Not reported
Reported to Dept:	2004-06-11
CID:	444
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-06-11
Spill Record Last Update:	2016-01-26
Spiller Name:	DAVID LEE
Spiller Company:	GAS STATION HESS #32543
Spiller Address:	450 LONG BEACH BLVD
Spiller Company:	001
Contact Name:	DAVID LEE
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was

HESS STATION #32543 (Continued) **S101508906**

AUSTIN 6/20/05 FILE REASSIGNED GASOLINE REMOVED FROM SUMP AND DRYWELL-NFA"

Remarks: "SPILL CONTAINED IN STP SUMP, ONLY ABOUT 4 GAL OUTSIDE OF CONTAINMENT, ON TOP OF CONCRETE, SPILL HAS BEEN CLEANED, MAINTENANCE CONTRACTOR LOOKING INTO THE CAUSE"

All Materials:

Site ID:	245244
Operable Unit ID:	884341
Operable Unit:	01
Material ID:	490322
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	60.00
Units:	G
Recovered:	60.00
Oxygenate:	Not reported

Name:	HESS STATION 32543
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0405427 / 2005-02-18
Facility ID:	0405427
Facility Type:	ER
DER Facility ID:	201462
Site ID:	245245
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C4
SWIS:	3009
Spill Date:	2004-08-17
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	2004-08-17
CID:	64
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Local Agency
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	True
Remediation Phase:	0
Date Entered In Computer:	2004-08-17
Spill Record Last Update:	2016-02-22
Spiller Name:	DAVID LESS
Spiller Company:	HESS STATION 32543
Spiller Address:	450 LONG BEACH BLVD
Spiller Company:	001
Contact Name:	DAVID LESS
DEC Memo:	"NO CALL BACK"
Remarks:	"Less than 1 gallon spilled, cleanup is in process. Spill is due to leaky break a way valve. Caller states that the leak is just leaking down the hose, doesn't believe it has hit the ground. "

HESS STATION #32543 (Continued) **S101508906**

All Materials:

Site ID:	245245
Operable Unit ID:	888960
Operable Unit:	01
Material ID:	489610
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	Not reported
Recovered:	.00
Oxygenate:	Not reported

Site ID:	245245
Operable Unit ID:	888960
Operable Unit:	01
Material ID:	489611
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	MERIT
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9312930 / Not Reported
Facility ID:	9312930
Facility Type:	ER
DER Facility ID:	201462
Site ID:	245246
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	B3
SWIS:	3009
Spill Date:	1994-02-02
Investigator:	NMHART
Referred To:	Not reported
Reported to Dept:	1994-02-02
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	5
Date Entered In Computer:	1994-02-03
Spill Record Last Update:	2017-03-22
Spiller Name:	Not reported

HESS STATION #32543 (Continued) **S101508906**

Spiller Company:	MERIT
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ENGELHARDT WELL 5/14/99 FILE REASSIGNED 9/28/00 FILE REASSIGNED 12/28/05 FILE REASSIGNED 3/22/17 FILE REASSIGNED"
Remarks:	"CONT SOIL ENCOUNTERED DURING TRENCHING FOR VES, VES BEING INSTALLED DUE TO VAPORS"

All Materials:

Site ID:	245246
Operable Unit ID:	991445
Operable Unit:	01
Material ID:	388334
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	True

Site ID:	245246
Operable Unit ID:	991445
Operable Unit:	01
Material ID:	573088
Material Code:	1213A
Material Name:	MTBE (methyl-tert-butyl ether)
Case No.:	01634044
Material FA:	Hazardous Material
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Oxygenate:	True

Name:	MERIT GAS STATION
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9407347 / 1994-11-23
Facility ID:	9407347
Facility Type:	ER
DER Facility ID:	201462
Site ID:	245247
DEC Region:	1
Spill Cause:	Human Error
Spill Class:	C3
SWIS:	3009
Spill Date:	1994-08-31
Investigator:	GIBBONS
Referred To:	Not reported
Reported to Dept:	1994-08-31
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Other

HESS STATION #32543 (Continued) **S101508906**

Cleanup Ceased:	1994-11-23
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	1994-09-01
Spill Record Last Update:	1994-11-25
Spiller Name:	Not reported
Spiller Company:	MERIT GAS STATION
Spiller Address:	Not reported
Spiller Company:	001
Contact Name:	Not reported
DEC Memo:	""
Remarks:	"CONTRACTOR HIT LINE DURING EXCAVATION CLEANUP IS DONE"

All Materials:

Site ID:	245247
Operable Unit ID:	1004773
Operable Unit:	01
Material ID:	553930
Material Code:	0012A
Material Name:	kerosene
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	HESS STATION #32543
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY 11561
Spill Number/Closed Date:	0801342 / 2008-06-03
Facility ID:	0801342
Facility Type:	ER
DER Facility ID:	431236
Site ID:	397244
DEC Region:	1
Spill Cause:	Other
Spill Class:	C3
SWIS:	3009
Spill Date:	2008-05-03
Investigator:	KJGOMEZ
Referred To:	Not reported
Reported to Dept:	2008-05-03
CID:	76
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	Not reported
Remediation Phase:	0
Date Entered In Computer:	2008-05-03

HESS STATION #32543 (Continued) **S101508906**

Spill Record Last Update:	2012-12-17
Spiller Name:	PETER HAID
Spiller Company:	HESS
Spiller Address:	450 LONG BEACH BLVD
Spiller Company:	001
Contact Name:	PETER HAID
DEC Memo:	"T/C W/MIKE MATRI @ HESS - MILLER ENVIRONMENTAL HIRED & RESPONDED TO LOCATION. 2000 GALLONS GAS/WATER MIXTURE REMOVED. - MIKE STATES ENVIROTRAC HIRED BY HESS WILL BE PERFORMING A SITE CHECK TODAY TO DETERMINE CLEANUP STATUS & INVESTIGATE CAUSE - POSSIBLY RELATED TO DELIVERY. "
Remarks:	"caller reports spill due to water mixing with residual gas in a catch basin. nassau cty hazmat is enr and long beach fd is o/s. caller adv vacuum truck is also enr."

All Materials:

Site ID:	397244
Operable Unit ID:	1154209
Operable Unit:	01
Material ID:	2145005
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	Not reported
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	HESS STATION 32523
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0404981 / 2005-02-25
Facility ID:	0404981
Facility Type:	ER
DER Facility ID:	201462
Site ID:	104773
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	B3
SWIS:	3009
Spill Date:	2004-08-06
Investigator:	CAGAITES
Referred To:	Not reported
Reported to Dept:	2004-08-06
CID:	77
Water Affected:	Not reported
Spill Source:	Unknown
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-08-06
Spill Record Last Update:	2016-02-18

HESS STATION #32543 (Continued) **S101508906**

Spiller Name:	ATTENDANT
Spiller Company:	HESS STATION 32523
Spiller Address:	450 LONG BEACH BLVD.
Spiller Company:	001
Contact Name:	ATTENDANT
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was GAITES 8/6 SPOKE WITH HOWARD GOLDMAN, HESS, FD ON SITE, OFFICER MAICKEN, 15-20 GALLONS SPILLED INTO SD, ENV PRODUCTS AND SERVICES CONTACTED FOR CLEANUP VACUUM TRUCK TO PUMP OUT SEWER SPOKE WITH MANAGER AT STATION, FD BOOMED DRAIN, DISCONNECTED HOSE RESPONSIBLE, SPILL HAD STARTED AS A DRIP FROM HOSE, BUT QUICKLY EXPANDED, PUMP SHUT DOWN, 1 DRAIN IMPACTED ENV PRODUCTS HIRED FOR CLEANUP CLEANUP COMPLETED BY ESI"
Remarks:	"spill of approx 15 gals of gasoline from possibly a gasoline dispenser, not confirmed, unkn cause, human error or equipment failure. contacted environmental product & services to due clean-up. spill possibly effected a sewer storm drain."

All Materials:

Site ID:	104773
Operable Unit ID:	887913
Operable Unit:	01
Material ID:	488951
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	15.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	MERIT GAS STATION
Address:	450 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9508357 / 1997-04-29
Facility ID:	9508357
Facility Type:	ER
DER Facility ID:	180665
Site ID:	218381
DEC Region:	1
Spill Cause:	Unknown
Spill Class:	B3
SWIS:	3009
Spill Date:	1995-10-08
Investigator:	BPAUSTIN
Referred To:	Not reported
Reported to Dept:	1995-10-08
CID:	281
Water Affected:	Not reported
Spill Source:	Commercial Vehicle
Spill Notifier:	Responsible Party
Cleanup Ceased:	Not reported
Cleanup Meets Std:	True
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False

HESS STATION #32543 (Continued) **S101508906**

Remediation Phase:	0
Date Entered In Computer:	1995-10-08
Spill Record Last Update:	1997-05-06
Spiller Name:	MIKE ALBANO
Spiller Company:	ISLAND TRANSPORTATION
Spiller Address:	299 EDISON AVE
Spiller Company:	001
Contact Name:	JACK NICHOLSON
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was AUSTIN DRAIN AFFECTED. CLEANED OUT. NO OTHER ACTION NEEDED"
Remarks:	"OVERFILL ON TANKER TRUCK.BELIEVED TO BE MECHANICAL MALFUNCTION. RESPONSIBLE PARTY ON SCENE FOR CLEAN UP.NO FURTHER INFO AVAILABLE AT TIME OF CALL. NASSUA CO.FIRE MARSHALL CALLED @ 23:35 REPORTING SAME SPILL. SPILL CONTAINED IN DRYWELL. 516-521-2046/SMITHING"

All Materials:

Site ID:	218381
Operable Unit ID:	1019059
Operable Unit:	01
Material ID:	362866
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	15.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	UNKNOWN
Address:	450 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0408773 / 2005-03-16
Facility ID:	0408773
Facility Type:	ER
DER Facility ID:	180665
Site ID:	333623
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C4
SWIS:	3009
Spill Date:	2004-11-08
Investigator:	Unassigned
Referred To:	Not reported
Reported to Dept:	2004-11-08
CID:	73
Water Affected:	Not reported
Spill Source:	Commercial/Industrial
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2004-11-15
Spill Record Last Update:	2013-01-28

HESS STATION #32543 (Continued) **S101508906**

Spiller Name:	HECTOR CAPINERI
Spiller Company:	ISLAND TRANSPORTATION
Spiller Address:	299 EDISON AVE
Spiller Company:	001
Contact Name:	HECTOR CAPINERI
DEC Memo:	"11/8/04 TELECON WITH HECTOR CAPINERI FROM ISLAND TRANSPORTATION, APPROX 3-4 GALS OF DIESEL FUEL SPILLED ONTO PAVEMENT, NO DRAINS/WELLS AFFECTED. CLEANUP IS IN PROGRESS, APPROX 2 BAGS OF SPEEDI DRI HAS BEEN USED SO FAR"
Remarks:	"SPILL WAS ON PAVEMENT. NO SEWERS OR DRAINS AFFECTED. SPILL IS BEING CLEANED UP NOW."

All Materials:

Site ID:	333623
Operable Unit ID:	1095773
Operable Unit:	01
Material ID:	575900
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	4.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Name:	HESS STORE #32543
Address:	450 LONG BEACH BLVD
City,State,Zip:	LONG BEACH, NY 11561
Spill Number/Closed Date:	0912832 / 2010-04-19
Facility ID:	0912832
Facility Type:	ER
DER Facility ID:	431236
Site ID:	425741
DEC Region:	1
Spill Cause:	Equipment Failure
Spill Class:	C3
SWIS:	3009
Spill Date:	2010-03-10
Investigator:	KJGOMEZ
Referred To:	Not reported
Reported to Dept:	2010-03-10
CID:	Not reported
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2010-03-10
Spill Record Last Update:	2012-11-29
Spiller Name:	Not reported
Spiller Company:	CUSTOMER
Spiller Address:	Not reported

HESS STATION #32543 (Continued) **S101508906**

Spiller Company:	999
Contact Name:	MICHAEL MATRI
DEC Memo:	"***SEE 9212930 HERE*** DR 03/10/10 1420 Hrs (A): Called Matri- a VEHICLE tank leaked. Most of the sillage was on pavement but a small amount entered a drywell. 03/10/10 1420 Hrs (B): EnviroTrac is enroute to inspect, and they will have Fenley & Nicol clean up. DR"
Remarks:	"contained on site - in to drywell - cleanup pending"

All Materials:

Site ID:	425741
Operable Unit ID:	1181453
Operable Unit:	01
Material ID:	2175538
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	7.00
Units:	G
Recovered:	Not reported
Oxygenate:	Not reported

Click this hyperlink while viewing on your computer to access additional NY SPILL: detail in the EDR Site Report.

NY MANIFEST:

Name:	ISLAND TRANSP/AT MERIT SVC/STA
Address:	450 LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY 13209
Country:	USA
EPA ID:	NYP000922377
Facility Status:	Not reported
Location Address 1:	450 LONG BEACH ROAD
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	LONG BEACH
Location State:	NY
Location Zip:	13209
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYP000922377
Mailing Name:	ISLAND TRANSP/AT MERIT SVC/STA
Mailing Contact:	ISLAND TRANSP/AT MERIT SVC/STA
Mailing Address 1:	299 EDISON AVE
Mailing Address 2:	Not reported
Mailing City:	W BABYLON
Mailing State:	NY
Mailing Zip:	11704
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	5166944800

NY MANIFEST:

Document ID:	NYB7843689

HESS STATION #32543 (Continued) **S101508906**

Manifest Status:	C
seq:	Not reported
Year:	1995
Trans1 State ID:	DD3367
Trans2 State ID:	Not reported
Generator Ship Date:	10/19/1995
Trans1 Recv Date:	10/19/1995
Trans2 Recv Date:	/ /
TSD Site Recv Date:	10/19/1995
Part A Recv Date:	11/03/1995
Part B Recv Date:	10/31/1995
Generator EPA ID:	NYP000922377
Trans1 EPA ID:	NYD986908085
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD082785429
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D001 - NON-LISTED IGNITABLE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00055
Units:	G - Gallons (liquids only)* (8.3 pounds)
Number of Containers:	001
Container Type:	DM - Metal drums, barrels
Handling Method:	B Incineration, heat recovery, burning.
Specific Gravity:	100

Click this hyperlink while viewing on your computer to access
-1 additional NY MANIFEST: record(s) in the EDR Site Report.

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45 **ZAPPIA RESIDENCE** **NY LTANKS** **S102660557**
NE **31 RADCLIFFE ROAD** **N/A**
1/4-1/2 **ISLAND PARK, NY**
0.430 mi.
2269 ft.

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	ZAPPIA RESIDENCE
Address:	31 RADCLIFFE ROAD
City,State,Zip:	ISLAND PARK, NY
Spill Number/Closed Date:	9401419 / 1994-07-22
Facility ID:	9401419
Site ID:	98028

ZAPPIA RESIDENCE (Continued) **S102660557**

Spill Date:	1994-04-29
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	C3
Cleanup Ceased:	1994-07-22
SWIS:	3000
Investigator:	RDDECAND
Referred To:	Not reported
Reported to Dept:	1994-04-29
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1994-05-02
Spill Record Last Update:	1994-07-25
Spiller Name:	Not reported
Spiller Company:	ZAPPIA RESIDENCE
Spiller Address:	Not reported
Spiller County:	999
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	87261
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DECANDIA 07/22/94: DECANDIA ON SITE, CLEANUP COMPLETE, DISPOSAL RECPTS RECEIVED. "
Remarks:	"SPILL OUTSIDE ON CONCRETE PAD, ANS ENVIR TO DO CLEANUP & REPLACE TANK"

All Materials:

Site ID:	98028
Operable Unit ID:	995188
Operable Unit:	01
Material ID:	564393
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	1.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

J46 SE 1/4-1/2 0.445 mi. 2347 ft. | **JAMES SCHAEFER RESIDENCE**
155 EAST WALNUT STREET
LONG BEACH, NY

Site 2 of 2 in cluster J

NY LTANKS | **S101102577**
N/A

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	JAMES SCHAEFER RESIDENCE
Address:	155 EAST WALNUT STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9402872 / 1994-06-17
Facility ID:	9402872
Site ID:	284570
Spill Date:	1994-05-27
Spill Cause:	Tank Failure
Spill Source:	Private Dwelling
Spill Class:	E6
Cleanup Ceased:	1994-06-17
SWIS:	3009
Investigator:	KAKISPER
Referred To:	Not reported
Reported to Dept:	1994-05-27
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Other
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1994-05-31
Spill Record Last Update:	1994-06-22
Spiller Name:	Not reported
Spiller Company:	JAMES SCHAEFER RESIDENCE
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	230746
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was KISPERT "
Remarks:	"HOMEOWNER CALLED OIL CO TO INVESTIGATE NO HEAT PROBLEM, OIL CO FOUND 4 WATER IN TANK, PUMPED OUT & WATER STILL COMING IN TANK, OIL CO SETTING UP TEMP SYSTEM FOR NOW, THINKS THAT TANK IS BAD"

All Materials:

Site ID:	284570
Operable Unit ID:	999905
Operable Unit:	01
Material ID:	383045
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

K47 SE 1/4-1/2 0.447 mi. 2362 ft. | **MOBIL OIL CO**
203 PARK AVENUE/LONG BEACH ROAD
LONG BEACH, NY

Site 2 of 3 in cluster K

NY LTANKS | **S100177063**
N/A

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	MOBIL OIL CO
Address:	203 PARK AVENUE/LONG BEACH ROAD
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9104787 / 1991-08-26
Facility ID:	9104787
Site ID:	322530
Spill Date:	1991-08-02
Spill Cause:	Tank Test Failure
Spill Source:	Gasoline Station or other PBS Facility
Spill Class:	B3
Cleanup Ceased:	1991-08-26
SWIS:	3009
Investigator:	KMYAGER
Referred To:	Not reported
Reported to Dept:	1991-08-02
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	1991-08-02
Spill Record Last Update:	2014-02-20
Spiller Name:	Not reported
Spiller Company:	MOBIL OIL CO
Spiller Address:	Not reported
Spiller County:	999
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	259824
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was DEROSA 08/26/91: OLD SPILL #90-00597, DIFFERENT TANKS, 8/26 PASSED RETEST 8/16 AFTER TIGHTENING LOOSE FITTING AT +.007, NO FURTHER ACTION. "
Remarks:	"1K FAILED AT -.128 PETROTITE TEST. ISLAND PUMP & TANK TESTER. WILL ISOLATE AND RETEST"

All TTF:

Facility ID:	9104787
Spill Number:	9104787
Spill Tank Test:	1538842
Site ID:	322530
Tank Number:	Not reported
Tank Size:	0
Material:	0001
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported

MOBIL OIL CO (Continued) **S100177063**

Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	322530
Operable Unit ID:	955560
Operable Unit:	01
Material ID:	423846
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

48
SW
1/4-1/2
0.453 mi.
2392 ft.

RESIDENCE
260 WEST WALNUT
LONG BEACH, NY

NY LTANKS **S106718754**
N/A

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	RESIDENCE
Address:	260 WEST WALNUT
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0109849 / 2002-01-24
Facility ID:	0109849
Site ID:	319519
Spill Date:	2002-01-11
Spill Cause:	Tank Test Failure
Spill Source:	Private Dwelling
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	T/T/F
Referred To:	Not reported
Reported to Dept:	2002-01-11
CID:	252
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2002-01-11
Spill Record Last Update:	2002-01-31
Spiller Name:	BARRY LEVINE
Spiller Company:	RESIDENCE
Spiller Address:	260 WEST WALNUT

RESIDENCE (Continued) **S106718754**

Spiller County:	001
Spiller Contact:	BARRY LEVINE
Spiller Phone:	(516) 889-1208
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	257431
DEC Memo:	""
Remarks:	"RECOMMEND TO PULL TANK"

All TTF:

Facility ID:	0109849
Spill Number:	0109849
Spill Tank Test:	1526809
Site ID:	319519
Tank Number:	Not reported
Tank Size:	550
Material:	0001
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	03
Test Method 2:	Horner EZ Check I or II
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	319519
Operable Unit ID:	846988
Operable Unit:	01
Material ID:	527493
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

K49 **NU CLEAR CLEANERS** **RCRA-SQG** **1000174259**
SE **180 E PARK AVE** **NY SHWS** **NYD068030782**
1/4-1/2 **LONG BEACH, NY 11561** **NY MANIFEST**
0.454 mi. **RI MANIFEST**
2399 ft. **Site 3 of 3 in cluster K**

Relative:
Higher

Actual:
1 ft.

RCRA-SQG:

Date form received by agency:	2007-01-01 00:00:00.0
Facility name:	NU CLEAR CLEANERS
Facility address:	180 E PARK AVE LONG BEACH, NY 11561
EPA ID:	NYD068030782
Mailing address:	E PARK AVE LONG BEACH, NY 11561
Contact:	Not reported

NU CLEAR CLEANERS (Continued) **1000174259**

Contact address:	E PARK AVE LONG BEACH, NY 11561
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	02
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	Not reported
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	212-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	Not reported
Owner/operator address:	NOT REQUIRED NOT REQUIRED, WY 99999
Owner/operator country:	US
Owner/operator telephone:	212-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No

NU CLEAR CLEANERS (Continued) **1000174259**

Used oil transporter: No

Historical Generators:
Date form received by agency: 2006-01-01 00:00:00.0
Site name: NU CLEAR CLEANERS
Classification: Small Quantity Generator

Date form received by agency: 1999-07-14 00:00:00.0
Site name: NU CLEAR CLEANERS
Classification: Small Quantity Generator

Date form received by agency: 1985-05-03 00:00:00.0
Site name: NU CLEAR CLEANERS
Classification: Large Quantity Generator

Hazardous Waste Summary:

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 2014-10-31 00:00:00.0
Date achieved compliance: 2014-12-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2014-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2014-10-31 00:00:00.0
Date achieved compliance: 2015-03-04 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2014-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

NU CLEAR CLEANERS (Continued) **1000174259**

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2014-10-31 00:00:00.0
Date achieved compliance: 2014-12-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2014-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2014-10-31 00:00:00.0
Date achieved compliance: 2014-12-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2014-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Exports
Date violation determined: 2014-10-31 00:00:00.0
Date achieved compliance: 2014-12-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2014-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2014-10-31 00:00:00.0
Date achieved compliance: 2015-03-04 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2014-11-19 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

NU CLEAR CLEANERS (Continued) **1000174259**

Area of violation:	TSD IS-Preparedness and Prevention
Date violation determined:	2014-10-31 00:00:00.0
Date achieved compliance:	2015-08-31 00:00:00.0
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	2014-11-19 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	Generators - General
Date violation determined:	2014-10-31 00:00:00.0
Date achieved compliance:	2015-03-04 00:00:00.0
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	2014-11-19 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	2014-10-31 00:00:00.0
Date achieved compliance:	2014-12-29 00:00:00.0
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	2014-11-19 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	Permits - Application
Date violation determined:	2008-03-10 00:00:00.0
Date achieved compliance:	2008-05-23 00:00:00.0
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	2008-03-28 00:00:00.0
Enf. disposition status:	Not reported
Enf. disp. status date:	Not reported
Enforcement lead agency:	State
Proposed penalty amount:	Not reported
Final penalty amount:	Not reported
Paid penalty amount:	Not reported

Regulation violated:	Not reported
Area of violation:	Generators - General

NU CLEAR CLEANERS (Continued) **1000174259**

Date violation determined: 2008-03-10 00:00:00.0
Date achieved compliance: 2008-05-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2008-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 2008-03-10 00:00:00.0
Date achieved compliance: 2008-05-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2008-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD IS-Preparedness and Prevention
Date violation determined: 2008-03-10 00:00:00.0
Date achieved compliance: 2008-05-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2008-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 2008-03-10 00:00:00.0
Date achieved compliance: 2008-05-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2008-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 2008-03-10 00:00:00.0

NU CLEAR CLEANERS (Continued) **1000174259**

Date achieved compliance: 2008-05-23 00:00:00.0
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 2008-03-28 00:00:00.0
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2014-12-29 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2014-12-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2015-03-04 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Exports
Date achieved compliance: 2014-12-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2015-08-31 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 2015-03-04 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 2014-12-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport

NU CLEAR CLEANERS (Continued) **1000174259**

Date achieved compliance: 2014-12-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2014-10-31 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 2015-03-04 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2008-03-10 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 2008-05-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2008-03-10 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 2008-05-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2008-03-10 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 2008-05-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2008-03-10 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD IS-Preparedness and Prevention
Date achieved compliance: 2008-05-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2008-03-10 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 2008-05-23 00:00:00.0
Evaluation lead agency: State

Evaluation date: 2008-03-10 00:00:00.0
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 2008-05-23 00:00:00.0
Evaluation lead agency: State

SHWS:
Name: NU-CLEAR DRY CLEANERS
Address: 180 EAST PARK AVENUE
City,State,Zip: LONG BEACH, NY 11561
Program: HW
Site Code: 513284
Classification: 2
Region: 1
Acres: 0.7
HW Code: 130221
Record Add: 09/02/2015
Record Upd: 11/06/2017
Updated By: WJPARISH

NU CLEAR CLEANERS (Continued) **1000174259**

Site Description: Location: Nu-Clear Cleaners (Nu-Clear) operates a standalone commercial dry cleaning facility at 180 East Park Avenue, in the City of Long Beach, Nassau County. The site is defined on the Nassau County Tax Assessor records as Section 59, Block 110, Lots 32-35. Site Features: The site is located in a highly urbanized area of the City of Long Beach, which is situated approximately in the center of a barrier island located on the southwest shore of Long Island. The site is bordered to the north by East Park Avenue, to the east by Long Beach Boulevard, to the south by a municipally owned paved parking area, and to the west by private commercial/retail property. The site covers approximately 0.7 acres, and includes a one-story masonry building housing a commercial office and dry-cleaning operation. The remainder of the site is covered with asphalt or concrete pavement. Topography in the vicinity of the site is generally flat, with elevations generally less than 10 feet above mean sea level (ft-msl). Current Zoning/Use(s): This site is currently zoned for commercial use. Historic Use(s) and Source(s): Nu-Clear Cleaners has operated at the site as a commercial dry cleaning facility for approximately 60 years. It is currently using tetrachloroethylene (PCE) as part of its dry cleaning operations. In November 2014, the site was inspected and investigated for Resource Conservation and Recovery Act (RCRA) violations and subsequently referred for further action under the State Superfund program. Site Geology/Hydrogeology: The barrier island, on which the City of Long Beach is located, lies within the Atlantic Coastal Plain Province, which extends beneath the Atlantic Ocean about 100 miles offshore to the edge of the continental shelf. The area is underlain by several unconsolidated deposits of sand, gravel, and clay that were laid down in parallel beds on the surface of hard, crystalline bedrock. Groundwater in the shallow, unconsolidated sediments is generally encountered at a depth of approximately 6 feet beneath ground surface (ft-bgs). Based on the data collected during a July 2015 groundwater sampling event, the direction of groundwater flow appeared to be toward the east/northeast; however, it is likely that the gradient and direction of groundwater flow is influenced by tidal conditions typical of a barrier island setting like Long Beach. Additional groundwater measurements are necessary to understand the prevailing direction of groundwater flow.

Env Problem: Nature and Extent of Contamination: The primary contaminants of concern at the site at this time include chlorinated volatile organic compounds (VOCs), specifically tetrachloroethylene (PCE) and it s daughter products. The media impacted include soil, soil vapor and groundwater. Soil: Soil impacts appear to be limited to the area immediately adjacent to the facility and in a dry well located in the municipal parking lot. PCE was detected in the dry well soil sample at 2,600 parts per million (ppm), which exceeds the NYSDEC soil cleanup objective (SCO) for unrestricted use of 1.3 ppm. PCE was detected in samples collected beneath the facility at levels as high as 18,000 ppm. Groundwater: The following compounds were detected in site groundwater at levels exceeding their respective NYSDEC groundwater quality standards (GWQs): PCE at 4,700 parts per billion (ppb); vinyl chloride at 830 ppb; trichloroethene (TCE) at 1,100 ppb; and, cis-1,2 dichloroethene (cis-1,2 DCE) at 29,000 ppb. Soil Vapor: Several VOCs, such as PCE and TCE, were measured in the soil vapor samples collected under the asphalt pavement surrounding the dry cleaning facility. PCE was detected in all five soil vapor sample locations at levels ranging from 110 micrograms per cubic meter

NU CLEAR CLEANERS (Continued) **1000174259**

(ug/m3) and 4,030,000 ug/m3. TCE was detected at all soil vapor sample locations ranging between 272 ug/m3 and 331,000 ug/m3. Vinyl chloride was detected at two vapor points at levels ranging from 417 ug/m3 to 3,480 ug/m3. Chloroform was detected at one vapor point at 4,330 ug/m3 and 1,2,4-trimethylbenzene was detected in one vapor point at 718 ug/m3. The project's RIWP was approved on August 19, 2016. The RI Report was approved on October 28, 2017. A FS is currently being prepared.

Health Problem: Direct contact with contaminants in soil and groundwater is unlikely as the site is covered by buildings and pavement. People are not drinking the contaminated groundwater as the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater or soil may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to soil vapor intrusion. The potential exists for people to inhale site contaminants in the on-site building via soil vapor intrusion. Also, the potential exists for off-site migration of site-related contaminants in soil vapor into the indoor air of off-site structures.

	Not reported
Dump:	False
Structure:	False
Lagoon:	False
Landfill:	False
Pond:	False
Disp Start:	Not reported
Disp Term:	Not reported
Lat/Long:	Not reported
Dell:	Not reported
Record Add:	2015-09-02 15:45:00
Record Upd:	2015-09-02 15:45:00
Updated By:	JCSHEEHA
Own Op:	Owner
Sub Type:	05
Owner Name:	Gary and Larry Hantverk
Owner Company:	-
Owner Address:	180 East Park Avenue
Owner Addr2:	Not reported
Owner City,St,Zip:	Long Beach, NY 11561
Owner Country:	United States of America
Own Op:	Document Repository
Sub Type:	01
Owner Name:	Not reported
Owner Company:	Long Beach Public Library
Owner Address:	111 West Park Avenue
Owner Addr2:	Not reported
Owner City,St,Zip:	Long Beach, NY 11561
Owner Country:	United States of America
HW Code:	130221
Waste Type:	1,2-dichloroethane
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	130221
Waste Type:	vinyl chloride
Waste Quantity:	UNKNOWN

NU CLEAR CLEANERS (Continued) **1000174259**

Waste Code:	Not reported
HW Code:	130221
Waste Type:	tetrachloroethene (PCE)
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
HW Code:	130221
Waste Type:	trichloroethene (TCE)
Waste Quantity:	UNKNOWN
Waste Code:	Not reported
Crossref ID:	Not reported
Cross Ref Type Code:	Not reported
Cross Ref Type:	Not reported
Record Added Date:	Not reported
Record Updated:	Not reported
Updated By:	Not reported

NY MANIFEST:

Name:	NU CLEAR CLEANERS
Address:	180 E PARK AVE
City,State,Zip:	LONG BEACH, NY 11561
Country:	USA
EPA ID:	NYD068030782
Facility Status:	Not reported
Location Address 1:	180 EAST PARK AVENUE
Code:	BP
Location Address 2:	Not reported
Total Tanks:	Not reported
Location City:	LONG BEACH
Location State:	NY
Location Zip:	11561
Location Zip 4:	Not reported

NY MANIFEST:

EPAID:	NYD068030782
Mailing Name:	NU CLEAR CLEANERS
Mailing Contact:	NU CLEAR CLEANERS
Mailing Address 1:	180 EAST PARK AVENUE
Mailing Address 2:	Not reported
Mailing City:	LONG BEACH
Mailing State:	NY
Mailing Zip:	11561
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	5164329260

NY MANIFEST:

Document ID:	Not reported
Manifest Status:	Not reported
seq:	Not reported
Year:	2018
Trans1 State ID:	NJD000564906
Trans2 State ID:	MIT270012321
Generator Ship Date:	10/24/2018
Trans1 Recv Date:	10/24/2018
Trans2 Recv Date:	10/30/2018
TSD Site Recv Date:	10/30/2018
Part A Recv Date:	Not reported

NU CLEAR CLEANERS (Continued) **1000174259**

Part B Recv Date:	Not reported
Generator EPA ID:	NYD068030782
Trans1 EPA ID:	Not reported
Trans2 EPA ID:	Not reported
TSDF ID 1:	CDX761010010
TSDF ID 2:	Not reported
Manifest Tracking Number:	019128840JJK
Import Indicator:	N
Export Indicator:	Y
Discr Quantity Indicator:	N
Discr Type Indicator:	N
Discr Residue Indicator:	N
Discr Partial Reject Indicator:	N
Discr Full Reject Indicator:	N
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	H020
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	320
Units:	P - Pounds
Number of Containers:	4
Container Type:	DM - Metal drums, barrels
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	1
Waste Code:	F002
Waste Code 1_2:	D039
Waste Code 1_3:	Not reported
Waste Code 1_4:	Not reported
Waste Code 1_5:	Not reported
Waste Code 1_6:	Not reported

Click this hyperlink while viewing on your computer to access
8 additional NY MANIFEST: record(s) in the EDR Site Report.

RI MANIFEST:

EPA Id:	NYD068030782
GEN Cert Date:	2/11/2011
Manifest Document Number:	004289189FLE
Waste Description:	HAZARDOUS WASTE LIQUID NOS
TSDF Id:	RID084802842
TSDF Name:	SAFETY KLEEN
Qty:	100
WT/Vol Units:	P
TSDF Date:	2/17/2011
Transporter 2 Id:	NJD071629976
Item Number:	2
Transporter 2 Name:	2/17/2011
Transporter Name 2:	SAFETY KLEEN
Transporter EPAID:	TXR000050930
Transporter Receipt Date:	2/11/2011

NU CLEAR CLEANERS (Continued) **1000174259**

Number Of Containers:	1
Container Type:	DF
Waste Code1:	D029
Waste Code2:	D039
Waste Code3:	D040
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Fee Exempt Code:	Not reported
Comment:	Not reported
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
Quarter:	Not reported
Transporter Contact Name:	Not reported
Transporter Contact Email:	Not reported
Filing Date:	Not reported
Total Fee:	Not reported
Billing Name:	Not reported
Paid Date:	Not reported
Paid Time:	Not reported
Facility Receipt Date:	Not reported
Fee:	Not reported
Manifest Created Date:	Not reported
Manifest Updated Date:	Not reported

RI MANIFEST:

Transporter Receipt Date:	11/19/2012
Number Of Containers:	2
Container Type:	DF
Waste Code1:	D029
Waste Code2:	D039
Waste Code3:	D040
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	003310534SKS
Quarter:	Not reported
Waste Description:	HAZARDOUS WASTE LIQUID NOS
Transporter Contact Name:	Not reported
Quantity:	200
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	2
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported

NU CLEAR CLEANERS (Continued) **1000174259**

Time Paid:	Not reported
GEN Cert Date:	11/19/2012
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	11/29/2012
Manifest Created Date:	Not reported
TSDF Receipt Date:	11/29/2012
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported

Transporter Receipt Date:	7/17/2012
Number Of Containers:	4
Container Type:	DF
Waste Code1:	D007
Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	003368227SKS
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS
Transporter Contact Name:	Not reported
Quantity:	760
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	7/17/2012
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	7/23/2012
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/23/2012
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported

Transporter Receipt Date:	7/17/2012
Number Of Containers:	2
Container Type:	DF
Waste Code1:	D029
Waste Code2:	D039
Waste Code3:	D040

NU CLEAR CLEANERS (Continued) **1000174259**

Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	003368227SKS
Quarter:	Not reported
Waste Description:	HAZARDOUS WASTE LIQUID NOS
Transporter Contact Name:	Not reported
Quantity:	200
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	2
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	7/17/2012
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	7/23/2012
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/23/2012
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	11/19/2012
Number Of Containers:	3
Container Type:	DF
Waste Code1:	D007
Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	003310534SKS
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS
Transporter Contact Name:	Not reported
Quantity:	570

NU CLEAR CLEANERS (Continued) **1000174259**

Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	11/19/2012
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	11/29/2012
Manifest Created Date:	Not reported
TSDF Receipt Date:	11/29/2012
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported

Transporter Receipt Date:	7/17/2012
Number Of Containers:	2
Container Type:	DM
Waste Code1:	D007
Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	003368227SKS
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS
Transporter Contact Name:	Not reported
Quantity:	200
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	3
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	7/17/2012
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	7/23/2012
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/23/2012

NU CLEAR CLEANERS (Continued) **1000174259**

Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	2/11/2011
Number Of Containers:	1
Container Type:	DM
Waste Code1:	D007
Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	004289189FLE
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS
Transporter Contact Name:	Not reported
Quantity:	200
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	3
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	2/11/2011
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	2/17/2011
Manifest Created Date:	Not reported
TSDF Receipt Date:	2/17/2011
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	2/11/2011
Number Of Containers:	3
Container Type:	DF
Waste Code1:	D007
Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842

NU CLEAR CLEANERS (Continued) **1000174259**

Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	004289189FLE
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS
Transporter Contact Name:	Not reported
Quantity:	585
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	2/11/2011
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	2/17/2011
Manifest Created Date:	Not reported
TSDF Receipt Date:	2/17/2011
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	2/11/2011
Number Of Containers:	1
Container Type:	DF
Waste Code1:	D029
Waste Code2:	D039
Waste Code3:	D040
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	SAFETY KLEEN
TSDF Id:	RID084802842
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	004289189FLE
Quarter:	Not reported
Waste Description:	HAZARDOUS WASTE LIQUID NOS
Transporter Contact Name:	Not reported
Quantity:	100
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	2
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported

NU CLEAR CLEANERS (Continued) **1000174259**

Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	2/11/2011
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	2/17/2011
Manifest Created Date:	Not reported
TSDF Receipt Date:	2/17/2011
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	6/29/2011
Number Of Containers:	1
Container Type:	DF
Waste Code1:	D029
Waste Code2:	D039
Waste Code3:	D040
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	CRANSTON RECYCLE CENTER
TSDF Id:	RID084802742
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	002595711SKS
Quarter:	Not reported
Waste Description:	HAZARDOUS WASTE LIQUID NOS
Transporter Contact Name:	Not reported
Quantity:	100
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	2
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	6/29/2011
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	7/14/2011
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/14/2011
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	6/29/2011
Number Of Containers:	5
Container Type:	DF
Waste Code1:	D007

NU CLEAR CLEANERS (Continued) **1000174259**

Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	CRANSTON RECYCLE CENTER
TSDF Id:	RID084802742
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	002595711SKS
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS
Transporter Contact Name:	Not reported
Quantity:	350
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	3
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	6/29/2011
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	7/14/2011
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/14/2011
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported
Transporter Receipt Date:	6/29/2011
Number Of Containers:	3
Container Type:	DF
Waste Code1:	D007
Waste Code2:	D029
Waste Code3:	D039
Waste Code4:	Not reported
Waste Code5:	Not reported
Waste Code6:	Not reported
Comment:	Not reported
Fee Exempt Code:	Not reported
TSDF Name:	CRANSTON RECYCLE CENTER
TSDF Id:	RID084802742
Transporter Name 2:	SJ TRANSPORTATION CO INC
Company Permit Number:	Not reported
Year:	Not reported
EPA ID:	NYD068030782
Manifest Docket Number:	002595711SKS
Quarter:	Not reported
Waste Description:	TOXIC LIQUIDS ORGANIC NOS

NU CLEAR CLEANERS (Continued) **1000174259**

Transporter Contact Name:	Not reported
Quantity:	570
Transporter Contact Email:	Not reported
WT/Vol Units:	P
Filing Date:	Not reported
Total Fee:	Not reported
Item Number:	1
Transporter Name:	SAFETY KLEEN
Billing Name:	Not reported
Transporter EPA ID:	TXR000050930
Date Paid:	Not reported
Time Paid:	Not reported
GEN Cert Date:	6/29/2011
Facility Receipt Date:	Not reported
Fee:	Not reported
Transporter 2 Receipt Date:	7/14/2011
Manifest Created Date:	Not reported
TSDF Receipt Date:	7/14/2011
Transporter 2 ID:	NJD071629976
Manifest Updated Date:	Not reported

Click this hyperlink while viewing on your computer to access
17 additional RI_MANIFEST: record(s) in the EDR Site Report.

L50 **MOBIL OIL CORP SS #KVT** **NY LTANKS** **1000553712**
SE **203 E PARK AVE** **RCRA NonGen / NLR** **NYD986961415**
1/4-1/2 **LONG BEACH, NY 11561** **FINDS**
0.457 mi. **ECHO**
2415 ft. **Site 1 of 2 in cluster L**

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	MOBIL OIL
Address:	203 EAST PARK AVENUE
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	9000587 / 2003-07-08
Facility ID:	9000587
Site ID:	122803
Spill Date:	1990-04-17
Spill Cause:	Tank Test Failure
Spill Source:	Gasoline Station or other PBS Facility
Spill Class:	B3
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	KMYAGER
Referred To:	Not reported
Reported to Dept:	1990-04-18
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Responsible Party
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	False
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1990-04-20
Spill Record Last Update:	2003-07-09
Spiller Name:	Not reported

MOBIL OIL CORP SS #KVT (Continued) **1000553712**

Spiller Company:	MOBIL OIL
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	106449
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was YAGER WELL 7/8/03 FILE INACTIVE.....REFER TO 01-10807"
Remarks:	"1-8K FAILED AT -1.131 & 1-550 FAILED AT UNK RATE. ISOLATE, EXCAVATE AND RETEST. ISLAND PUMP AND TANK TO EXCAVATE TOMORROW"

All TTF:

Facility ID:	9000587
Spill Number:	9000587
Spill Tank Test:	1536956
Site ID:	122803
Tank Number:	Not reported
Tank Size:	0
Material:	1213A
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00
Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	122803
Operable Unit ID:	939964
Operable Unit:	01
Material ID:	438967
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	True

Site ID:	122803
Operable Unit ID:	939964
Operable Unit:	01
Material ID:	572523
Material Code:	1213A
Material Name:	MTBE (methyl-tert-butyl ether)
Case No.:	01634044
Material FA:	Hazardous Material
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported

MOBIL OIL CORP SS #KVT (Continued) **1000553712**

Oxygenate: True

RCRA NonGen / NLR:

Date form received by agency:	2007-01-01 00:00:00.0
Facility name:	MOBIL OIL CORP SS #KVT
Facility address:	203 E PARK AVE LONG BEACH, NY 11561-3511
EPA ID:	NYD986961415
Mailing address:	GALLOWS RD - MKTG ENVIRON FAIRFAX, NY 22037-0001
Contact:	Not reported
Contact address:	GALLOWS RD - MKTG ENVIRON FAIRFAX, NY 22037-0001
Contact country:	US
Contact telephone:	Not reported
Contact email:	Not reported
EPA Region:	02
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	MOBIL OIL CORP
Owner/operator address:	3225 GALLOWS RD FAIRFAX, VA 22037
Owner/operator country:	US
Owner/operator telephone:	703-849-3330
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	MOBIL OIL CORP
Owner/operator address:	3225 GALLOWS RD FAIRFAX, VA 22037
Owner/operator country:	US
Owner/operator telephone:	703-849-3330
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No

MOBIL OIL CORP SS #KVT (Continued) **1000553712**

Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 2006-01-01 00:00:00.0
Site name: MOBIL OIL CORP SS #KVT
Classification: Not a generator, verified

Date form received by agency: 1999-07-08 00:00:00.0
Site name: MOBIL OIL CORP SS #KVT
Classification: Not a generator, verified

Date form received by agency: 1991-04-10 00:00:00.0
Site name: MOBIL OIL CORP SS #KVT
Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

FINDS:

Registry ID: 110004471722

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000553712
Registry ID: 110004471722
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110004471722

L51 SE 1/4-1/2 0.457 mi. 2415 ft. | **EXXON LONG BEACH AUTO**
203 EAST PARK AVENUE
LONG BEACH, NY 11561

NY LTANKS
NY TANKS
NY Spills

S104513911
N/A

Site 2 of 2 in cluster L

Relative: Higher

Actual: 1 ft.

LTANKS:

Name:	MOBIL S/S
Address:	203 EAST PARK AVENUE
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	8901401 / 1992-03-09
Facility ID:	8901401
Site ID:	122802
Spill Date:	1989-05-11
Spill Cause:	Tank Test Failure
Spill Source:	Gasoline Station or other PBS Facility
Spill Class:	B3
Cleanup Ceased:	1992-03-09
SWIS:	3009
Investigator:	AYLEUNG
Referred To:	Not reported
Reported to Dept:	1989-05-12
CID:	Not reported
Water Affected:	Not reported
Spill Notifier:	Tank Tester
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	True
Remediation Phase:	0
Date Entered In Computer:	1989-05-16
Spill Record Last Update:	2011-03-17
Spiller Name:	Not reported
Spiller Company:	MOBIL S/S
Spiller Address:	3225 GALLOWS ROAD
Spiller County:	001
Spiller Contact:	Not reported
Spiller Phone:	Not reported
Spiller Extention:	Not reported
DEC Region:	1
DER Facility ID:	106449
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was LEUNG 03/09/92: 12K RETESTED & PASSED, 8K STAGE II PROBLEM 8K RETEST PASSED. "
Remarks:	"1-12K FAILED AT -.216 1-8K FAILED AT -.195. F&N TESTER. FIBERGLASS TANKS,3 YRS OLD. INITITAL PETROTITE FAILURE."

All TTF:

Facility ID:	8901401
Spill Number:	8901401
Spill Tank Test:	1535458
Site ID:	122802
Tank Number:	Not reported
Tank Size:	0
Material:	0009
EPA UST:	Not reported
UST:	Not reported
Cause:	Not reported
Source:	Not reported
Test Method:	00

EXXON LONG BEACH AUTO (Continued) **S104513911**

Test Method 2:	Unknown
Leak Rate:	.00
Gross Fail:	Not reported
Modified By:	Spills
Last Modified Date:	Not reported

All Materials:

Site ID:	122802
Operable Unit ID:	927534
Operable Unit:	01
Material ID:	449149
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

TANKS NASSAU:

Facility Name:	PMG #8555
Permit End Date:	Not reported
Tank Number:	1114
Decode of Ttype:	Under Ground
Capacity:	00020000
Product Description:	GASOLINE, UNLEADED REGULAR
Facility Name:	PMG #8555
Permit End Date:	Not reported
Tank Number:	1115
Decode of Ttype:	Under Ground
Capacity:	00012000
Product Description:	GASOLINE, UNLEADED PREMIUM
Facility Name:	PMG #8555
Permit End Date:	Not reported
Tank Number:	1116
Decode of Ttype:	Under Ground
Capacity:	00008000
Product Description:	OIL, DIESEL FUEL

SPILLS:

Name:	EXXON LONG BEACH AUTO
Address:	203 EAST PARK AVENUE
City,State,Zip:	LONG BEACH, NY 11561
Spill Number/Closed Date:	0110807 / 2014-10-09
Facility ID:	0110807
Facility Type:	ER
DER Facility ID:	407309
Site ID:	122800
DEC Region:	1
Spill Cause:	Human Error
Spill Class:	C3
SWIS:	3009

EXXON LONG BEACH AUTO (Continued) **S104513911**

Spill Date:	2002-02-12
Investigator:	CAENGELH
Referred To:	Not reported
Reported to Dept:	2002-02-12
CID:	397
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Other
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2002-02-12
Spill Record Last Update:	2014-10-31
Spiller Name:	TOM BUDDE
Spiller Company:	EXXON LONG BEACH AUTO
Spiller Address:	203 EAST PARK AVENUE
Spiller Company:	001
Contact Name:	TOM BUDDE
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was ENGELHARDT WELL 2/12 DEC WILL CHECK SITE, 90-00587 2/15/02 FILE REASSIGNED 08/31/04 FILE REASSIGNED"
Remarks:	"contractor was digging in area of tanks and hit a tank. soil was contaminated and some gasoline went into the sewer. unk clean up"

All Materials:

Site ID:	122800
Operable Unit ID:	847880
Operable Unit:	01
Material ID:	571976
Material Code:	1213A
Material Name:	MTBE (methyl-tert-butyl ether)
Case No.:	01634044
Material FA:	Hazardous Material
Quantity:	Not reported
Units:	Not reported
Recovered:	Not reported
Oxygenate:	True

Site ID:	122800
Operable Unit ID:	847880
Operable Unit:	01
Material ID:	528414
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	True

Name:	EXXON MOBIL
Address:	203 EAST PARK AVENUE
City,State,Zip:	LONG BEACH, NY

EXXON LONG BEACH AUTO (Continued) **S104513911**

Spill Number/Closed Date:	0307440 / 2008-09-09
Facility ID:	0307440
Facility Type:	ER
DER Facility ID:	106449
Site ID:	122801
DEC Region:	1
Spill Cause:	Other
Spill Class:	B3
SWIS:	3009
Spill Date:	2003-10-13
Investigator:	KMYAGER
Referred To:	Not reported
Reported to Dept:	2003-10-15
CID:	204
Water Affected:	Not reported
Spill Source:	Gasoline Station or other PBS Facility
Spill Notifier:	Citizen
Cleanup Ceased:	Not reported
Cleanup Meets Std:	False
Last Inspection:	Not reported
Recommended Penalty:	False
UST Trust:	False
Remediation Phase:	0
Date Entered In Computer:	2003-10-15
Spill Record Last Update:	2017-03-29
Spiller Name:	Not reported
Spiller Company:	EXXON MOBIL
Spiller Address:	203 EAST PARK AVENUE
Spiller Company:	001
Contact Name:	GLENN
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was YAGER SAME AS 90-00587, REMOVING TANKS, 2-8K GAS, 1-12K GAS FILED W/01-10807"
Remarks:	"STATION WAS TORN DOWN - ESCAVATION STARTED - PRODUCT ALL OVER BECAUSE OF THE RAIN "

All Materials:

Site ID:	122801
Operable Unit ID:	876108
Operable Unit:	01
Material ID:	500972
Material Code:	0009
Material Name:	gasoline
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

Site ID:	122801
Operable Unit ID:	876108
Operable Unit:	01
Material ID:	500973
Material Code:	0022
Material Name:	waste oil/used oil
Case No.:	Not reported
Material FA:	Petroleum

EXXON LONG BEACH AUTO (Continued) **S104513911**

Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported
Site ID:	122801
Operable Unit ID:	876108
Operable Unit:	01
Material ID:	500971
Material Code:	0008
Material Name:	diesel
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

52
WSW
1/4-1/2
0.465 mi.
2455 ft.

PAUL TOBELMANN RESIDENCE
365 WEST HUDSON STREET
LONG BEACH, NY

NY LTANKS **S105997923**
N/A

Relative:
Higher

Actual:
1 ft.

LTANKS:

Name:	PAUL TOBELMANN RESIDENCE
Address:	365 WEST HUDSON STREET
City,State,Zip:	LONG BEACH, NY
Spill Number/Closed Date:	0210424 / 2003-01-16
Facility ID:	0210424
Site ID:	69934
Spill Date:	2003-01-15
Spill Cause:	Tank Overfill
Spill Source:	Private Dwelling
Spill Class:	C4
Cleanup Ceased:	Not reported
SWIS:	3009
Investigator:	UNASSIGNED
Referred To:	Not reported
Reported to Dept:	2003-01-15
CID:	405
Water Affected:	Not reported
Spill Notifier:	Affected Persons
Last Inspection:	Not reported
Recommended Penalty:	False
Meets Standard:	True
UST Involvement:	False
Remediation Phase:	0
Date Entered In Computer:	2003-01-15
Spill Record Last Update:	2003-01-17
Spiller Name:	Not reported
Spiller Company:	PETRO OIL
Spiller Address:	Not reported
Spiller County:	001
Spiller Contact:	PAUL TOEBELMANN
Spiller Phone:	(516) 431-4017
Spiller Extention:	Not reported

PAUL TOBELMANN RESIDENCE (Continued) **S105997923**

DEC Region:	1
DER Facility ID:	66446
DEC Memo:	"Prior to Sept, 2004 data translation this spill Lead_DEC Field was NONE 1/15/03 9:00 TELECON TO PAUL-LINE BUSY 9:40 TELECON TO PAUL-CALLED PETRO FOR SERVICE, SERVICE PERSON NOTICED OIL RESIDUE ON SIDE OF TANK, APPEARS THAT THERE IS A PROBLEM WITH THE FILL PIPE, OIL DID NOT IMPACT THE SOIL,ONLY SIDE OF TANK, PETRO INSTALLED A TEMP TANK AND PUMPED OUT TANK, WILL DETERMINE IF TANK CAN BE FIXED,NO RESPONSE"
Remarks:	"caller states that petro oil is at his residence and they overfilled the tank causing a small spill onto the ground in the basement - according to the caller petro oil has taken care of the clean up - mostly just residue"

All Materials:

Site ID:	69934
Operable Unit ID:	861673
Operable Unit:	01
Material ID:	513805
Material Code:	0001A
Material Name:	#2 fuel oil
Case No.:	Not reported
Material FA:	Petroleum
Quantity:	.00
Units:	G
Recovered:	.00
Oxygenate:	Not reported

---

53 SSE 1/2-1 0.628 mi. 3315 ft. **LONG BEA FIRE CON STA** **FUDS** **1024899248**
N/A

LONG BEACH, NY

Relative: Higher

Actual: 1 ft.

FUDS:

EPA Region:	2
Installation ID:	NY29799F116800
Congressional District Number:	4
Facility Name:	LONG BEA FIRE CON STA
FUDS Number:	C02NY0631
City:	LONG BEACH
State:	NY
County:	NASSAU
Telephone:	978-318-8238
USACE Division:	North Atlantic Division (NAD)
USACE District:	New England District (NAE)
Status:	Properties without projects
Current Owner:	Private Sector
X Coord:	-73.659444440208006
Y Coord:	40.584444439959803
Latitude:	40.584444439999999
Longitude:	-73.659444440000001

Count: 2 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
ISLAND PARK	S113916566	ISLAND PARK LIQUID WASTE DISPOSAL	130013 ISLAND PARK LIQUID WAST	11558	NY SHWS
LONG BEACH	S113922018	LONG BEACH HOLDER	RIVERSIDE BLVD & WATER STREET	11561	NY VCP

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: N/A
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 10/04/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 08/13/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 6

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/07/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/19/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System
Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/09/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 14

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/09/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Inactive Hazardous Waste Disposal Sites in New York State
Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Facility Register
Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 07/02/2019
Date Data Arrived at EDR: 07/02/2019
Date Made Active in Reports: 09/06/2019
Number of Days to Update: 66

Source: Department of Environmental Conservation
Telephone: 518-402-8678
Last EDR Contact: 09/30/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 79

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 04/12/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 07/02/2019
Date Data Arrived at EDR: 10/16/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 8

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 10/16/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

LTANKS: Spills Information Database
Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 08/29/2019
Number of Days to Update: 16

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Varies

HIST LTANKS: Listing of Leaking Storage Tanks
A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Varies

UST: Petroleum Bulk Storage (PBS) Database
Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/05/2019
Number of Days to Update: 71

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: No Update Planned

CBS UST: Chemical Bulk Storage Database
Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 10/24/2005
Next Scheduled EDR Contact: 01/23/2006
Data Release Frequency: No Update Planned

MOSF UST: Major Oil Storage Facilities Database
Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

CBS: Chemical Bulk Storage Site Listing
These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/05/2019
Number of Days to Update: 71

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

MOSF: Major Oil Storage Facility Site Listing
These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/05/2019
Number of Days to Update: 71

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

AST: Petroleum Bulk Storage
Registered Aboveground Storage Tanks.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/05/2019
Number of Days to Update: 71

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: No Update Planned

CBS AST: Chemical Bulk Storage Database
Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

MOSF AST: Major Oil Storage Facilities Database
Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 02/20/2002
Date Made Active in Reports: 03/22/2002
Number of Days to Update: 30

Source: NYSDEC
Telephone: 518-402-9549
Last EDR Contact: 07/25/2005
Next Scheduled EDR Contact: 10/24/2005
Data Release Frequency: No Update Planned

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 04/12/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/23/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/05/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/16/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 79

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 08/05/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 79

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 07/29/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 80

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

TANKS: Storage Tank Faciliy Listing
This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/05/2019
Number of Days to Update: 71

Source: Department of Environmental Conservation
Telephone: 518-402-9543
Last EDR Contact: 09/25/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

RES DECL: Restrictive Declarations Listing
A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/18/2010
Date Data Arrived at EDR: 06/30/2014
Date Made Active in Reports: 07/21/2014
Number of Days to Update: 21

Source: NYC Department of City Planning
Telephone: 212-720-3401
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Varies

ENV RES DECL: Environmental Restrictive Declarations
The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 06/14/2019
Number of Days to Update: 84

Source: New York City Department of City Planning
Telephone: 212-720-3300
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Varies

ENG CONTROLS: Registry of Engineering Controls
Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Quarterly

INST CONTROL: Registry of Institutional Controls
Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9553
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9711
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Semi-Annually

VCP NYC: Voluntary Cleanup Program Listing NYC

New York City voluntary cleanup program sites.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 08/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 64

Source: New York City Office of Environmental Protection
Telephone: 212-788-8841
Last EDR Contact: 09/12/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9764
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Semi-Annually

ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a $200 million Environmental Restoration or Brownfields Fund as part of the $1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 06/04/2019
Date Made Active in Reports: 08/26/2019
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

SWTIRE: Registered Waste Tire Storage & Facility List

A listing of facilities registered to accept waste tires.

Date of Government Version: 02/27/2018
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 63

Source: Department of Environmental Conservation
Telephone: 518-402-8694
Last EDR Contact: 09/06/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: No Update Planned

SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 07/02/2019
Date Data Arrived at EDR: 07/02/2019
Date Made Active in Reports: 09/06/2019
Number of Days to Update: 66

Source: Department of Environmental Conservation
Telephone: 518-402-8678
Last EDR Contact: 09/30/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 10/17/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/02/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: No Update Planned

DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 64

Source: Department of Environmental Conservation
Telephone: 518-402-9622
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 06/11/2019
Date Data Arrived at EDR: 06/13/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

DEC surveyed select businesses, fire departments, fire training centers, bulk storage facilities, airports, and Department of Defense (DoD) facilities. The responses to the survey have helped to determine if these entities used or stored materials containing PFOA/PFOS including AFFF and dispersants used in Teflon coating operations. The results of this survey will be updated periodically as additional responses are received..

Date of Government Version: 01/16/2019
Date Data Arrived at EDR: 05/08/2019
Date Made Active in Reports: 06/24/2019
Number of Days to Update: 47

Source: Department of Environmental Conservation
Telephone: 518-402-9020
Last EDR Contact: 08/09/2019
Next Scheduled EDR Contact: 11/18/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SUFFOLK CO TANKS: Storage Tank Database
Facilities that have no tank information

Date of Government Version: 06/28/2018
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 31

Source: Department of Health Services
Telephone: 631-854-2516
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Varies

HIST UST: Historical Petroleum Bulk Storage Database
These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: Varies

HIST AST: Historical Petroleum Bulk Storage Database
These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 06/02/2006
Date Made Active in Reports: 07/20/2006
Number of Days to Update: 48

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 10/23/2006
Next Scheduled EDR Contact: 01/22/2007
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Spill Liens Information
Lien information from the Oil Spill Fund.

Date of Government Version: 08/05/2019
Date Data Arrived at EDR: 08/06/2019
Date Made Active in Reports: 10/14/2019
Number of Days to Update: 69

Source: Office of the State Comptroller
Telephone: 518-474-9034
Last EDR Contact: 08/02/2019
Next Scheduled EDR Contact: 11/18/2019
Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/30/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 89

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 08/12/2019
Date Data Arrived at EDR: 08/13/2019
Date Made Active in Reports: 08/29/2019
Number of Days to Update: 16

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 08/13/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Varies

HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002
Date Data Arrived at EDR: 07/08/2005
Date Made Active in Reports: 07/14/2005
Number of Days to Update: 6

Source: Department of Environmental Conservation
Telephone: 518-402-9549
Last EDR Contact: 07/07/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/12/2013
Number of Days to Update: 40

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/07/2013
Number of Days to Update: 63

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 113

Source: Environmental Protection Agency
Telephone: (212) 637-3660
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 05/15/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 79

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/23/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/07/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/16/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 06/24/2019
Date Data Arrived at EDR: 06/26/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/24/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/05/2019
Next Scheduled EDR Contact: 11/18/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 08/09/2019
Next Scheduled EDR Contact: 11/18/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 09/19/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/23/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 09/30/2018
Date Data Arrived at EDR: 04/24/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 106

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 10/23/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 09/05/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 18

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 11/18/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 10/11/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 10/07/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/20/2019
Date Data Arrived at EDR: 06/20/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 49

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 09/06/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/03/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 08/09/2019
Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 10/15/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/31/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 85

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 07/31/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 06/30/2019
Date Data Arrived at EDR: 07/16/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 78

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 01/06/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/06/2019
Next Scheduled EDR Contact: 01/19/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/30/2019
Next Scheduled EDR Contact: 11/18/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/19/2019
Date Data Arrived at EDR: 07/30/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/03/2019
Date Data Arrived at EDR: 05/29/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 71

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/27/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Semi-Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 06/06/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 140

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 09/12/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2019
Date Data Arrived at EDR: 09/10/2019
Date Made Active in Reports: 10/17/2019
Number of Days to Update: 37

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 09/10/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 05/03/2019
Date Data Arrived at EDR: 06/05/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 90

Source: EPA
Telephone: (212) 637-3000
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 10/10/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 07/06/2019
Date Data Arrived at EDR: 07/09/2019
Date Made Active in Reports: 10/02/2019
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 10/08/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/21/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/20/2019
Date Data Arrived at EDR: 05/21/2019
Date Made Active in Reports: 08/08/2019
Number of Days to Update: 79

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/20/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Quarterly

AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 08/14/2019
Date Data Arrived at EDR: 08/14/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 63

Source: Department of Environmental Conservation
Telephone: 518-402-8452
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: Annually

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal ash disposal site locations.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 04/04/2019
Date Made Active in Reports: 06/19/2019
Number of Days to Update: 76

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 09/27/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

DRYCLEANERS: Registered Drycleaners

A listing of all registered drycleaning facilities.

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 06/13/2019
Number of Days to Update: 93

Source: Department of Environmental Conservation
Telephone: 518-402-8403
Last EDR Contact: 09/06/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Annually

E DESIGNATION: E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 06/18/2019
Number of Days to Update: 84

Source: New York City Department of City Planning
Telephone: 718-595-6658
Last EDR Contact: 09/16/2019
Next Scheduled EDR Contact: 12/30/2019
Data Release Frequency: Semi-Annually

Financial Assurance 1: Financial Assurance Information Listing

Financial assurance information.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/02/2019
Date Made Active in Reports: 09/06/2019
Number of Days to Update: 66

Source: Department of Environmental Conservation
Telephone: 518-402-8660
Last EDR Contact: 09/27/2019
Next Scheduled EDR Contact: 01/13/2020
Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 03/01/2019
Date Data Arrived at EDR: 03/19/2019
Date Made Active in Reports: 06/18/2019
Number of Days to Update: 91

Source: Department of Environmental Conservation
Telephone: 518-402-8712
Last EDR Contact: 09/06/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Varies

HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003
Date Data Arrived at EDR: 10/20/2006
Date Made Active in Reports: 11/30/2006
Number of Days to Update: 41

Source: Department of Environmental Conservation
Telephone: 518-402-9564
Last EDR Contact: 05/26/2009
Next Scheduled EDR Contact: 08/24/2009
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 07/29/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Quarterly

SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 07/29/2019
Date Data Arrived at EDR: 08/06/2019
Date Made Active in Reports: 10/14/2019
Number of Days to Update: 69

Source: Department of Environmental Conservation
Telephone: 518-402-8233
Last EDR Contact: 10/21/2019
Next Scheduled EDR Contact: 02/03/2020
Data Release Frequency: No Update Planned

VAPOR REOPENED: Vapor Intrusion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 12/01/2018
Date Data Arrived at EDR: 02/13/2019
Date Made Active in Reports: 06/13/2019
Number of Days to Update: 120

Source: Department of Environmenal Conservation
Telephone: 518-402-9814
Last EDR Contact: 08/16/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: Varies

UIC: Underground Injection Control Wells
A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 06/03/2019
Date Data Arrived at EDR: 06/05/2019
Date Made Active in Reports: 06/18/2019
Number of Days to Update: 13

Source: Department of Environmental Conservation
Telephone: 518-402-8056
Last EDR Contact: 09/04/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: Quarterly

COOLING TOWERS: Registered Cooling Towers
This data includes the location of cooling towers registered with New York State. The data is self-reported by owners/property managers of cooling towers in service in New York State. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York State.

Date of Government Version: 07/09/2019
Date Data Arrived at EDR: 07/17/2019
Date Made Active in Reports: 09/06/2019
Number of Days to Update: 51

Source: Department of Health
Telephone: 518-402-7650
Last EDR Contact: 10/16/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Varies

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/09/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department of Environmental Conservation
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

CORTLAND COUNTY:

AST - CORTLAND: Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 57

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 07/26/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Quarterly

UST - CORTLAND: Cortland County Storage Tank Listing
A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 08/20/2019
Date Data Arrived at EDR: 08/20/2019
Date Made Active in Reports: 10/16/2019
Number of Days to Update: 57

Source: Cortland County Health Department
Telephone: 607-753-5035
Last EDR Contact: 07/26/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Quarterly

NASSAU COUNTY:

AST - NASSAU: Registered Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 35

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: No Update Planned

AST NCFM: Storage Tank Database
A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 03/29/2011
Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Varies

TANKS NASSAU: Registered Tank Database in Nassau County
A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 35

Source: Nassau County Department of Health
Telephone: 516-227-9691
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Varies

UST - NASSAU: Registered Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 02/15/2017
Number of Days to Update: 35

Source: Nassau County Health Department
Telephone: 516-571-3314
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: No Update Planned

UST NCFM: Storage Tank Database
A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011
Date Data Arrived at EDR: 02/23/2011
Date Made Active in Reports: 03/29/2011
Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal
Telephone: 516-572-1000
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Varies

ROCKLAND COUNTY:

AST - ROCKLAND: Petroleum Bulk Storage Database
A listing of aboveground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 09/22/2017
Number of Days to Update: 189

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: No Update Planned

UST - ROCKLAND: Petroleum Bulk Storage Database
A listing of underground storage tank sites located in Rockland County. Rockland County?s Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017
Date Data Arrived at EDR: 03/17/2017
Date Made Active in Reports: 09/22/2017
Number of Days to Update: 189

Source: Rockland County Health Department
Telephone: 914-364-2605
Last EDR Contact: 08/30/2019
Next Scheduled EDR Contact: 12/16/2019
Data Release Frequency: No Update Planned

SUFFOLK COUNTY:

AST - SUFFOLK: Storage Tank Database
A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 02/07/2019
Number of Days to Update: 63

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: No Update Planned

UST - SUFFOLK: Storage Tank Database
A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 02/07/2019
Number of Days to Update: 63

Source: Suffolk County Department of Health Services
Telephone: 631-854-2521
Last EDR Contact: 07/25/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: No Update Planned

WESTCHESTER COUNTY:

AST - WESTCHESTER: Listing of Storage Tanks
A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 05/10/2019
Date Data Arrived at EDR: 05/17/2019
Date Made Active in Reports: 06/13/2019
Number of Days to Update: 27

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 07/26/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Semi-Annually

UST - WESTCHESTER: Listing of Storage Tanks
A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 05/10/2019
Date Data Arrived at EDR: 05/17/2019
Date Made Active in Reports: 06/13/2019
Number of Days to Update: 27

Source: Westchester County Department of Health
Telephone: 914-813-5161
Last EDR Contact: 07/26/2019
Next Scheduled EDR Contact: 11/11/2019
Data Release Frequency: Semi-Annually

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 05/14/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 08/05/2019
Number of Days to Update: 83

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/07/2019
Next Scheduled EDR Contact: 11/25/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 10/02/2019
Next Scheduled EDR Contact: 01/20/2020
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 10/09/2019
Next Scheduled EDR Contact: 12/07/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/16/2019
Next Scheduled EDR Contact: 12/02/2019
Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data
Hazardous waste manifest information.

Date of Government Version: 07/15/2019
Date Data Arrived at EDR: 07/16/2019
Date Made Active in Reports: 10/04/2019
Number of Days to Update: 80

Source: Department of Environmental Conservation
Telephone: 802-241-3443
Last EDR Contact: 10/10/2019
Next Scheduled EDR Contact: 01/27/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/06/2019
Next Scheduled EDR Contact: 12/23/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Day Care Providers
Source: Department of Health
Telephone: 212-676-2444

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

LONG BEACH WPCP
2 W PINE STREET
LONG BEACH, NY 11561

TARGET PROPERTY COORDINATES

Latitude (North):	40.593024 - 40˚ 35’ 34.89’’
Longitude (West):	73.665774 - 73˚ 39’ 56.79’’
Universal Tranverse Mercator:	Zone 18
UTM X (Meters):	612902.4
UTM Y (Meters):	4494224.5
Elevation:	1 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5940613 LAWRENCE, NY
Version Date:	2013

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

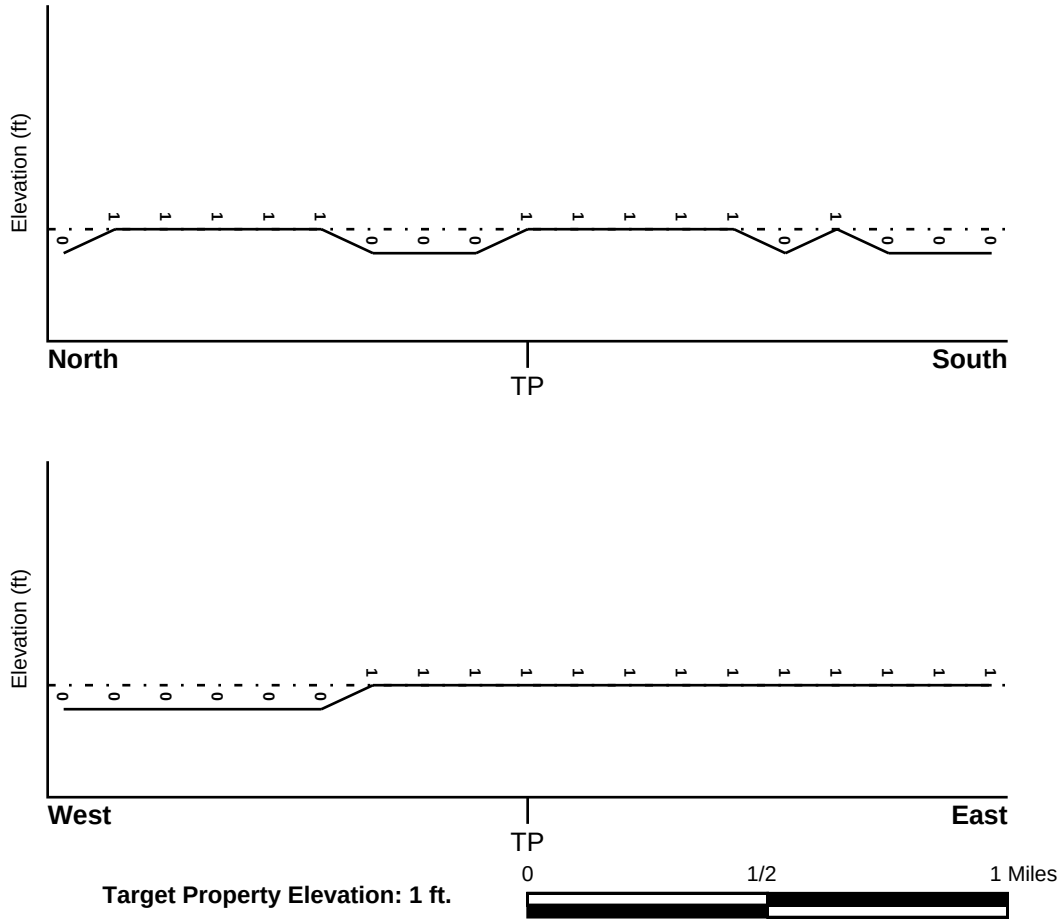
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General North

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 1 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
36059C0308G	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
36059C0306G	FEMA FIRM Flood data
36059C0307G	FEMA FIRM Flood data
36059C0309G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
LAWRENCE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Cenozoic
System:	Quaternary
Series:	Pleistocene
Code:	Qp *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name:	URBAN LAND
Soil Surface Texture:	variable
Hydrologic Group:	Not reported
Soil Drainage Class:	Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel:	Not Reported
Depth to Bedrock Min:	> 10 inches
Depth to Bedrock Max:	> 10 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	6 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: sand
mucky-peat

Surficial Soil Types: sand
mucky-peat

Shallow Soil Types: No Other Soil Types

Deeper Soil Types: coarse sand
sand
loamy sand
sapric material

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B4	USGS40000825981	1/8 - 1/4 Mile East
B5	USGS40000826030	1/8 - 1/4 Mile ENE
C6	USGS40000826016	1/8 - 1/4 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
C9	USGS40000826020	1/8 - 1/4 Mile WSW
C10	USGS40000826017	1/8 - 1/4 Mile West
D11	USGS40000826026	1/8 - 1/4 Mile East
D12	USGS40000826025	1/8 - 1/4 Mile East
D13	USGS40000826024	1/4 - 1/2 Mile East
D14	USGS40000826023	1/4 - 1/2 Mile East
D15	USGS40000826027	1/4 - 1/2 Mile East
D16	USGS40000826029	1/4 - 1/2 Mile East
D17	USGS40000826019	1/4 - 1/2 Mile East
E18	USGS40000826022	1/4 - 1/2 Mile East
E19	USGS40000826028	1/4 - 1/2 Mile East
20	USGS40000826003	1/4 - 1/2 Mile West
21	USGS40000826031	1/4 - 1/2 Mile East
22	USGS40000825958	1/2 - 1 Mile SSE
F23	USGS40000825999	1/2 - 1 Mile West
25	USGS40000825963	1/2 - 1 Mile SE
G26	USGS40000825946	1/2 - 1 Mile SSW
G27	USGS40000825952	1/2 - 1 Mile SSW
H28	USGS40000826066	1/2 - 1 Mile North
H29	USGS40000826067	1/2 - 1 Mile North
30	USGS40000825951	1/2 - 1 Mile SSW
31	USGS40000825953	1/2 - 1 Mile SW
I32	USGS40000826060	1/2 - 1 Mile NE
I33	USGS40000826059	1/2 - 1 Mile NE
I34	USGS40000826061	1/2 - 1 Mile NE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A3	NY0002834	0 - 1/8 Mile ESE

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	NYWS006480	0 - 1/8 Mile ESE
A2	NYWS006481	0 - 1/8 Mile ESE
C7	NYWS006483	1/8 - 1/4 Mile West
C8	NYWS006482	1/8 - 1/4 Mile West
F24	NYWS006484	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 5846767.2s

County Boundary
Major Roads
Contour Lines
Earthquake epicenter, Richter 5 or greater
Water Wells
Public Water Supply Wells
Cluster of Multiple Icons

0 1/4 1/2 1 Miles

Groundwater Flow Direction
GI Indeterminate Groundwater Flow at Location
GV Groundwater Flow Varies at Location
HD Closest Hydrogeological Data
Oil, gas or related wells

N

No contour lines were detected within this map area.

SITE NAME: Long Beach WPCP	CLIENT: First Environment, Inc.
ADDRESS: 2 W Pine Street Long Beach NY 11561	CONTACT: Kenneth Farah
LAT/LONG: 40.593024 / 73.665774	INQUIRY #: 5846767.2s
	DATE: October 28, 2019 4:03 pm

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Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **ESE** **0 - 1/8 Mile** **Higher**	**NY WELLS**	**NYWS006480**

Well ID:	NY2902834	Well Name:	N 08011 - WELL 14
System ID:	005	System Name:	LONG BEACH CITY
Type:	WL	Status:	A
Agency:	NYMAN, BRUCE		

A2 **ESE** **0 - 1/8 Mile** **Higher**	**NY WELLS**	**NYWS006481**

Well ID:	NY2902834	Well Name:	N 05308 - WELL 11
System ID:	002	System Name:	LONG BEACH CITY
Type:	WL	Status:	A
Agency:	NYMAN, BRUCE		

A3 **ESE** **0 - 1/8 Mile** **Higher**	**FRDS PWS**	**NY0002834**

PWS ID:	NY0002834	PWS type:	System Owner/Responsible Party
PWS name:	EATON EDWARD L J	PWS address:	Not Reported
PWS city:	LONG BEACH	PWS state:	NY
PWS zip:	11561	PWS ID:	NY0002834
Activity status:	Active	Date system activated:	Not Reported
Date system deactivated:	Not Reported	Retail population:	00035000
System name:	LONG BEACH CITY	System address:	Not Reported
System address:	1 WEST CHESTER STREET	System city:	LONG BEACH
System state:	NY	System zip:	11561
County FIPS:	029	City served:	LONG BEACH
Latitude:	403534	Longitude:	0733955
Latitude:	403518	Longitude:	0733820
Latitude:	403533	Longitude:	0734010
Latitude:	403534	Longitude:	0733955
Latitude:	403533	Longitude:	0734010
Latitude:	403518	Longitude:	0733827
Latitude:	403534	Longitude:	0733955
Latitude:	403529	Longitude:	0734033

Map ID Direction Distance Elevation	Database	EDR ID Number
B4 **East** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000825981**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 8557. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1258
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

B5 **ENE** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000826030**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	-LONG BEACH WELL-WELL 16	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

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C6 **WSW** **1/8 - 1/4 Mile** **Higher**	**FED USGS**	**USGS40000826016**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 6450. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1280
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

C7 **West** **1/8 - 1/4 Mile** **Higher**	**NY WELLS**	**NYWS006483**

Well ID:	NY2902834	Well Name:	N 08233 - WELL 15
System ID:	006	System Name:	LONG BEACH CITY

Type:	WL	Status:	A
Agency:	NYMAN, BRUCE		

C8
West
1/8 - 1/4 Mile
Higher

NY WELLS **NYWS006482**

Well ID:	NY2902834	Well Name:	N 07776 - WELL 13
System ID:	004	System Name:	LONG BEACH CITY
Type:	WL	Status:	A
Agency:	NYMAN, BRUCE		

C9
WSW
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000826020**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 43. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1285
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

C10
West
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000826017**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 8011. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1270
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D11
East
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000826026**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 3687. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported

Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1251
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D12
East
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000826025**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 45. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1133
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D13
East
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000826024**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 40. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1078
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D14
East
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000826023**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 830. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1061
Well Depth Units:	ft	Well Hole Depth:	1061
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
D15 **East** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826027**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 7776. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1238
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D16 **East** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826029**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 42. 2	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1203
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

D17 **East** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826019**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 42. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Magothy Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	615
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
E18 **East** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826022**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 41. 2	Type:	Well
Description:	OLD: N 41. 1	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1257
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

E19 **East** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826028**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 41. 1	Type:	Well
Description:	NEW: N 41. 2 193707	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1135
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

20 **West** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826003**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 44. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1282
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Map ID Direction Distance Elevation	Database	EDR ID Number
21 **East** **1/4 - 1/2 Mile** **Higher**	**FED USGS**	**USGS40000826031**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 1416. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Not Reported
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	200	Well Depth Units:	ft
Well Hole Depth:	200	Well Hole Depth Units:	ft

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22 **SSE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000825958**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 319. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Magothy Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

F23 **West** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000825999**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 2597. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1241
Well Depth Units:	ft	Well Hole Depth:	1253
Well Hole Depth Units:	ft		

F24 **WSW** **1/2 - 1 Mile** **Higher**	**NY WELLS**	**NYWS006484**

Well ID:	NY2902834	Well Name:	N 02597 - WELL 9
System ID:	001	System Name:	LONG BEACH CITY

Type:	WL	Status:	A
Agency:	NYMAN, BRUCE		

25
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40000825963**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 3529. 1	Type:	Well
Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Glacial Aquifer, Upper	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	104
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

G26
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000825946**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 11109. 1	Type:	Well
Description:	LAT/LONG UPDATES FROM SIM 3066		
HUC:	02030202	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported		
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Magothy Aquifer	Aquifer Type:	Not Reported
Construction Date:	19870318	Well Depth:	810
Well Depth Units:	ft	Well Hole Depth:	1300
Well Hole Depth Units:	ft		

G27
SSW
1/2 - 1 Mile
Higher

FED USGS **USGS40000825952**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 11002. 1	Type:	Well
Description:	LAT/LONG UPDATES FROM SIM 3066		
HUC:	02030202	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported		
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Lloyd Aquifer	Aquifer Type:	Not Reported
Construction Date:	19870328	Well Depth:	1255
Well Depth Units:	ft	Well Hole Depth:	1475
Well Hole Depth Units:	ft		

Map ID Direction Distance Elevation	Database	EDR ID Number
H28 **North** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000826066**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 6365. 1	Type:	Well
Description:	NEW: N 6365. 2 196504	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Glacial Aquifer, Upper	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	19
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

H29 **North** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000826067**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 6365. 2	Type:	Well
Description:	OLD: N 6365. 1	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Glacial Aquifer, Upper	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	19
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

30 **SSW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000825951**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 13550. 1	Type:	Well
Description:	Sediment Core @ 1051’	HUC:	Not Reported
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Lloyd Aquifer
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

31 **SW** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000825953**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 10621. 1	Type:	Well

Description:	Not Reported	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Basement Complex
Aquifer Type:	Not Reported	Construction Date:	Not Reported
Well Depth:	Not Reported	Well Depth Units:	Not Reported
Well Hole Depth:	1475	Well Hole Depth Units:	ft

I32
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000826060**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 6366. 2	Type:	Well
Description:	OLD: N 6366. 1 196504 NEW: N 6366. 3 196504		
HUC:	02030202	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported		
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Glacial Aquifer, Upper	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	24
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

I33
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000826059**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 6366. 1	Type:	Well
Description:	NEW: N 6366. 2 195907	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Glacial Aquifer, Upper	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	19
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

I34
NE
1/2 - 1 Mile
Higher

FED USGS **USGS40000826061**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	N 6366. 3	Type:	Well
Description:	OLD: N 6366. 2	HUC:	02030202
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Northern Atlantic Coastal Plain aquifer system		
Formation Type:	Glacial Aquifer, Upper	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	Not Reported
Well Depth Units:	Not Reported	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: NY Radon

Radon Test Results

County	Town	Num Tests	Avg Result	Geo Mean	Max Result
NASSAU	GLEN COVE	6	2.53	2.15	5.5
NASSAU	HEMPSTEAD	350	1.19	0.86	8.3
NASSAU	LONG BEACH (CITY DESIGNATION)	2	0.25	0.2	0.4
NASSAU	N. HEMPSTEAD	164	1.61	1.2	7.5
NASSAU	OYSTER BAY	208	1.77	1.2	13.9

Federal EPA Radon Zone for NASSAU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for NASSAU COUNTY, NY

Number of sites tested: 226

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.640 pCi/L	98%	2%	0%
Basement	1.100 pCi/L	98%	2%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Freshwater Wetlands
Source: Department of Environmental Conservation
Telephone: 518-402-8961

HYDROGEOLOGIC INFORMATION

AQUIFLOW[R] Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

New York Public Water Wells
Source: New York Department of Health
Telephone: 518-458-6731

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database
Source: Department of Environmental Conservation
Telephone: 518-402-8072
These files contain records, in the database, of wells that have been drilled.

RADON

State Database: NY Radon
Source: Department of Health
Telephone: 518-402-7556
Radon Test Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Long Beach WPCP

2 W Pine Street

Long Beach, NY 11561

Inquiry Number: 5846767.3

October 29, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/29/19

Site Name:	Client Name:
Long Beach WPCP	First Environment, Inc.
2 W Pine Street	91 Fulton Street
Long Beach, NY 11561	Boonton, NJ 07005
EDR Inquiry # 5846767.3	Contact: Kenneth Farah

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Certified Sanborn Results:

Certification # 4502-4EC3-AFCF

PO # NA

Project Long Beach WPCP

Maps Provided:

1980
1970
1966
1955
1953
1950
1922
1914

Sanborn® Library search results

Certification #: 4502-4EC3-AFCF

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- ✔ Library of Congress
- ✔ University Publications of America
- ✔ EDR Private Collection

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Sanborn Sheet Key

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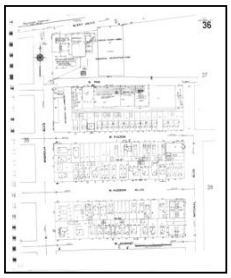
1980 Source Sheets



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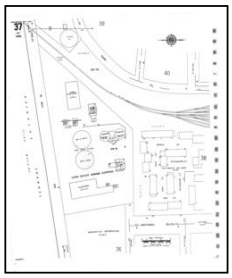
1980



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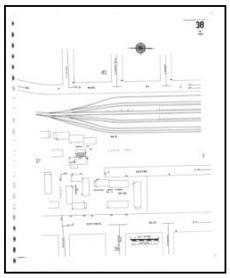
1980



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1980

1970 Source Sheets

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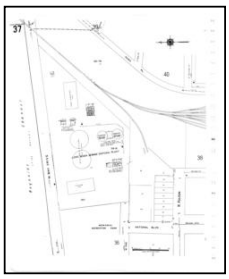
1970



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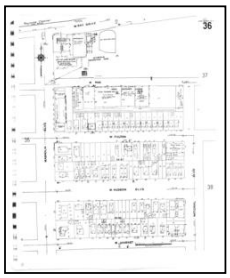
1970

1966 Source Sheets



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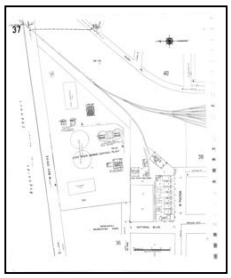
1966



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1966

1955 Source Sheets

Volume 1, Sheet 37
1955

Sanborn Sheet Key

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1953 Source Sheets

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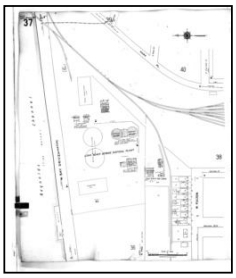
1953



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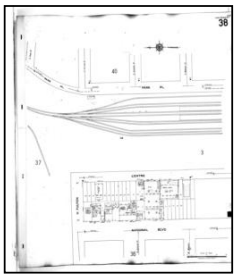
1953



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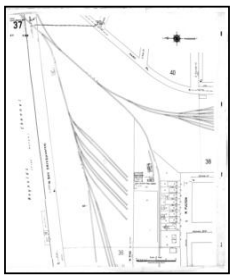
1953

1950 Source Sheets



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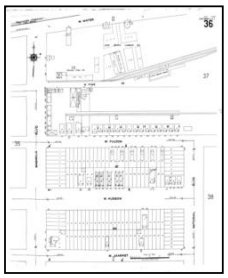
1950

1922 Source Sheets



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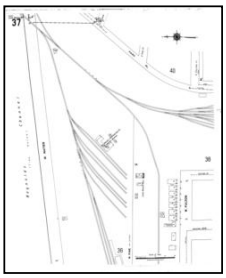
1922



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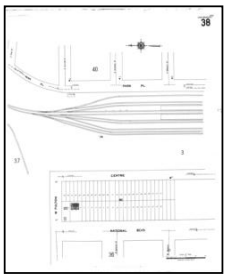
1922



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1922

1914 Source Sheets

Volume 1, Sheet 2
1914

Volume 1, Sheet 3
1914

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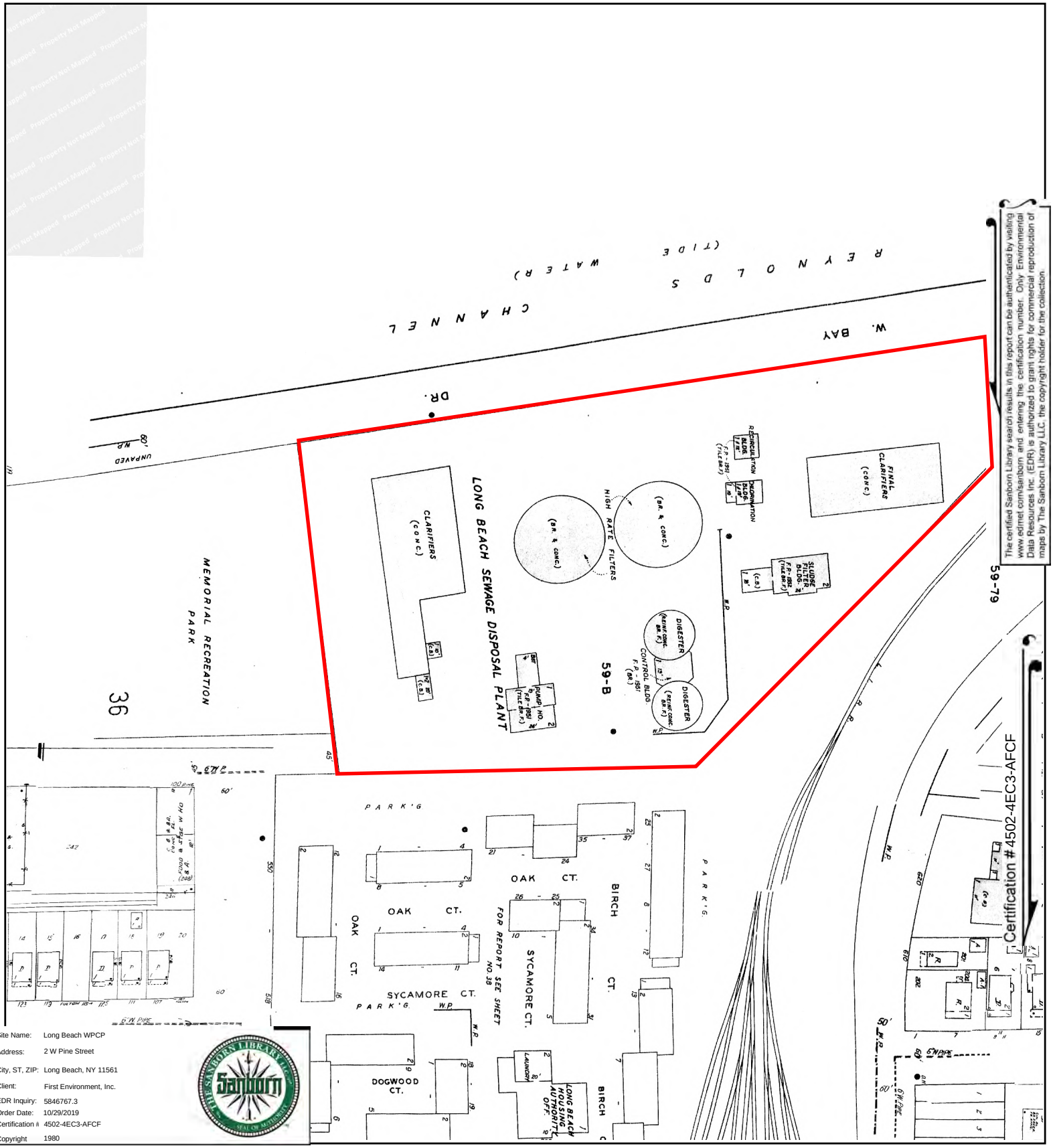
1980



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Site Name:	Long Beach WPCP
Address:	2 W Pine Street
City, ST, ZIP:	Long Beach, NY 11561
Client:	First Environment, Inc.
EDR Inquiry:	5846767.3
Order Date:	10/29/2019
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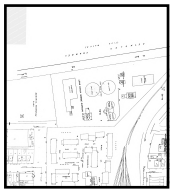
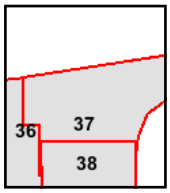
0 Feet 150 300 600



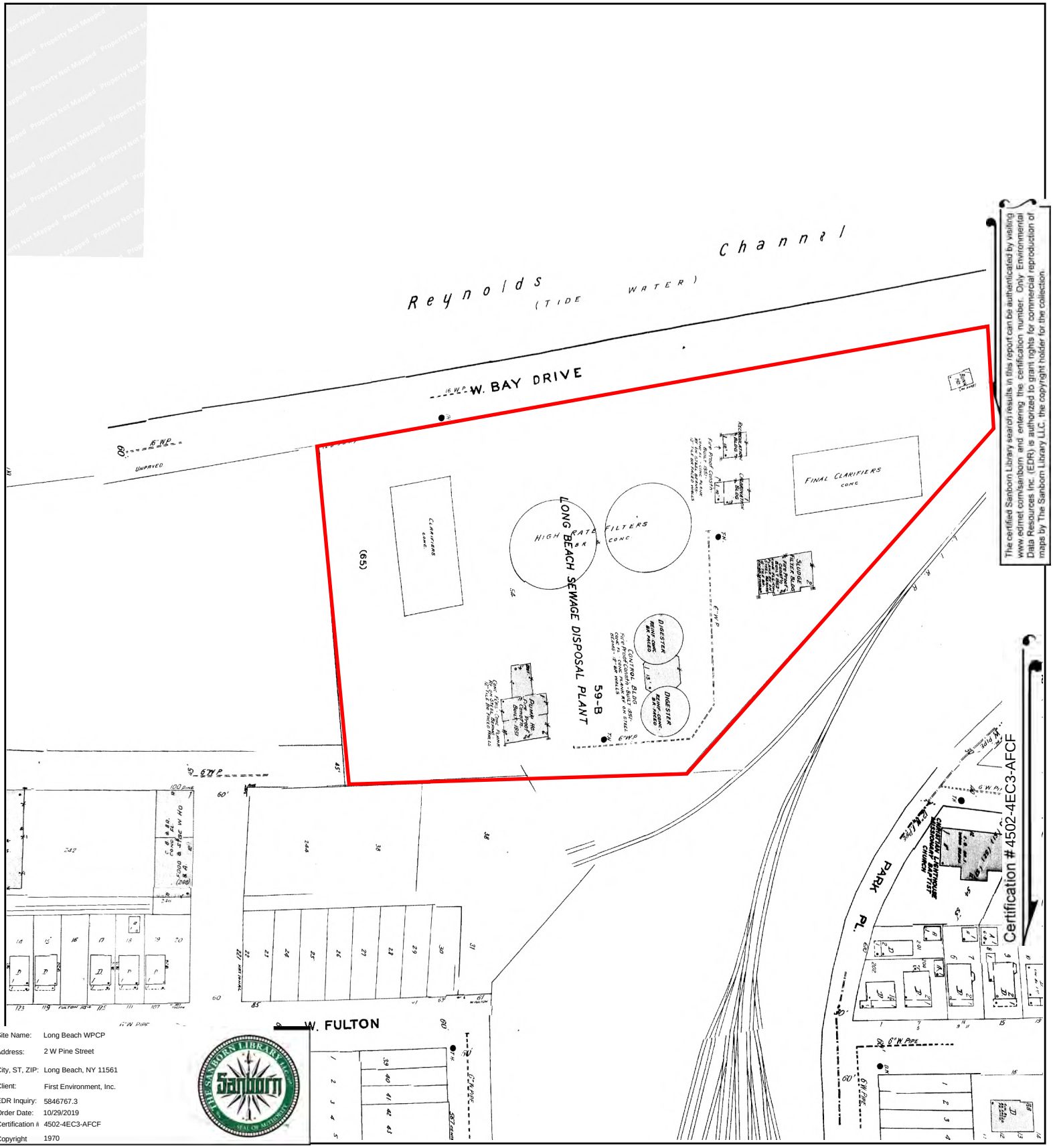


Volume 1, Sheet 38
Volume 1, Sheet 37
Volume 1, Sheet 36

N

Certified Sanborn® Map

1970



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Address:	2 W Pine Street
City, ST, ZIP:	Long Beach, NY 11561
Client:	First Environment, Inc.
EDR Inquiry:	5846767.3
Order Date:	10/29/2019
Certification #	4502-4EC3-AFCF
Copyright	1970

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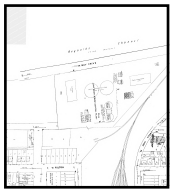

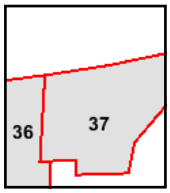

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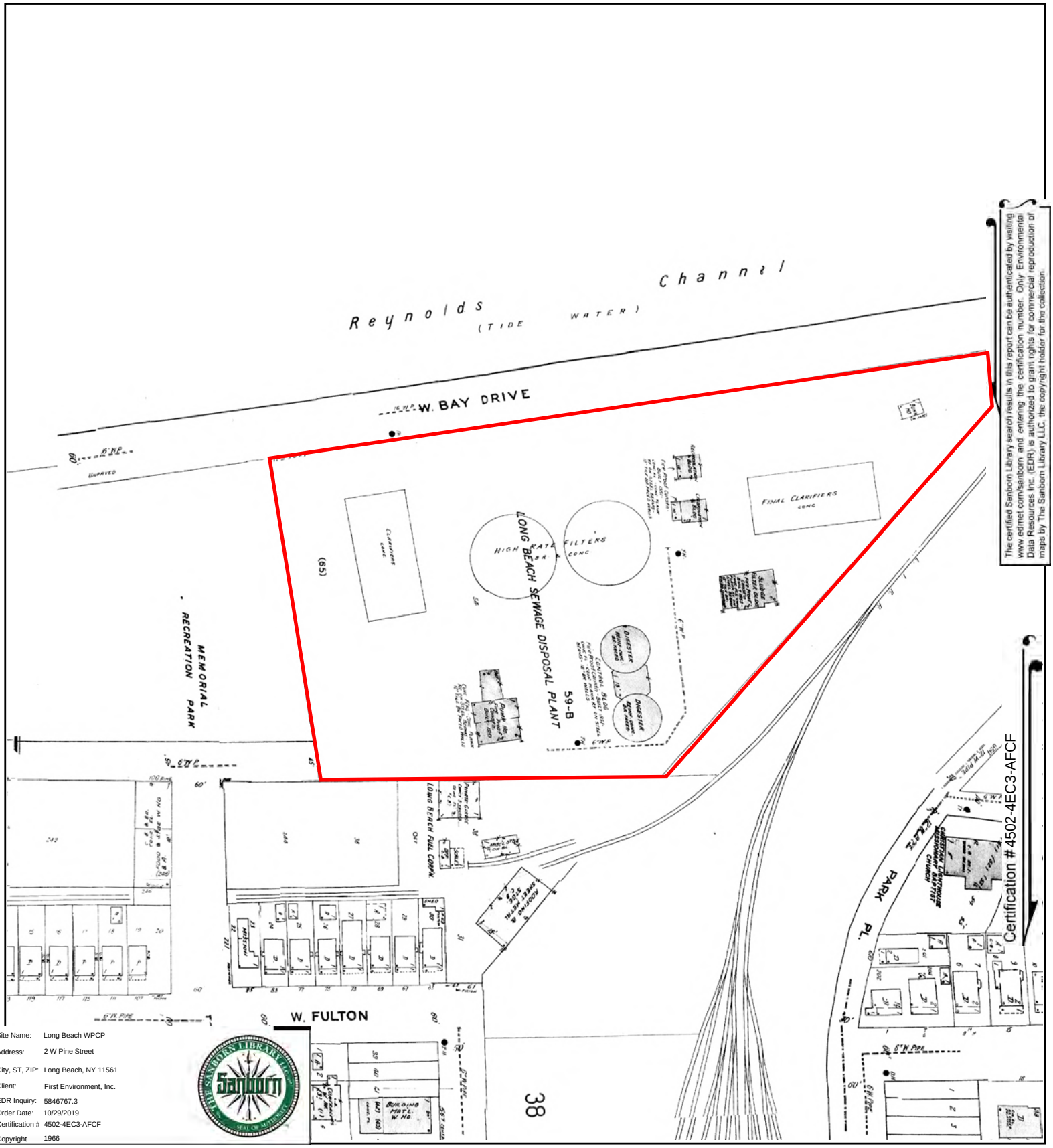
Certified Sanborn® Map

1966



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EDR Inquiry:	5846767.3
Order Date:	10/29/2019
Certification #	4502-4EC3-AFCF
Copyright	1966

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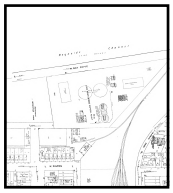

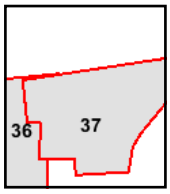

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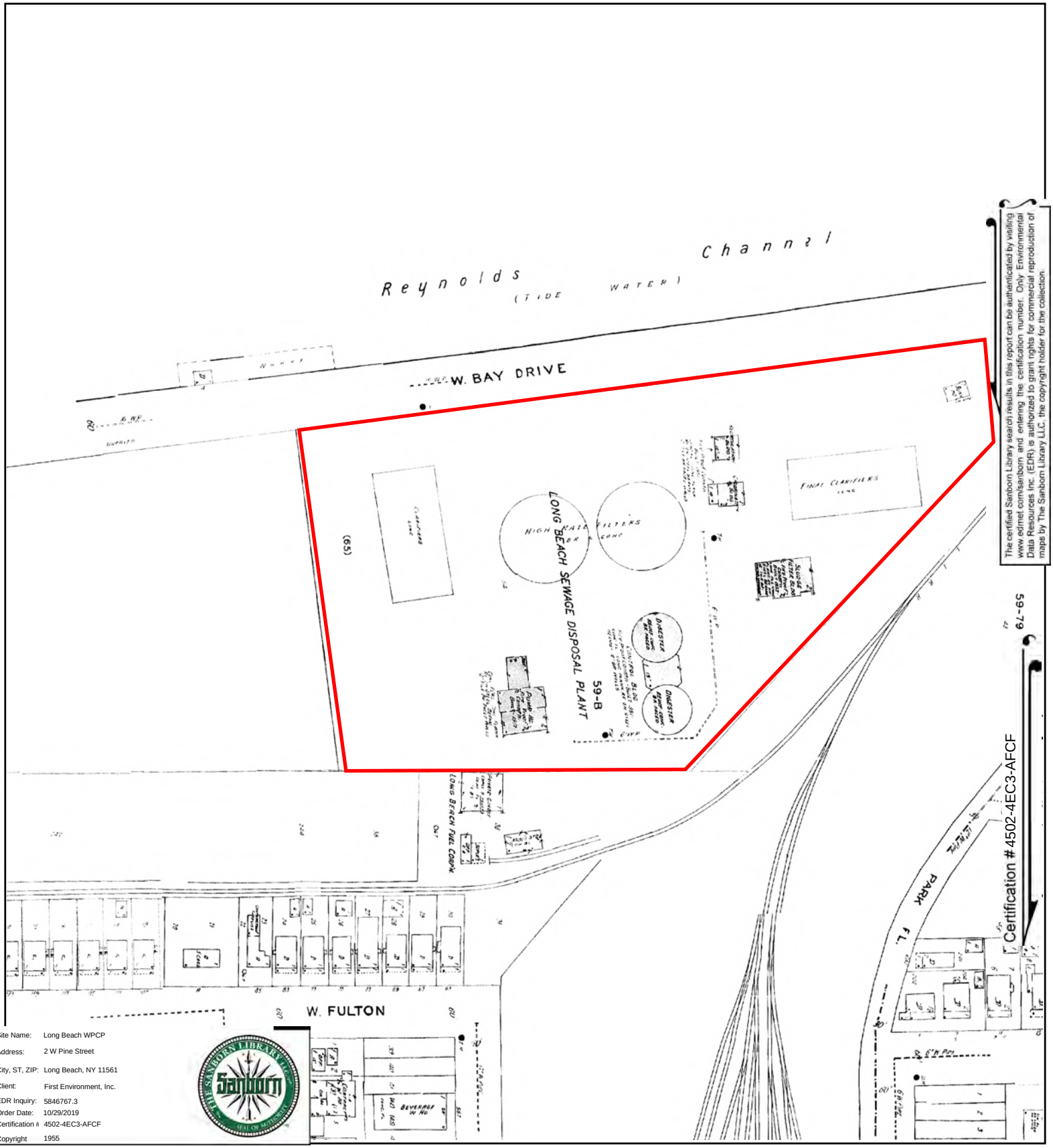
Certified Sanborn® Map

1955



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Certification #	4502-4EC3-AFCF
Copyright	1955

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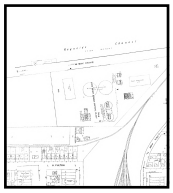

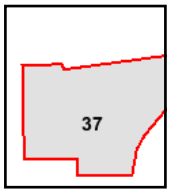

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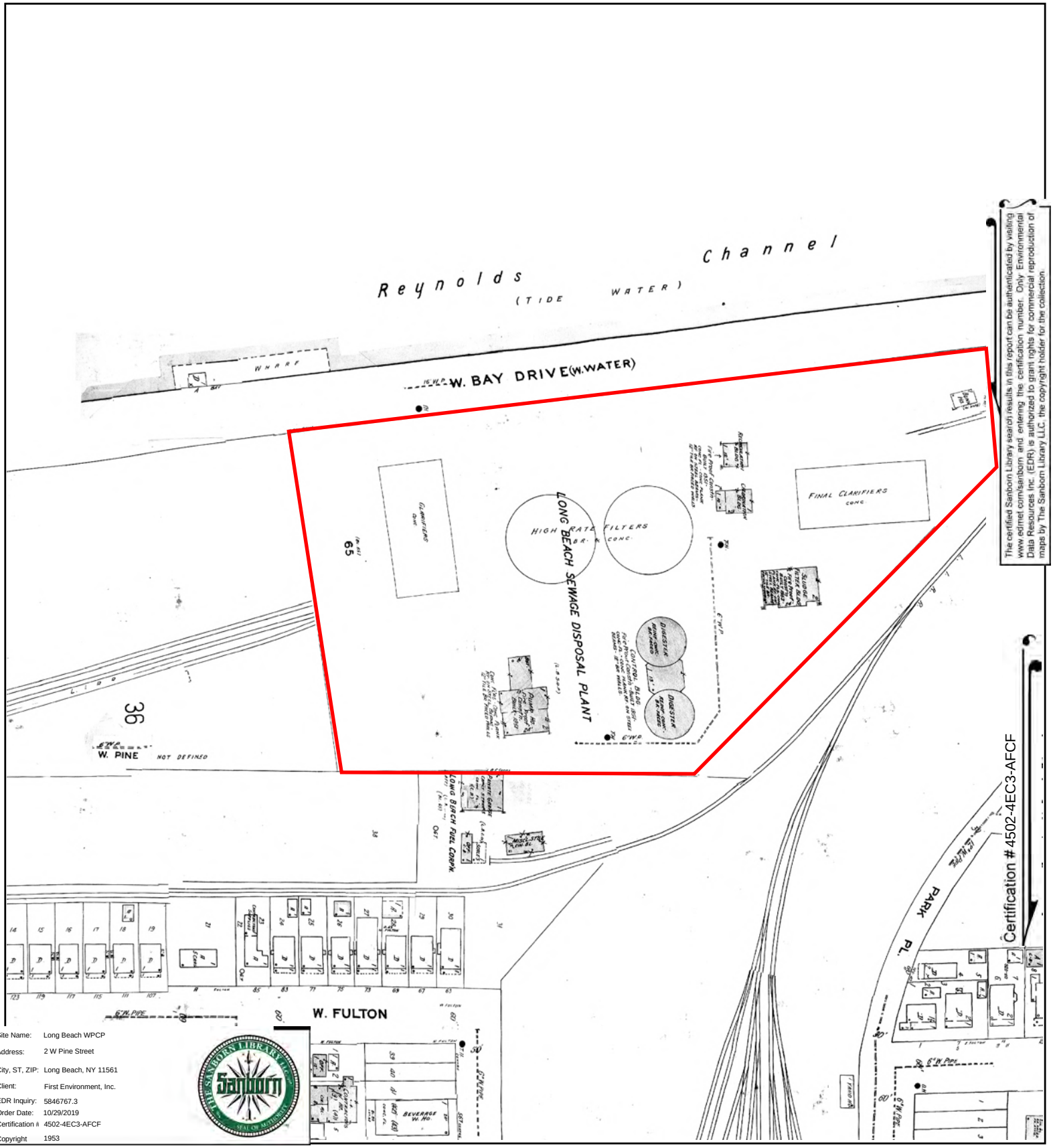
1953



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Certification #	4502-4EC3-AFCF
Copyright	1953

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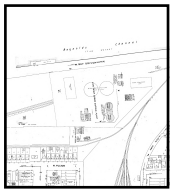

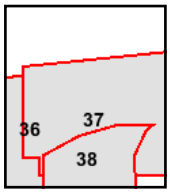

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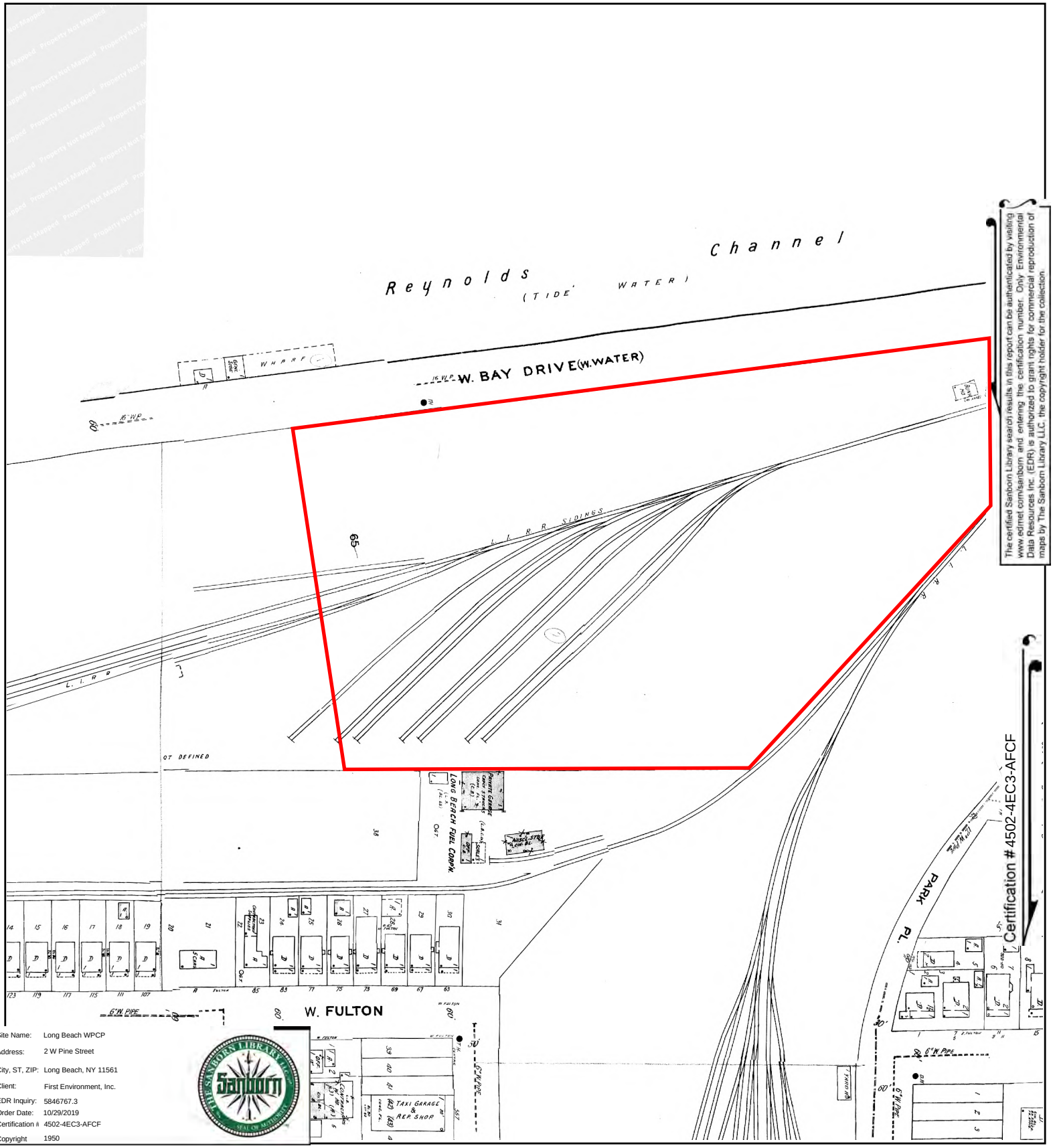
1950



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EDR Inquiry:	5846767.3
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Certification #	4502-4EC3-AFCF
Copyright	1950

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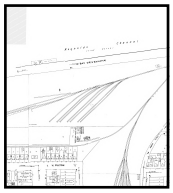

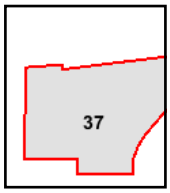

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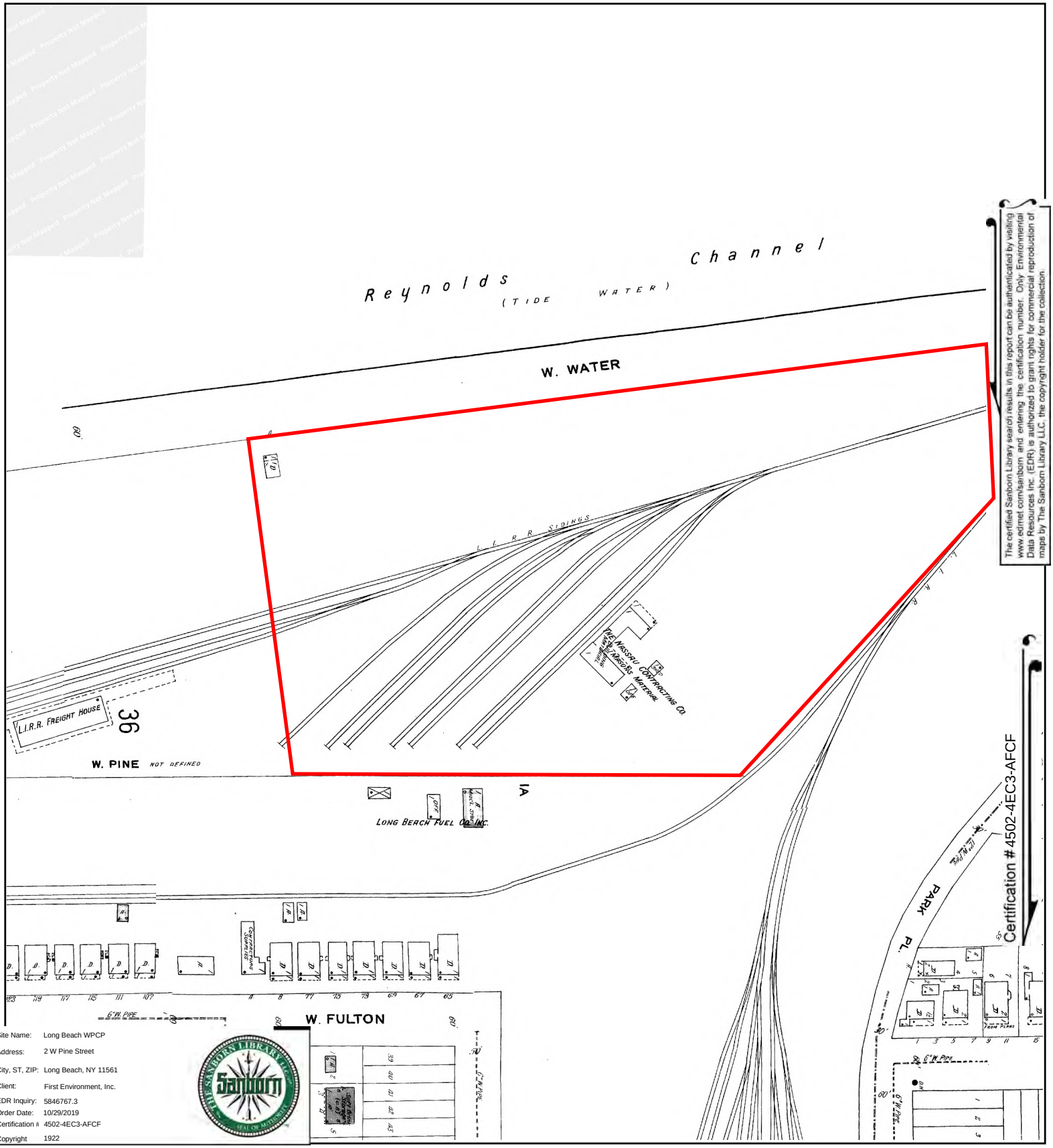
1922



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Order Date:	10/29/2019
Certification #	4502-4EC3-AFCF
Copyright	1922

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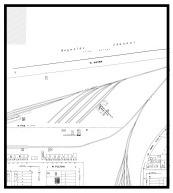

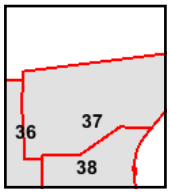

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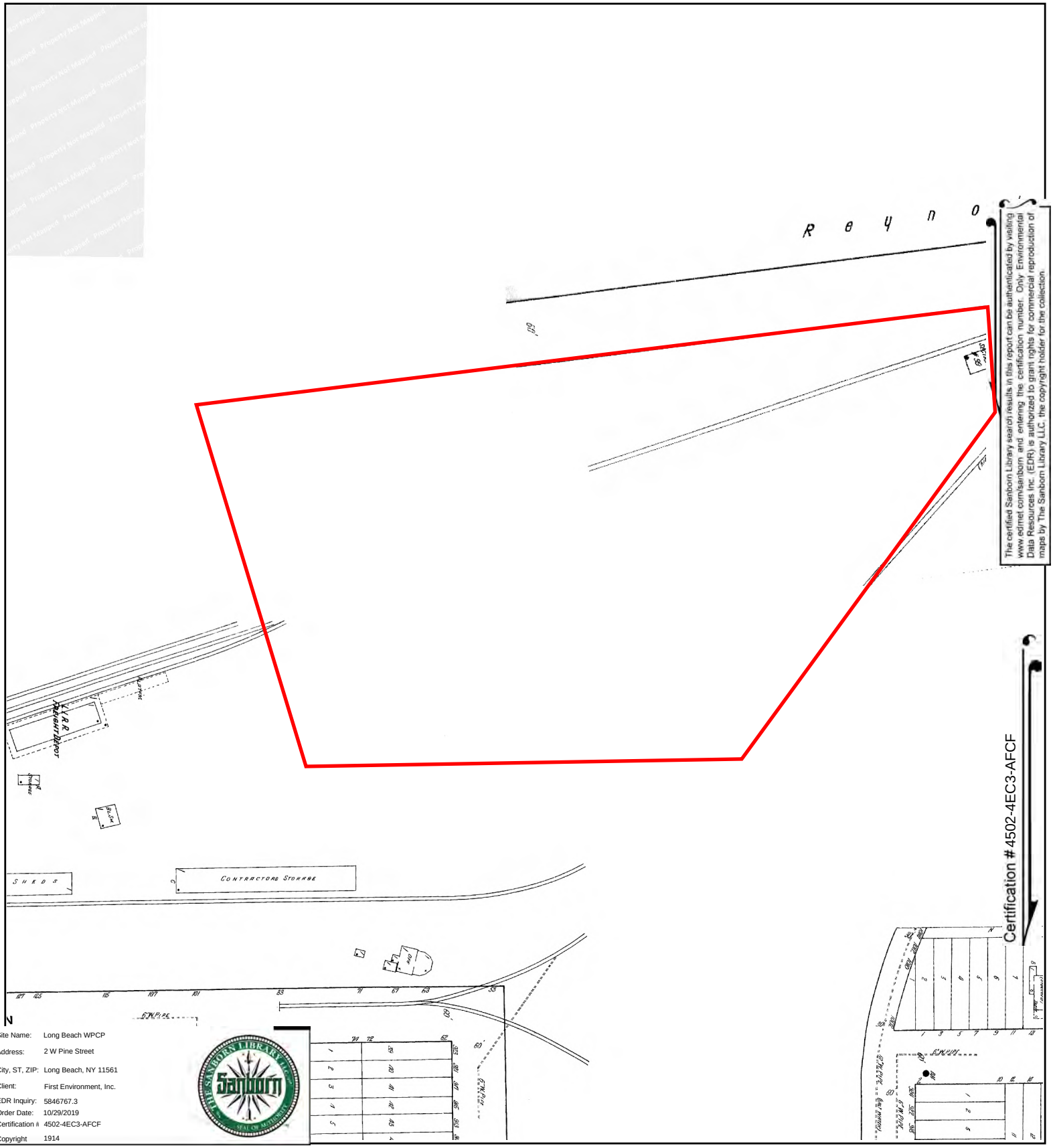
Certified Sanborn® Map

1914



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Certification #	4502-4EC3-AFCF
Copyright	1914

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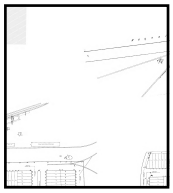

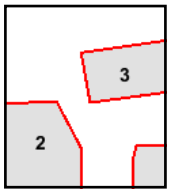

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N

Long Beach WPCP
2 W Pine Street
Long Beach, NY 11561

Inquiry Number: 5846767.5
November 01, 2019

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by infoUSA®

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☐	EDR Digital Archive
1995	☑	☐	EDR Digital Archive
1992	☑	☐	EDR Digital Archive
1987	☑	☐	Cole Criss-Cross Directory
1982	☑	☐	Cole Criss-Cross Directory
1977	☑	☐	Cole Criss-Cross Directory
1972	☑	☐	Cole Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

2 W Pine Street
Long Beach, NY 11561

Year	*CD Image*	*Source*
W PINE ST		
2014	pg A2	EDR Digital Archive
2010	pg A4	EDR Digital Archive
2005	pg A6	EDR Digital Archive
2000	pg A8	EDR Digital Archive
1995	pg A10	EDR Digital Archive
1992	pg A11	EDR Digital Archive
1987	pg A13	Cole Criss-Cross Directory
1982	pg A14	Cole Criss-Cross Directory
1977	pg A15	Cole Criss-Cross Directory
1972	pg A16	Cole Criss-Cross Directory

FINDINGS

CROSS STREETS

No Cross Streets Identified

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2014

209	PALAZZO, JAMES J
	RAW TALENT APPAREL INC
210	BERNARDINO, DEBORAH V
	DU WIN INC
214	OCCUPANT UNKNOWN,
217	OCCUPANT UNKNOWN,
220	DENNIS, RASHAWN
223	GEISLER, STEVEN M
226	KENNEDY, ROBERT P
227	OCCUPANT UNKNOWN,
230	OCCUPANT UNKNOWN,
233	ADDEO LANDSCAPING INC
	ADDEO, JAMES A
237	ZEIGLER, RUFUS
240	CORTESE REMODEL
	CORTESE, DAMIAN E
241	OCCUPANT UNKNOWN,
244	BELLA, JENNIFER A
245	COSTELLO, GEORGE W
248	POSADA, ALVARO P
252	COLLINS, JENNIFER L
255	MORGENROTH, BRUCE M
256	GIACOMA, J D
	WERNER, EDWARD E
260	GIUDICE, JOHN L
	LOGIUDICE, JOHN J
	WEISS, RANDI
264	TERRONE, JENNIFER
265	OCCUPANT UNKNOWN,
270	RIZZO, ROBERT
275	MISTRETTA, PAUL C
285	MEYERS, DIANE
310	CHIN, HOWARD
316	BAER, DAVID
	CHOOSE SOUND INC
	HARNICK, SAMANTHA B
	JULIANO, PHIL
	PRESTIA, BILL
	VELIZ, BRYAN
319	BANSCHICK, STUART R
320	REAP, EDWARD J
323	OCCUPANT UNKNOWN,
324	OCCUPANT UNKNOWN,
327	ZIPKIN, JEANNETTE
330	ALEXANDER, MARL
	GOLUB, CRAIG L
331	HANGLEY, JAMES P
335	CROSBY, JASON
338	PICUCCI, FRANK V
342	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2014 (Cont'd)

345	BOCHNER, SCOTT S
350	KUDLEK, ROBERT P
356	ROSNER, HOWARD J
365	FEBRIZIO, NICHOLAS G
366	GAYDAR, WILLIAM R
378	HAMLET, LUKE G
380	VISCECCHIA, RICHARD E

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2010

210	BERNARDINO, BARBARA D
	DU WIN INC
214	BROWNE, GEORGE J
215	DARCMIND INC
	TAGLIAGAGAMBE, RICHARD
217	OCCUPANT UNKNOWN,
220	SIMICIC, ALEX
223	COVEL MUSIC INC
	GEISLER, STEVEN M
226	OCCUPANT UNKNOWN,
227	BROWN, DAVID
230	DUNBAR, CURTIS
233	ADDEO LANDSCAPING INC
	LARUBBIO, DAVID P
236	RESOPHONIC RESURRECTIONS
	SHAYNE, ANDREW
237	ODOM, JACQUETTA V
240	CORTESE REMODEL
	CORTESE, DAMIAN E
241	SPELLMAN, LORI A
245	COSTELLO, GEORGE W
	FSG TRADING
248	POSADA, ALVARO P
252	OCCUPANT UNKNOWN,
255	MORGENROTH, BRUCE M
	PYRAMID ADVERTISING CORP
	VITRUVIAN HSPTLITY HLDINGS INC
256	DELLA-GIACOMA, J
	SHMUL, MAOR M
260	AKINS, OSCAR C
	LO, GIUDICE J
	LOGIUDICE, JOHN J
	WEISS, RANDI
264	TERRONE, JENNIFER
265	OCCUPANT UNKNOWN,
270	RIZZO, ROBERT
275	MISTRETTA, PAUL C
285	MEYERS, DIANE
310	OCCUPANT UNKNOWN,
316	BAER, DAVID
	CHOOSE SOUND INC
	HL FORCE
	PRESTIA, BILL
	ROCK, STACI
	VELIZ, BRYAN
319	BANSCHICK, STUART R
320	REAP, DARLENE
323	JOHNSON MICHAEL
	JOHNSON, MICHAEL A
324	BUCKLEY, KATHY M

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2010 (Cont'd)

327	ZINGER CORP
	ZIPKIN, GERALD L
330	ALEXANDER, MARL
	FUNK, MICHAEL J
331	HANGLEY, JAMES P
335	KOTCHER, RAYMOND L
342	CLARKE, PHILIP S
345	BOCHNER, SCOTT S
350	OCCUPANT UNKNOWN,
356	ROSNER, HOWARD J
365	FEBRIZIO, NICHOLAS G
366	GAYDAR, WILLIAM R
378	GIURICICH, LE D
380	VISCECCHIA, RICHARD E

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2005

209	LABRIE, KATHERINE
210	BERNARDINO BARBARA
	BERNARDINO, BARBARA D
	DU WIN INC
214	BROWNE, FRANCES P
215	TAGLIAGAMBE, RICHARD
217	DUFFY, JENNIFER N
220	SIMICIC, ALEX
223	GEISLER, STEVEN M
226	OCCUPANT UNKNOWN,
227	BURNS, MICHAEL T
230	DUNBAR, CURTIS
233	MINTZ, SEENA L
236	SHAYNE, ANDREW K
237	ODOM, JACQUETTA V
240	PASCULLO, FILOMENO F
241	EVERGAS INC
	SPELLMAN, LORI A
244	BELLA, JOHN J
245	COSTELLO, GEORGE W
	FSG TRADING
248	PAGNONI, JOSEPH A
252	OCCUPANT UNKNOWN,
256	HARROW, DAVID
	OBRIEN, DENNIS
	REINERSTSEN, JOSEPH P
260	GUIDICE, JOHN
	LOGIUDICE, JOHN
	WEISS, RANDI
264	EDELMAN, MARTIN
265	OCCUPANT UNKNOWN,
270	OCONNOR, JAMES T
275	CIPOLLINI, PRISCILLA A
285	MEYERS, DIANE
310	BOHIN, MAE E
316	ALTMAN, J
	SHORTINO, ANN L
319	MELLUSO, BARBARA A
320	REAP, ANNE M
323	JOHNSON, MICHAEL A
324	BUCKLEY, KATHLEEN M
327	ZINGER CORP
	ZIPKIN, GERALD L
330	ALEXANDER, MELVA K
331	HANGLEY, JAMES P
335	KOTCHER, RAYMOND L
338	LEAGUE, GEORGENE M
342	CLARKE, PHILIP S
345	BOCHNER, SCOTT S
350	KEMPF, JOSEPH H

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2005 (Cont'd)

356	ROSNER, HOWARD J
365	FEBRIZIO, NICHOLAS G
366	KILDUFF, JUSTIN
	THIS SONGS FOR YOU
378	GLENDAY, LUKE
380	VISCECCHIA, RICHARD E

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2000

209	CLAUDIO, HERBERT
210	BERNARDINO BARBARA
	BERNARDINO, BARBARA
214	BROWNE, GEORGE
215	TAGLIAGAMBE, RICHARD
217	DUFFY, J N
	HUSEMAN, JOSEPH
220	SIMICIC, ALEX
223	SOMRA, R
226	KENNEDY, ROBERT
230	DUNBAR, CURTIS
233	IDLER, JANICE
	MINTZ, SEENA
236	SHAYNE, ANDREW
240	PASCULLO, FANNIE
241	OCCUPANT UNKNOWN,
244	BELLA, JOHN J
	CZYZAK, JEAN
248	PAGNONI, JOSEPH
252	OCCUPANT UNKNOWN,
256	BLACK, STEPHEN
	KAYE, J
260	LO, JOHN
	WERNER, EDWARD
264	EDELMAN, MARTIN
	FINK, KELLIE
	TERRANOVA, K
270	GRABER, SHERRY
	RIZZO, ROBERT
310	BOHIN, MAE C
316	FLAHERTY, K
	KUTLER, MARLENE
319	ABELES, STANLEY H
320	REAP, EDWARD
323	JOHNSON, J
324	KRIZOGORSKY, IGOR
327	KEENEY, LISA
	LONG BEACH BOAT SALES INC
	SEAFARERS INVESTING CO
330	ALEXANDER, MELVA
	GOLUB, MATTHEW
331	HANGLEY, JAMES
335	KOTCHER, RAYMOND
338	LEAGUE, G
342	CLARKE, PHILIP
345	FERNANDEZ, CRUZ
350	KEMPF, JOSEPH
356	ROSNER, HOWARD
366	SALKOVSKY, EUGENE
378	HAMLET, C L

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 2000 (Cont'd)

380 WALSH, DONALD

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 1995

100	SOUTH SHORE FOODS INC
140	CHARLES GRAY FOODS INC
	LEONARD REMO CATERING
160	COMM SELL
209	VIDEO TREASURES PRODUCTIONS
327	SEAFARERS INVESTING CO
338	BALDELLI ELECTRIC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 1992

100	SOUTH SHORE FOODS INC
140	CHARLES GRAY FOODS INC
150	CORPORATE I D INC
209	CLAUDIO, HERBERT
	VIDEO TREASURES PRODUCTIONS
210	BERNADINO, DANIEL
	BERNARDINO, BARBARA
	BERNARDINO, DEBORAH
214	BROWNE, GEORGE
215	TAGLIAGAMBE, RICHARD
217	HUSEMAN, JOSEPH III C
220	SIMICIC, ALEX
223	SOMRA, RAJENIE
226	BERGER, A
230	RIOS, DE FILIA
236	MCFARLAN, ANNE
	SHAYNE, ANDREW
237	MALONEY, MICHAEL D
241	CAMERON, F
	CAMERON, WILLIAM
244	BELLA, JOHN J
	DURSO, MIKE
248	PAGNONI, JOSEPH
	SANDAVAL, CARLOS G
252	COLLINS, LISA
256	BLACK, STEPHEN
	SACHS, E
260	LOGIUDICE, JOHN
264	EDELMAN, MARTIN
	TERRANOVA, K
270	FAGAN, D
	FERRARA, DANIEL J
	RIZZO, ROBERT
310	BOHIN, MAE C
316	MC ELROY, ROBERT
319	ABELES, STANLEY H
320	HANBELMAN, GUSSIE
	RAMELKAMP, A
323	BURKHALTER, A C
324	BERNSTEIN, I B
	DUIGNAN, PETER
327	SEAFARERS INVESTING CO
330	ALEXANDER, A HAROLD
	EQUIPMENT CLEARING HOUSE
335	KOTCHER, RAYMOND & BETSY
338	BALDELLI, FRANK
342	CLARKE, PHILIP
350	KEMPF, D
	KEMPF, JOSEPH
356	CHIARELLO, AUGUSTUS

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

W PINE ST 1992 (Cont'd)

356	LANDIS, L
366	ZARECOR, KENNETH & LORRAINE
378	KLEIN, HOWARD
380	WALSH, DONALD

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

W PINE ST 1987

226 Richard Varela 66 432-8293
271 305 . . . . . NP
309 Virginia Farry 83 889-7876
S Nicholson 85 432-2724
311 G Mitchell 80 432-1394
312 F F Filardo 78 889-3375
315 Mark Albert 76 889-6606
316 N Bard 76 432-2705
319 Barbara Lohrer 84 889-1016
Thomas Lohrer 85 889-0979
320 John J Levesque 64 432-1398
323 Irving Gips 85 432-9082
Tony Higgins . . . . . H 889-0577
326 K Fry 80 889-1852
327 John F Riechart . . . . H 889-7877
329 John Esposito . . . . . H 432-0753
Raymond Mitchell . . . 84 431-9044
331 . . . . . NP
332 Robert Kelsey . . . . . - 889-3036
336 Seymour Goldstein . . . 61 431-3304
337 . . . . . NP
340 Joseph Trachman 84 431-9109
341 John Celli 80 889-8229
347 Herbert A Grondahl . . . 82 431-7363
350 Lev Feldman . . . . . H 889-7019
354 Morris Greenberg 82 889-0724
Morris Massey 65 432-8775
358 Joseph Fuld 77 431-3392
359 . . . . . NP
364 Oscar Miller 70 431-3553
365 369 . . . . . NP
370 Hilda Seewald 85 431-6567
375 David Fishman . . . . . H 431-2539
David Fishman . . . . . H 431-2581
E Leeds . . . . . - 431-2702
411 John Belvedere 79 431-4585
414 L Leder 67 431-6583
415 Tom C Jewell . . . . . H 889-0977
418 P Cipollini . . . . . - 889-2451
Nancy Lee . . . . . H 889-4471
419 Mike Poplinger 62 432-0903
Mike Poplinger 62 432-4791
Helen Rosenberg 889-4121
Murray Rosenberg . . . 66 431-5375
420 David C Winter 68 432-7650
427 A P Colson 74 889-6722
428 Joseph Libutti 74 432-8632
432 James Smyth 78 431-8974
433 Harry Mermelstein . . . 67 889-8797
437 N Paul Barad 65 431-3082
441 A Schwartz 76 889-1306
442 . . . . . NP
445 Eugene Morrow 84 431-1096
454 . . . . . NP
457 Bruce Bergman 78 889-4559
458★ Dr A I Edelman 77 432-0651
459 Kathleen Hayes 72 889-1433
464 Michael Libutti 65 432-3071
Sante Orlando 64 432-3071
Henry Rainone 69 432-3071
465 J Cherlin 85 431-8795
469 Timothy Klein 70 889-7651
470 . . . . . NP
475 C Gold 77 432-7265
David Gold 77 432-7887
505 511 517 . . . . . NP
520 Norman Spielberg . . . 67 432-3178
524 Irving Brown 66 432-1293
526 Edward Walpole 70 431-7336
529 Thomas Stebe 84 432-0873
530 Mrs Ethel Fass 70 432-8984
Jack Greenfield 70 432-3578
531 . . . . . NP
535 D Lantz 85 431-0590
D Siegel 78 431-4677
John D Ziegler 77 432-3077
536 . . . . . NP
539 George Buchheit . . . . - 889-6496
Patti Michelman . . . . . H 889-6496
T OConnor 84 432-3970
547 Sam Tharos 83 889-0935
550 Frank Allyn 79 889-0131
Sidney Farber 83 432-5241
Meryl R Kalem 81 431-2668
554 . . . . . NP
557 William Bradley 83 889-2942
561 Herbert W Brody 80 889-8435
Michael Brody 84 432-1618
Miriam Lash 84 432-0639
565 Joel Crystal 72 431-9411
Christopher Porter . . . 85 431-2375
566 Mark Kassof 84 889-2833
Brian J Lederman . . . . H 889-2888
570 Ihor Nykolak 83 889-1528
580 D S Samuels 84 432-7252
Robert L Samuels . . . 74 432-6798
S Samuels . . . . . H 432-4121
Stanley M Samuels . . . 71 432-6751
621 M J Delehanty 81 431-8242
629 Leonard Little 69 431-0430
661 Bernard P Joyce . . . . H 889-3472
665 . . . . . NP
698 Juan Irazarry 84 431-7416
733 Gregory Grimard . . . . H 431-5037
Mrs Anne Snow 65 431-7897
★ W Snow&Sns Plbg&Ht . 85 431-5775
738 . . . . . NP
NO #★ Pine Town Houses . . 73 432-8429
248 RESIDENCE 4 BUSINESS

● PINE ST W 11561

Long Beach PO
1- 599 CT4165 $E..O 5
600- END CT4164 $E..O 4
150★ Arctic Insltd Clth 431-4630
★ Donde Designs 84 889-8300
209 Herbert Claudio 76 432-3634
★ Video Treasure Prd . . - 432-4455
210 Gil Bernardino 75 431-9880
214 George Browne 85 431-7074
215 Richd Tagliagambe . . . 76 889-1813
217 . . . . . NP
220 Cleofio Gonzales . . . . H 432-1407
Ricardo Vargas 83 889-0695
223 . . . . . NP
226 John J Sullivan 69 431-1887
227 . . . . . NP
230 M Martinez 85 432-3843
D Rodriguez 84 431-3195
233 Martha Arroyo 82 432-1419
A Bergerman 70 431-0156
236 D Giancontiere 85 431-8317
Andrew Shayne 84 431-0122
Andrew Shayne 84 432-9691
237 Morris Speinson 67 432-7173
240★ Larry Pascullo 431-4205
241 John D Cameron 62 432-7952
244 John J Bella 64 432-0635
John Bella Jr . . . . . H 889-1853
248 Joseph Pagnoni 75 889-8503
Lourdes Pagnoni 75 889-0259
252 R Tragno . . . . . - 432-8584
256 F Hopkins 84 431-9164
John Milazzo 84 431-4815
260 Gina Logiudice . . . . . H 889-0862
John Logiudice 75 431-3370
R Logiudice . . . . . H 431-7348
Jerry Pilc . . . . . - 431-7508
264 Martin Edelman 81 889-2481
K Schornstein 85 432-1743
270 Dominick Digiorgio . . . 74 889-2848
Robert Rizzo 71 431-9030
310 Mae C Bohin 74 431-5353
316 Roger J Young 76 432-6467
319 Stanley H Abeles 67 432-8361
320 Denis Aupied 85 889-4266
Gussie Hanbelman . . . 66 432-3915
A Ramelkamp 83 431-2350
323 Jack Becker 68 432-1747
Jack Becker 74 432-6363
324 I B Bernstein 64 431-1498
327 . . . . . NP
330 A H Alexander 68 431-4707
John Thomas 85 889-9538
331 Margie Leinwand 62 432-5352
335 Raymond Kotcher . . . . - 889-8231
338★ Baldelli Electric 80 889-9618
Frank Baldelli 78 431-5080
340 . . . . . NP
342 Antonio Tricarico . . . 65 432-3836
350 . . . . . NP
356 Augustus Chiarello . . . 74 431-5095
Stephen Tighe . . . . . H 889-6643
366 William Eisner . . . . . - 431-7003
378 Michael Grodzinski . . . 80 431-1654
380 Ann Walsh 84 431-0896
Donald Walsh 77 431-8411
NO #★ South Shore Foods . . 432-7141
58 RESIDENCE 6 BUSINESS

● PINE ST 11565

Malverne PO
1- END CT4101 $B..K 5
1 L Dalessandro 62 599-4903
6 Charles J Safarik 64 599-8362
15 A Vonhenning 83 593-5218
20 August J Benkert . . . 74 593-4375
4 RESIDENCE

● PINE ST E 11758

Massapequa PO
1- 99 CT5220 $E..M13
12 Eugene Pepe . . . . . H 795-6970
20 Donald W Geue 72 795-4378
2 RESIDENCE

● PINE ST 11762

Massapequa Park PO
1- END CT5216.01 $D..L12
116 Brian P Hussey 72 799-1357
121 . . . . . NP
124 Franco Dattero 82 798-6410
129 T Olsson 81 798-4951
132 Elmer Weggeland 76 799-6109
133 . . . . . NP
139 Percy A Harney 64 798-2584
140 Thomas Heinen 72 541-6248
147 Howard W Bruhnke . . . 63 795-7333
150 K Hughes 84 795-7208
Roy Hughes 77 541-3517
153 Eugene Wager 68 798-3009
159 C Schaefer Jr 67 798-1108
160 Richard K Hanrahan . . 68 798-5503
169 Raymond Birney 76 541-2761
206 Joseph Gordon 72 798-8529
211 . . . . . NP
214 Edward C Destasio . . . 64 798-7024
217 Paul Scheiner 78 798-6950
220 . . . . . NP
223 Robert F Ponton 63 541-5359
229 Charles E Gorham . . . 68 798-0958
235 Lawrence Bing 85 795-6957
236 S Evans 81 798-2153
243 Ken Chew 79 795-5504
248 249 . . . . . NP
252 M T Duffy . . . . . - 798-6203
254 P Labruyere 84 799-9884
255 . . . . . NP
260 Walter Otten 69 799-0955
261 B Dalvano 74 798-0883
D Dalvano 74 798-3967
267 L Prasinos . . . . . H 798-0618
Mark Prasinos 68 541-1331
35 RESIDENCE

● PINE ST 11040

New Hyde Park PO
1- END CT3031.02 $B..G 6
121 Georgia Barbalios . . . . H 741-8637
124 Edward Flaherty 75 746-0968
128 135 . . . . . NP
136 Mrs A M Wittenberg . . 746-0651
R C Wittenberg 73 248-2589
139 Martin Graber 56 741-6632
140 Henry Wang 79 746-3093
144 Louisa Marrero 78 746-5946
148 Frank R Jurks 60 741-4654
J M Jurks 77 741-4654
151 Angel Tomaselli 742-8705
152 S Giarraputo 56 742-1704
156 Kenneth Adamo 85 746-0211
159 M L Martinolich 65 742-3890
160 . . . . . NP
163 Mike Cobb 85 747-8048
Jaime Restrepo 77 742-1846
164 . . . . . NP
167 George Y Nissan 74 747-5338
168 E Murphy 82 747-7229
171 N Derkazarian 66 742-2495
172 Maurice E Keating . . . 73 742-2895
175 Henrich Geffken 76 742-3522
176 . . . . . NP
179 Karl Herrmann 74 747-6072
180 Steve Karatzas 77 747-3309
184 Thomas Niczky 73 747-5726
187 Paul Lembo 74 742-0106
188 . . . . . NP
191 Peter Domini 66 742-0451
192 Stephen Plaener 84 248-2092
William Plaener 56 742-2331
195 George J Robelen . . . 66 742-3887

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Tract 83,84,85,Etc. — Year First Listed 1983,84,85,Etc #A48,Etc — Census Tract Wealth Rating CL18 — Map Location

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

W PINE ST 1982

PINE ST W 11561
Long Beach PO
1- 599 TZ4165 $E..A 3
600- END TZ4164 $E..A 3
119040
150★Anti-Cold Clothing 431-4630
★Arctic Insltd Clth 431-4630
★Heritage Manfctrng . . . . .¤ 889-6000
★M&F Furniture Co 432-9109
209 Herbert Claudio 76 432-3634
210 Gil Bernardino 75 431-9880
214 S Castro-Vallejo . . . . . .¤ 432-1227
215 Richd Tagliagambe 76 889-1813
217 D Nisvoccia 75 889-9859
Alfonso Tice 71 889-5371
220 223 . . . . . .NP
226 John J Sullivan 69 431-1887
227 . . . . . .NP
230 D Maugham 78 889-0699
233 A Bergerman 70 431-0156
Anthony Hernandez . . . . .¤ 889-2609
236 L Farsky 79 431-7514
Victoria McFadyen . . . . . .¤ 432-7394
237 Morris Speinson 67 432-7173
240★Larry Pascullo 431-4205
241 John D Cameron 62 432-7952
244 John J Bella 64 432-0635
248 Dino Pagnoni 75 431-6238
Joseph Pagnoni 75 889-8503
252 M Barbera 78 431-3721
256 S Abramowski 79 431-9166
260 John Loguidice 75 431-3370
James Ruppel . . . . . .¤ 431-8251
264 Martin Edelman . . . . . .¤ 889-2481
Martin Zafonte 79 432-2476
270 Dominick Digiorgio 74 889-2848
Robert Rizzo 71 431-9030
310 Mae C Bohin 74 431-5353
316 Anthony Milazzo 80 889-7144
Roger J Young 76 432-6467
319 Stanley Abeles 67 432-8361
320 Gussie Hanbelman 66 432-3915
323 Jack Becker 68 432-1747
Jack Becker 74 432-6363
324 I B Bernstein 64 431-1498
A Czeczuga 80 431-2688
327 . . . . . .NP
330 A H Alexander 431-4707
Eugene F Hession 80 889-2762
331 Margie Leinwand 62 432-5352
338★Baldelli Electric 889-9618
Frank Baldelli 78 431-5080
340 . . . . . .NP
342 Antonio Tricarico 65 432-3836
350 Robert Bauer . . . . . .¤ 431-1851
356 Augustus Chiarello 74 431-5095
366 Vicki Laufer . . . . . .¤ 889-5090
G R Weisenberg . . . . . .¤ 432-8431
H Weinsenberg 70 889-4089
378 Michael Grodzinski 80 431-1654
380 Donald Walsh 77 431-8411
733★William Snow&Son 431-5775
No #★South Shore Foods 432-7141
51 Residence 8 Business

PINE ST 11565
Malverne PO
1- END TZ4101 $B..D 3
119050
1 L Dalessandro 62 599-4903
6 Charles J Safarik 599-8362
15 Anthony Senci 74 599-2158
20 August J Benkert 74 593-4375
4 Residence

PINE ST 11762

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

W PINE ST 1977

PINE ST W 11561
Long Beach PO

	1 - 599 TZ 4165	**$E..A 3**
	600 - END TZ 4164	**$E..A 3**
150	**★ Anti-Cold Clothing**	**431-4630**
	★ Arctic Insltd Clth	**431-4630**
	★ Thetatrol Inc	**889-4078**
209	Herbert Claudio	□ 432-3634
210	Gil Bernardino	5 431-9880
214	E Matthews	431-8294
215	Richd Tagliagambe	□ 889-1813
217	D Nisvoccia	5 889-9859
	Alfonso Tice	1 889-5371
220	Alex C Lamoureux	432-7764
223		NP
226	John J Sullivan	9 GE1-1887
227		NP
230	Michael McCabe	4 889-9291
	Aldo A Poletti	– 889-0074
233	A Bergerman	0 GE1-0156
	Frank Bergerman	432-1847
236		NP
237	Morris Speinson	7 GE2-7173
240	**★ Larry Pascullo**	**GE1-4205**
241	John D Cameron	GE2-7952
244	John J Bella	432-0635
248	Dino Pagnoni	5 431-6238
	Joseph Pagnoni	5 889-8503
252		NP
256	Jay C Kelly	5 889-9537
260	John Loguidice	5 889-6336
264	J Schornstein	– 431-5062
	G Sullivan	□ 889-5614
270	Dominick Digiorgio	4 889-2848
	Robert Rizzo Jr	□ 431-5532
310	Mae C Bohin	4 431-5353
316	Charles Henry	□ 432-6467
	H Moser	4 889-3485
	Roger J Young	□ 432-6467
319	Stanley Abeles	7 432-8361
320	Carl Brier	8 889-9891
	D Franks	□ 889-3549
	Gussie Hanbelman	432-3915
323	Jack Becker	8 432-1747
	Jack Becker	4 432-6363
324	I B Bernstein	GE1-1498
	Mrs Z Dornfield	432-4143
327	Milton H Jacoby	GE2-7023
330	A H Alexander	GE1-4707
	M Lastra	5 432-7187
331	Margie Leinwand	432-5352
338	S B Firestone	– 431-8763
340	Kenneth Esrick	– 432-7689
342	Antonio Tricarico	GE2-3836
350	Robert M Scharf	5 432-2920
	Ralph Weiner	9 432-0861
356	Augustus Chiarello	4 431-5095
	Joseph Serrano	□ 432-1084
366	J Laufer	□ 432-0828
	H Weinsenberg	0 889-4089
378	**★ Substandard Life**	**431-2440**
	Saul Sutel	2 431-6616
380	E Klersfeld	2 889-2476
	54 RESIDENCE	*5 BUSINESS*

PINE ST 11565
Malverne PO

	1 - END TZ 4101	**$B..D 3**
1	L Dalessandro	LY9-4903
6	Charles J Safarik	LY9-8362
15	Louis Senci	4 LY9-2158
20	August J Benkert	4 LY3-4375
	4 RESIDENCE	

PINE ST 11762
Massapequa Park PO

Target Street	Cross Street	Source
✓	-	Cole Criss-Cross Directory

W PINE ST 1972

```
      1ST RESIDENCE          2 BUSINESS

      PINE ST W                    11561
..................................
      LONG BEACH PO
...     1-   599 T 4165     $D..A 3
...   600-   END T 4164     $E..A 3
  150*ANTI-COLD CLOTHING   4314630
      *ARCTIC INSLTD CLTH  4314630
      *L H COHEN UMBRLS    4320014
      *IDEAL FASTENER      4323400
  209 HELEN LIGHTSTONE     8898889
      I H LIGHTSTONE       GE13776
  210 BARBARA DUBOW        GE14087
      ISAAC DUBOW        2 4311045
  214 E MATTHEWS         5 4318294
  217 ALFONSO TICE        -8895371
  220 ALEX C LAMOUREUX     4323224
  223 MAXWELL FEUER        GE26523
      ARNOLD PFINGST       GE26907
      EDNA RAMIREZ        -4322351
  226 JOHN J SULLIVAN    9 GE11887
  227                  NP
  230 MARY MCCABE        3 8899291
      JAMES T SNOW       9 4316732
  233 A BERGERMAN        0 GE10156
      FRANK BERGERMAN      4321847
  236 ADOLPH A SWIECA      GE27055
  237 MORRIS SPEINSON    7 GE27173
  240*LARRY PASCULLO       GE14205
  241 JOHN D CAMERON     2 GE27952
  244 JOHN J BELLA       4 4320635
  310 TED WILSON           GE26801
  316 LOUIS COHEN        9 8891081
      R PHILLIPS         9 8891080
      ROBERTA PHILLIPS     8891080
      SIDNEY SCHWARTZ    8 4325537
  319 STANLEY ABELES     7 4328361
  320 CARL BRIER         8 8899891
  323 JACK BECKER        8 4321747
      SUSAN BECKER         4326363
  324 I B BERNSTEIN      4 GE11498
      MRS Z DORNFIELD    6 4324143
  327 MILTON H JACOBY      GE27023
  330 A H ALEXANDER        GE14707
  331 MARGIE LEINWAND    2 4325352
  338 SAMUEL WEISSMAN      GE13124
  340 JOSEPH BURKHART     ¤8898205
      MARK DORSHAY        ¤8890684
      WILLIAM LEE        0 4322491
      HERBERT PATTERSON -GE28939
      E RUSS               4325534
      G A SIPE           7 4325534
  342 ANTONIO TRICARICO5 GE23836
  350 DR M PRAISSMAN     0 4310067
      RALPH WEINER       9 4320861
  356 JOHN T GRACE       8 4310939
      ARON JEREMITSKY    8 4317881
      ARON JEREMITSKY      4317883
  366 H WEINSENBERG      0 8894089
  378 BRIAN CALHOUN        GE15176
  380 CINDY BELLER       0 4316933
      MAX BELLER           4328844
   51 RESIDENCE        5 BUSINESS

      PINE ST                      11565
..................................
      MALVERNE PO
...     1-   END T 4101     $A..D 3
    1 L CALESSANDRO      2 LY94903
    6*C J SAFARIK INS      LY98362
   15 J M FRISENDA       7 8872197
   20 MRS HELEN DORSEY 9 LY34375
    3 RESIDENCE        1 BUSINESS

      PINE ST                      11762
..................................
      MASSAPEQUA PARK PO
...     1-   END T 521601 $D..D 9
  116 T ZYLICK           3 PY94774
      THEODORE ZYLICK JR PY97769
  121 ROBERT J MCMAHON 7 PY97434
  124 FRANCO DATTERO     8 7982191
  129 JAMES G DUNN         5410562
  139 PERCY A HARNEY     4 PY82584
```

Long Beach WPCP

2 W Pine Street

Long Beach, NY 11561

Inquiry Number: 5846767.4

October 28, 2019

EDR Historical Topo Map Report

with QuadMatch™

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Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

10/28/19

Site Name:	Client Name:
Long Beach WPCP	First Environment, Inc.
2 W Pine Street	91 Fulton Street
Long Beach, NY 11561	Boonton, NJ 07005
EDR Inquiry # 5846767.4	Contact: Kenneth Farah

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Search Results:		*Coordinates:*	
P.O.#	NA	**Latitude:**	40.593024 40° 35' 35" North
Project:	Long Beach WPCP	**Longitude:**	-73.665774 -73° 39' 57" West
		UTM Zone:	Zone 18 North
		UTM X Meters:	612899.39
		UTM Y Meters:	4494435.88
		Elevation:	1.00' above sea level

Maps Provided:

2013	1897
1979	
1966	
1954	
1947	
1903	
1899	
1898	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2013 Source Sheets

Lawrence
2013
7.5-minute, 24000

1979 Source Sheets

Lawrence
1979
7.5-minute, 24000
Aerial Photo Revised 1977

1966 Source Sheets

Lawrence
1966
7.5-minute, 24000
Aerial Photo Revised 1941

1954 Source Sheets

Lawrence
1954
7.5-minute, 24000
Aerial Photo Revised 1941

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1947 Source Sheets

Lawrence
1947
7.5-minute, 24000
Aerial Photo Revised 1941

1903 Source Sheets

Hempstead
1903
15-minute, 62500

1899 Source Sheets

Hempstead
1899
15-minute, 62500

1898 Source Sheets

Hempstead
1898
15-minute, 62500

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1897 Source Sheets

Hempstead
1897
15-minute, 62500

Historical Topo Map

2013

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Lawrence, 2013, 7.5-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1979

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

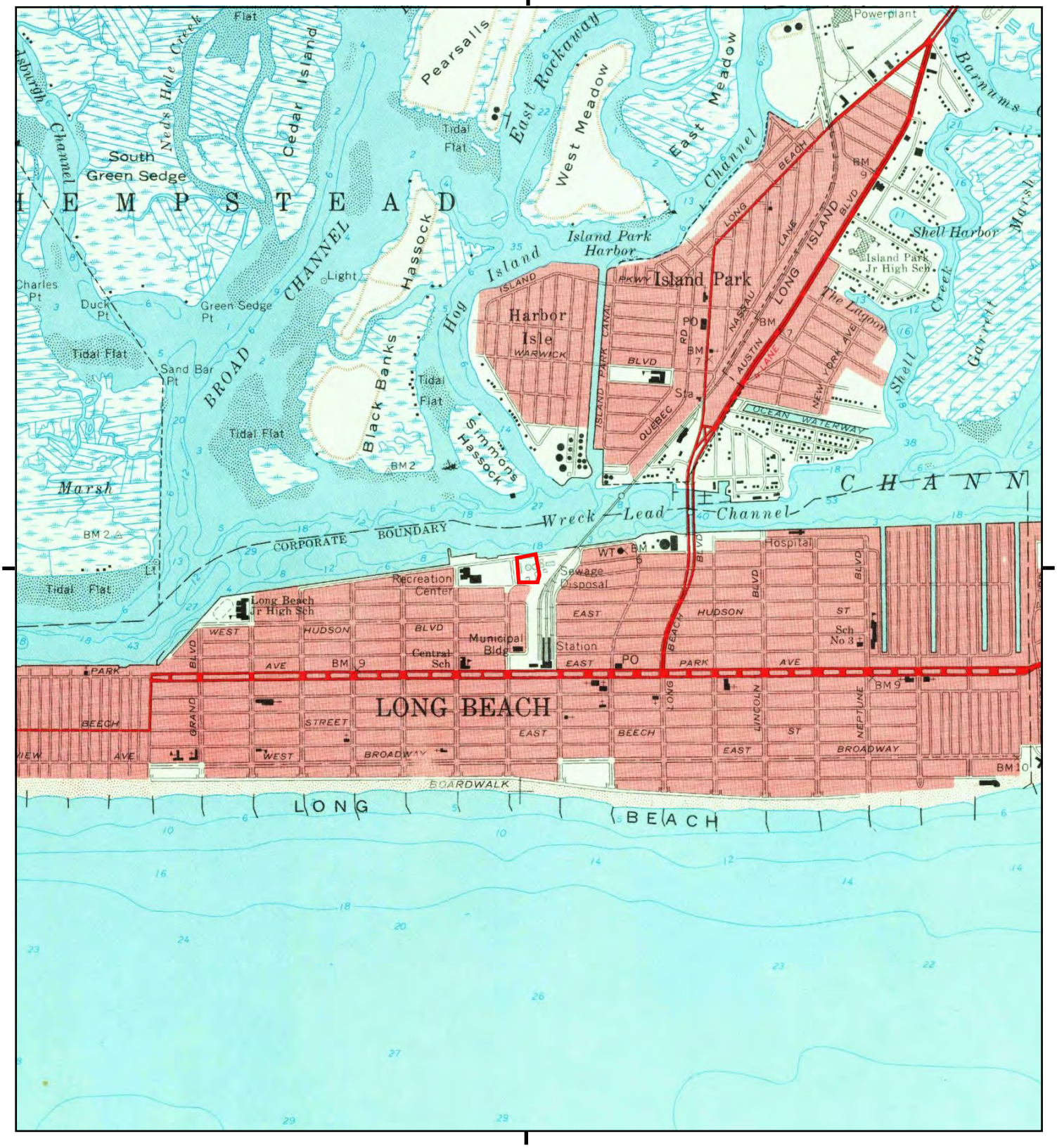
TP, Lawrence, 1979, 7.5-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1966



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NW N NE
W E
SW S SE

TP, Lawrence, 1966, 7.5-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1954

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

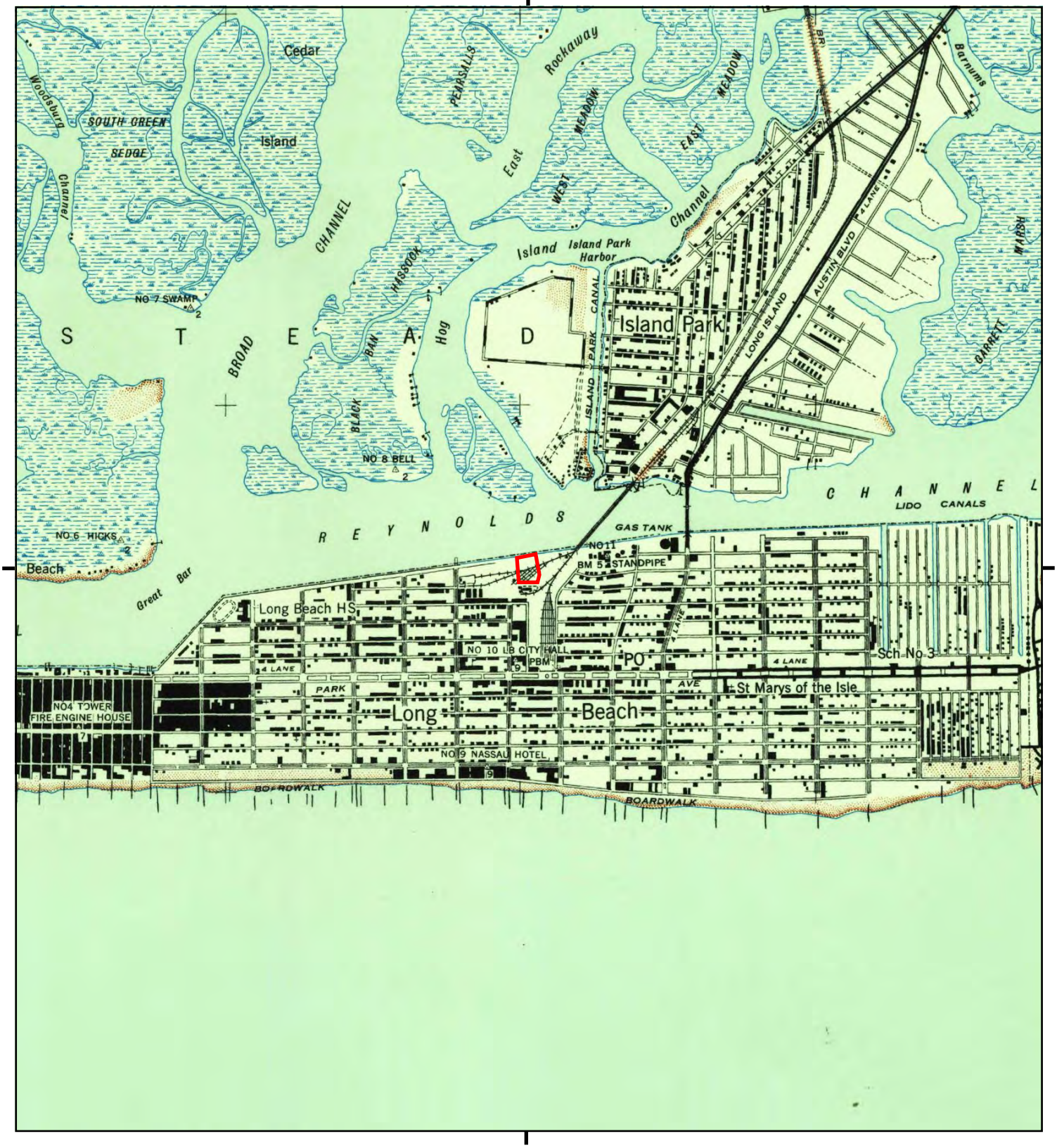
TP, Lawrence, 1954, 7.5-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1947



This report includes information from the following map sheet(s).

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W E
SW S SE

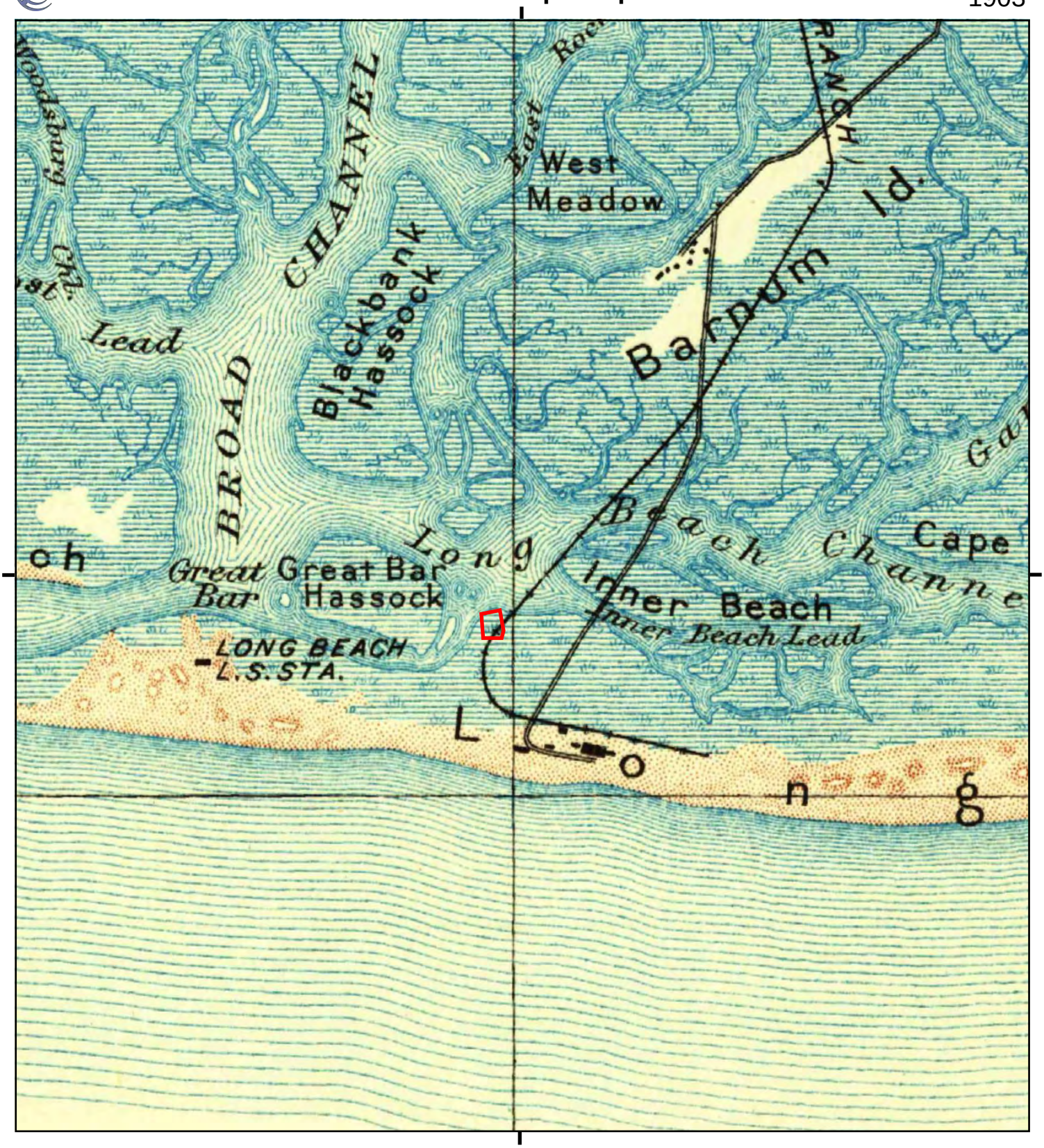
TP, Lawrence, 1947, 7.5-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1903



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W E
SW S SE

TP, Hempstead, 1903, 15-minute

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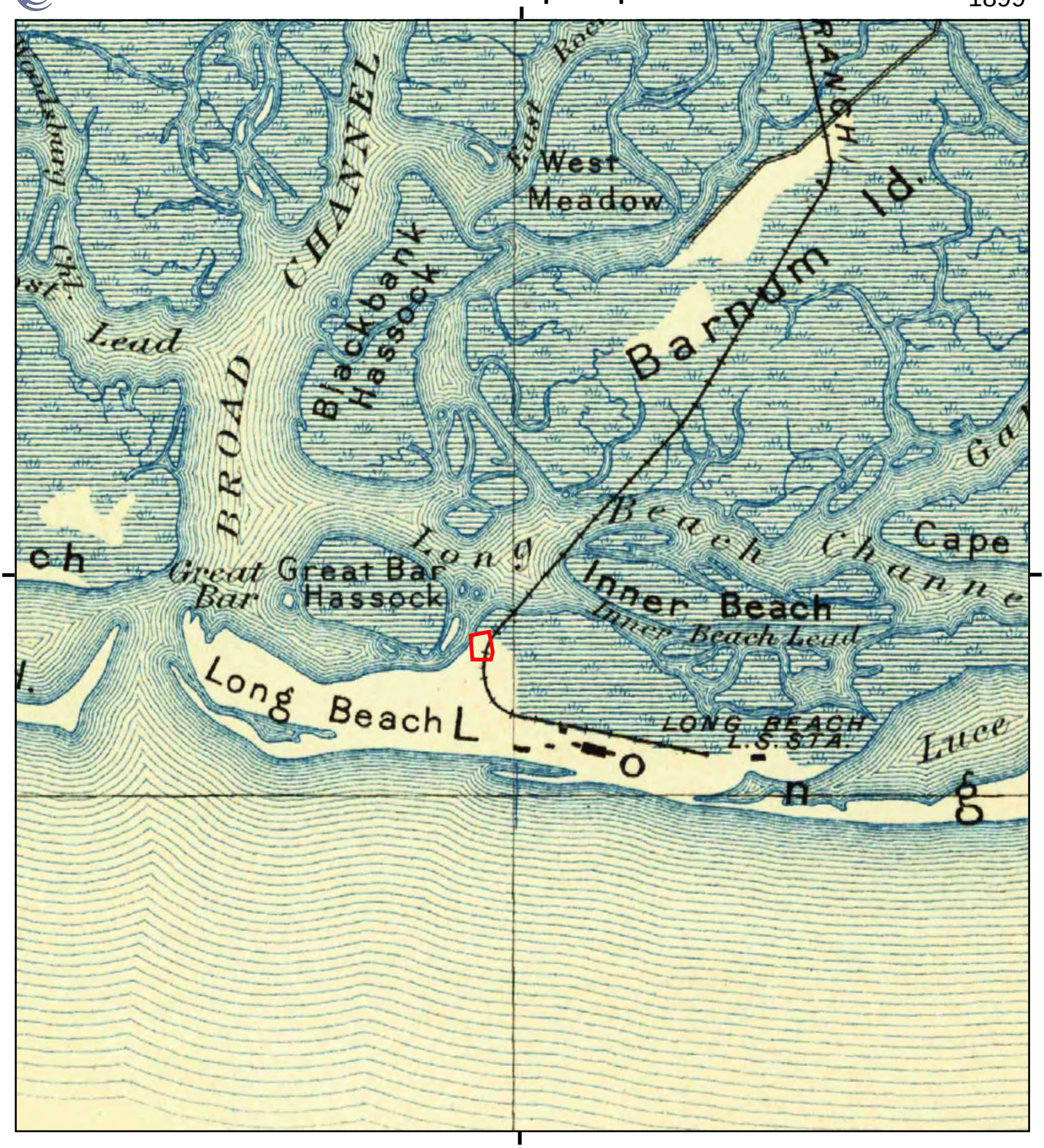
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1899



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NW N NE
W E
SW S SE

TP, Hempstead, 1899, 15-minute

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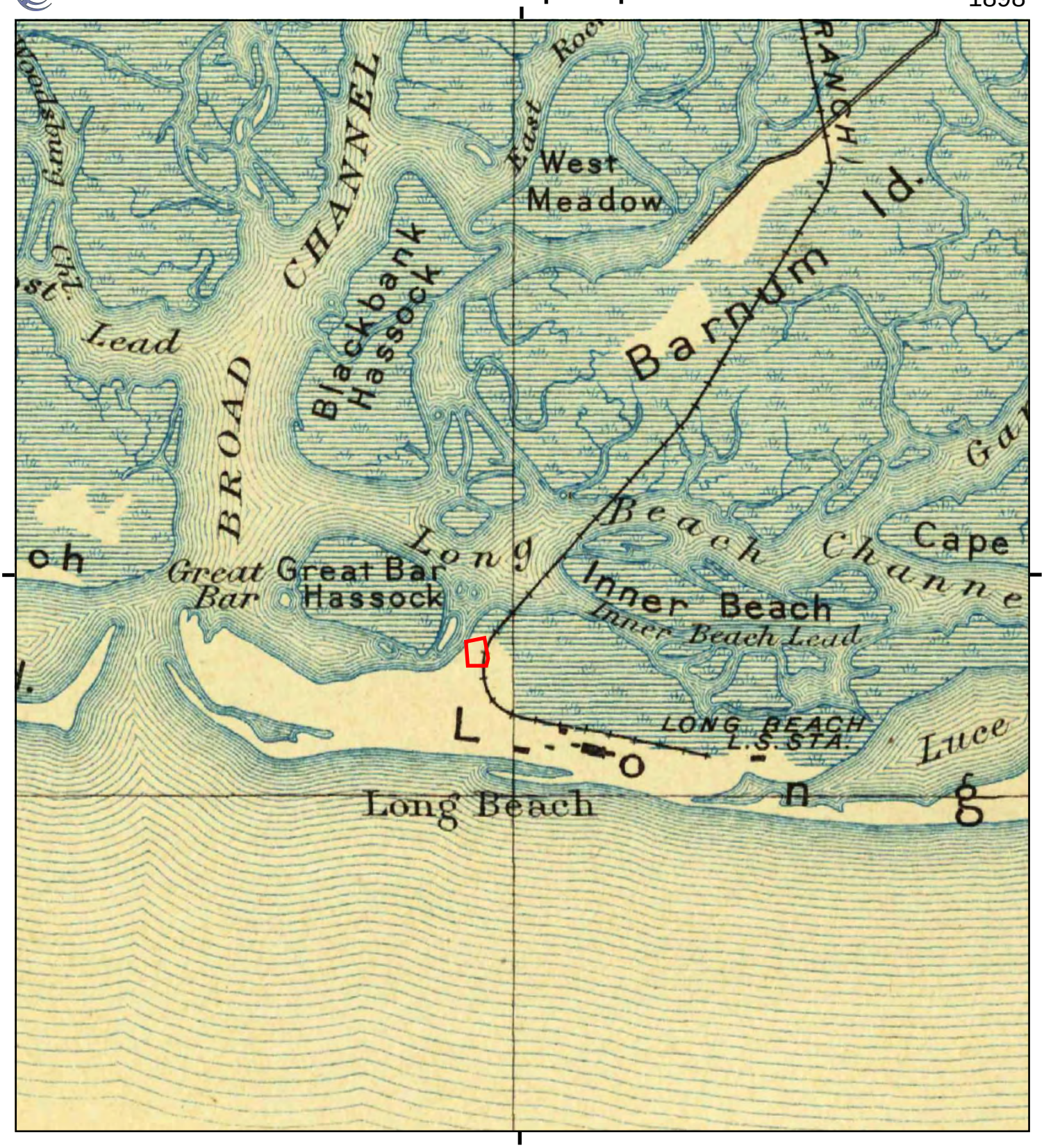
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1898



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

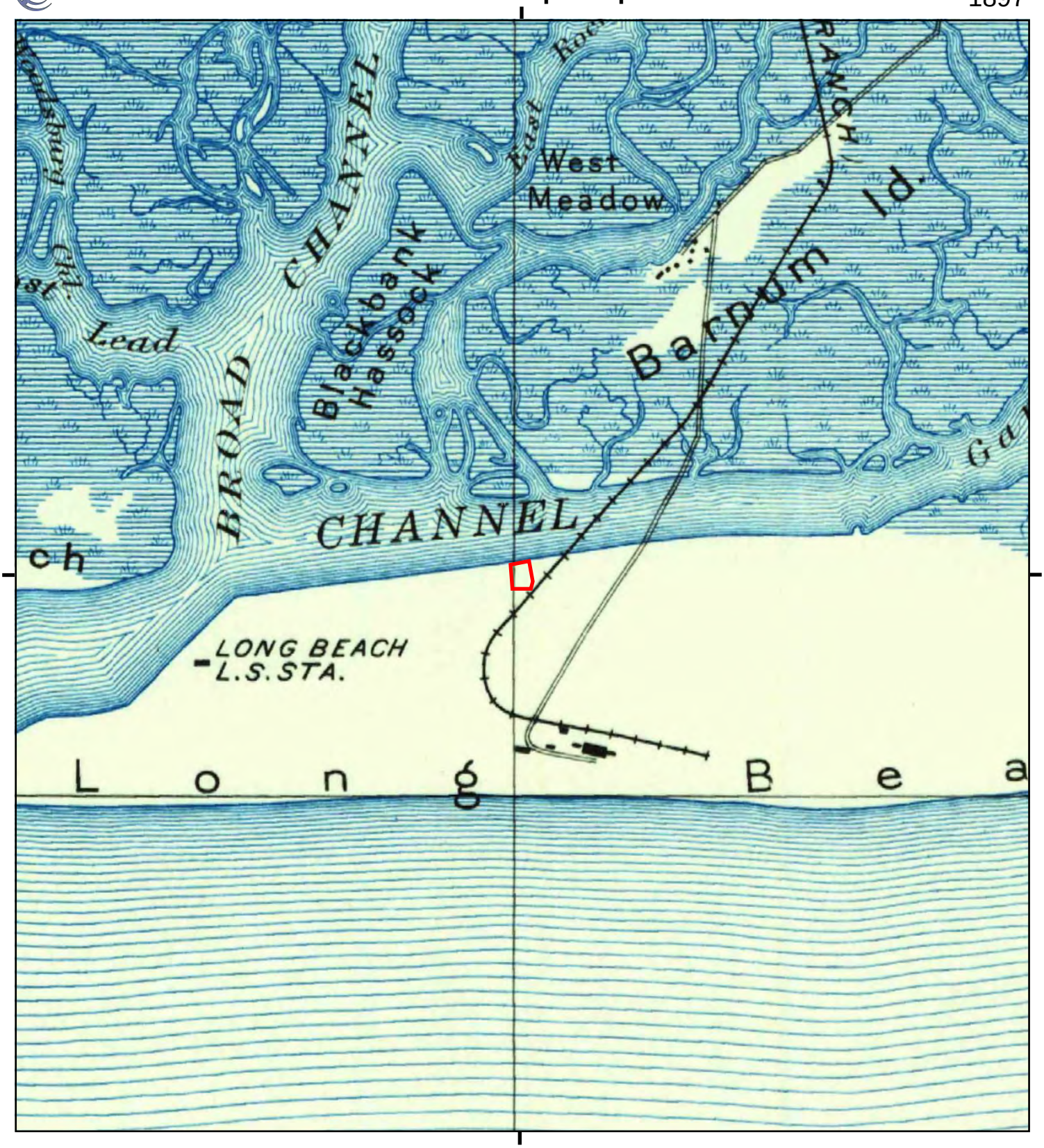
TP, Hempstead, 1898, 15-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Historical Topo Map

1897



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Hempstead, 1897, 15-minute

SITE NAME: Long Beach WPCP
ADDRESS: 2 W Pine Street
Long Beach, NY 11561
CLIENT: First Environment, Inc.

N

Long Beach WPCP

2 W Pine Street

Long Beach, NY 11561

Inquiry Number: 5846767.8

October 28, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

10/28/19

Site Name:

Long Beach WPCP
2 W Pine Street
Long Beach, NY 11561
EDR Inquiry # 5846767.8

Client Name:

First Environment, Inc.
91 Fulton Street
Boonton, NJ 07005
Contact: Kenneth Farah

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2013	1"=500'	Flight Year: 2013	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1994	1"=500'	Acquisition Date: April 04, 1994	USGS/DOQQ
1984	1"=500'	Flight Date: March 26, 1984	USDA
1980	1"=500'	Flight Date: April 06, 1980	Aero
1974	1"=500'	Flight Date: April 21, 1974	USGS
1966	1"=500'	Flight Date: February 22, 1966	USGS
1962	1"=500'	Flight Date: March 10, 1962	EDR Proprietary Aerial Viewpoint
1954	1"=500'	Flight Date: February 19, 1954	USGS
1951	1"=500'	Flight Date: April 21, 1951	EDR Proprietary Aerial Viewpoint
1943	1"=500'	Flight Date: January 01, 1943	FirstSearch

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INQUIRY #: 5846767.8
YEAR: 2017
= 500'
N
EDR

INQUIRY #: 5846767.8
YEAR: 2013
= 500'
N
EDR

INQUIRY #: 5846767.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 5846767.8
YEAR: 2006
= 500'
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EDR

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YEAR: 1994

= 500'

N

EDR

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YEAR: 1984
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EDR

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YEAR: 1980
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EDR

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YEAR: 1966
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YEAR: 1962
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EDR

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YEAR: 1954
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EDR

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YEAR: 1951
= 500'
N
EDR

INQUIRY #: 5846767.8
YEAR: 1943
= 500'
N
EDR

APPENDIX B

ASTM E 1527-05 Phase I ESA User Questionnaire

In order to qualify for one of the Landowner Liability Protection (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments", the User must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

Site Name: Long Beach WPCP
Location: 2 South Pine Street, Long Beach, Long Island, NY

1. **Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).**
   Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law?
   Yes ☐ No ☒
   If so, please specify:

2. **Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26)**
   Are you aware of any AULs, such as engineering controls, land use restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local laws?
   Yes ☐ No ☒
   If so, please specify:

3. **Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).**
   As the User of this ESA do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?
   Yes ☐ No ☒
   If so, please specify:

4. **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).**
   Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*?
   Yes ☐ No ☐ Unknown ☒
   If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*?
   Yes ☐ No ☐
   If so, please explain:

5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the *environmental professional* to identify conditions indicative of releases or threatened releases? For example, as the User,

a. Do you know the past uses of this property? Yes ☐ No ☐ Unknown ☒
If so, please specify:

b. Do you know of specific chemicals that are present or once were present at the property? Yes ☒ No ☐ Unknown ☐
If so, please specify: Chlorine and Aluminum Sulfate for water treatment.

c. Do you know of spills or other chemical releases that have taken place at the property? Yes ☐ No ☐ Unknown ☒
If so, please specify:

d. Do you know of any environmental cleanups that have taken place at the *property*?
Yes ☐ No ☐ Unknown ☒
If so, please specify:

6. The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination of appropriate investigation (40 CFR 312.31).

As the User of this ESA, based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of contamination at the *property*?
Yes ☐ No ☐ Unknown ☒
If so, please specify:

The preparer of the User Questionnaire must complete and sign the following:

Name:

Title:

Firm:

Address:

Phone Number:

Date:

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge no material facts have been suppressed or misstated.

_____ _____
Preparer's Signature Date

APPENDIX C

APPENDIX D
Site Photos
Long Beach WPCP

Photo 1 – Laboratory for testing effluent

Photo 2 – Transformer(s) within Main Control Room Building

APPENDIX D
Site Photos
Long Beach WPCP

Photo 3 – Boiler supplied by heating oil in Main Building

Photo 4 – Sump located in Main Building

APPENDIX D
Site Photos
Long Beach WPCP

Photo 5 – Transformer located outside Main Building

Photo 6 – Waste removal from influent water in ancillary structure to Main Building

APPENDIX D
Site Photos
Long Beach WPCP

Photo 7 – Clarifiers

Photo 8 – Heating Oil UST area rear of Main Building

APPENDIX D
Site Photos
Long Beach WPCP

Photo 9 – Digesters

Photo 10 – Sludge filter building

APPENDIX D

KENNETH FARAH, EIT

Project Engineer

Summary of Professional Experience:

Mr. Farah is a project manager for First Environment's site investigation and remediation operations. He has ten years of experience in the environmental consulting field working with the Technical Requirements for Site Remediation (TRSR) and the Administrative Requirements for the Remediation of Contaminated Sites (ARRCS). His experience includes more than six years performing Phase I inspections, industrial site investigations, and Preliminary Assessments. He has performed numerous site and remedial investigations, remedial action workplan (RAWP) and reports (RAR) preparations; and assisted design and implementation of remedial systems in New Jersey. His specialties include calculations and design focused on the remediation of contaminated properties. Responsibilities include managing—for a variety of clients—small to large scale sites that must meet the New Jersey Department of Environmental Protection (NJDEP) Soil Remediation and Groundwater Quality Standards.

Prior to joining First Environment, Mr. Farah was a technical advisor responsible for preparing document packages and permit applications, managing project scopes, and advising senior management in the attainment and execution of NJDEP regulations and site remediation requirements. In addition to his management capabilities, Mr. Farah is also competent in site remedial modeling for engineering-related calculations. He has experience in computer modeling software such as AutoCAD and TDAST designing, as well as in NJDEP regulatory agency programs for remediation attainment, such as ProUCL and ArcGIS.

Mr. Farah has extensive experience in the remediation of chlorinated volatile organic compounds (cVOCs) in the subsurface ranging from shallow to deep bedrock aquifer systems. He has utilized a variety of in-situ chemical oxidation (ISCO) treatments such as permanganate and persulfate for remedial injections. Additionally, he has utilized bio-remediation materials, such as molasses, Petrox® and other bio-augmentation compounds for the remediation of CVOCs; and has assisted in the design and scope of the remedial injection systems.

Previous to working in environmental consulting, Mr. Farah served as a research assistant at the Center for Environmental Engineering of Stevens Institute of Technology. The research projects he attended on related to the fate and transport and remediation of hexavalent chromium from soils, as well as the development of a plasma energy source for the Defense for Advanced Research Projects Agency (DARPA).

Litigation:

Mr. Farah has also been involved in project matters involving litigation support. As part of this involvement he has reviewed and evaluated site investigation and remediation practices in terms of the reasonableness and appropriateness of actions taken and the costs incurred. He has also prepared reports of expert testimonies for these projects relating to the fate and transport of chlorinated solvents and petroleum related compounds; and has assisted in modeling of groundwater contaminated plumes for litigation support.

Education:

Master of Engineering, Environmental Engineering, Stevens Institute of Technology, 2010
Bachelor of Engineering, Environmental Engineering, Stevens Institute of Technology, 2004

Years of Experience: 12

Certifications / Registrations:

Engineer in Training (NJ – 00734)
40-Hour OSHA HAZWOPER Certified
8-Hour OSHA Supervisor / Refresher Certified
CPR/AED/First Aid Certification

Professional Training:

Environmental Audits and Site Assessments, NJDEP/Rutgers (2011)
In-Situ Remediation Technologies for Contaminated Soils, NJDEP/Rutgers (2012)
Ex-Situ Remediation Technologies for Contaminated Soils (2013)Underground Storage Tanks, NJDEP/Rutgers (2013)
Vapor Intrusion under LSRP Program, NJDEP/Rutgers (2014)
Case Study Training for LSRP's (2017)

Professional Registrations/Affiliations:

American Society of Civil Engineers
Society of Environmental Engineers
Environmental Engineers Group
American Academy of Environmental Engineers and Scientists
Association of Environmental and Engineering Geologists

Relevant Project Experience:

SITE INVESTIGATION / REMEDIATION EXPERIENCE

Route 21 Associates, Brownfields Remediation Project, Belleville, New Jersey. Project manager. Provided additional technical oversight and management for this hazardous waste site impacted with chlorinated organic compounds, metals, and base neutral compounds. Management aspects of project included task scheduling, client and attorney interaction and NJDEP regulatory remediation permitting as well as remedial injection calculations for design and instigation of work. Site activities have included the installation and sampling of numerous soil samples and monitoring wells, budget and cost estimating, coordination with disposal facilities, and development of technically feasible remedial strategies for both soil and groundwater, implementation of full-scale, Site-wide remedial injections, attainment of off-site public access agreements and sampling, and coordinating project goals and deliverables. 2013 – ongoing.

White Plains Housing Authority, Litigation Support for N.W. Bernstein & Associates, LLC, White Plains, New York. *Project manager.* Reviewing and overseeing third-party consultant's work being conducted at the former Getty service station immediately adjacent to the WPHA property. Designed and implemented several site and remedial investigation across WPHA property relating to various incidences. Provided expert opinions regarding remedial investigation and remedial action being conducted, and assisted in preparations of expert testimonies by providing facts and details. 2013 – ongoing.

Seagis Property Group, Remedial Evaluation for Former Gasoline Service Station – Jamaica, Queens, New York. *Project manager.* Managed remediation oversight of excavation activities to remediate petroleum impacted soils. Reviewed ISCO treatment options and determined best course of treatment for Site conditions. Implemented remedial injections based on engineered Site design and groundwater flow, and performed site inspections of engineering and institutional controls. Communicated daily with client and contractors to develop scope of work and maintain client satisfaction and projects schedule. 2013 – ongoing.

Former Tube Manufacturing Facility, Remedial Investigation and Remediation, Bridgewater, New Jersey. *Project engineer.* Supervised and coordinated the completion of a remedial Investigation for groundwater at a five-acre industrial facility, including the preparation of a comprehensive remedial approach to characterize the extent of chlorinated VOC impact in multiple water-bearings zones and evaluation of feasible remedial alternatives. Assisted in design and implementation of a full-scale groundwater treatment remedial actions, which included the performance of a high vacuum dual-phase extraction system and in-situ chemical oxidation (ISCO). Directly involved with the evaluation of HVDPE data, and continued development and design of systems. Continued performance monitoring will be conducted to evaluate the efficacy of the systems with respect to the treatment of CVOCs. 2013 – ongoing.

EnviroAnalytics Group, LLC, Multiple Remedial Oversight Projects, New Jersey. *Technical engineer.* Managed remediation oversight of properties. Conducted Phase II sampling according to NJDEP and EAP regulations and performed site cleanup via remedial injections. Communicated weekly with client to develop scope of work and maintain client satisfaction and projects timeframes. 2013.

City of Newburgh, Provan Ford Brownfields Remediation, Newburgh, New York. *Project engineer.* Assisted in supervising and coordinating the detailed site assessment of this Brownfields remediation project. Project activities included an evaluation of feasible remedial alternatives leading to the preparation of a remedial action work plan and subsequent remedial application of in-situ compounds. Assisted in designs and application of engineering control and capping of Site. 2013 – 2016.

Dallas Airmotive, Multiple Preliminary Assessments, Millville, New Jersey. *Project manager.* Conducted in depth site inspections of Industrial Site Recovery Act (ISRA) subject lease-hold buildings for the purpose of preparing extensive Preliminary Assessment reports for several facets of the property. Extensively researched site history and documents detailing the property to meet NJDEP regulations. Administratively closed the PA's and cases relating to the filing of ISRA Remediation in Progress Waivers for Client in terms of cessation responsibilities. 2013 - 2015.

City of Newburgh, Provan Ford Brownfields Remediation, Newburgh, New York. *Project engineer.* Assisted, supervised and coordinated detailed site assessment of a 8-acre Brownfields remediation project, including the implementation of monitoring well installation and sampling events, soil gas surveys, evaluation of feasible remedial alternatives, preparation of Remedial Action Work Plan, implementation of in-situ chemical oxidation pilot study and full-scale groundwater treatment event, and subsequent post-remediation groundwater monitoring program. Assisted in overall engineering plan cap design and supervised cap installation to specifications. 2010 – 2016.

ELT Harmony, LLC, Former Witco-Brainards/Chemtura Facility, Remedial Investigation/Action, Harmony, New Jersey. *Project engineer.* Supervised and coordinated the installation of an in-situ remediation system at a15-acre former industrial site. Included preparation of a Conceptual Site Model and comprehensive Remedial Investigation Report/Remedial Action Workplan. AOCs

include hazardous material storage, former drains and piping, groundwater impact, surface water bodies, and spill areas. Remedial alternatives include removal of PCB-impacted soil, in-situ treatment of dissolved-phase chlorinated VOCs and LNAPL in bedrock aquifer, and restoration of wetland/riparian areas. Selected remedial approach for treatment of CVOCs included the installation of injection wells and packers and performance of downhole geophysical logging to facilitate the application of bio-augmentation reagents to shallow and deep bedrock zones. 2011 – ongoing.

Von Roll, USA, Preliminary Assessment, Monmouth Junction, New Jersey. *Project manager.* Conducted numerous in depth site inspections of Industrial Site Recovery Act (ISRA) subject lease-hold buildings for the purpose of preparing an extensive Preliminary Assessment report for several facets of the property. Extensively researched site history and documents detailing the property to meet NJDEP regulations. Administratively closed the PA and case relating to the filing of ISRA Remediation in Progress Waivers for Client in terms of cessation responsibilities. Client was not responsible for prior company operations and AOCs located in the facilities. 2015 - 2016.

Former Jonas Automotive, Brownfields Site Investigation, Newburgh, New York. *Team member.* As project team member, assisted in the implementation and oversight of remedial activities at this former automotive parts manufacturing facility. The remedial design required the excavation of lead and mercury contaminated soils, building decontamination and demolition measures, and post-excavation soil and groundwater sampling. As a field team leader, she was also responsible for daily implementation of the CAMP air-monitoring program, which included data collection for particulates and volatile organic vapor monitoring. 2011 – 2013

PREVIOUS PROJECT EXPERIENCE

Former 3M Facility, Environmental Site Remediation, New York. *Field engineer.* Former manufacturing plant highly impacted with chlorinated organic compounds TCE and PCE. Developed site remedial injection layout and performed installation of injection wells. Site activities have included the installation and sampling of numerous injection wells and monitoring wells; the execution and oversight of monthly bio-augmentation injections via an injection well network. Involvement of design characteristics of network and characterizing chlorinated daughter products to levels below applicable standards. 2006 – 2009.

City of Elizabeth, Multiple Site Remediation Projects, Elizabeth New Jersey. *Technical engineer.* Task managed projects that included frequent client / contractor interaction, scheduling, and delegation of tasks to junior staff. Provided environmental regulatory compliance alternatives through Phase II investigation work to bring projects and sites to NJDEP closure status. Sites included former USTs, removal of USTs, and soil contamination with heavy metals or cVOCs. Natural attenuation was the preferred remedial application. 2012 – 2013.

Atlantic Health System, Multiple Site and Remedial Investigations, New Jersey. *Project manager.* Managed site and remedial investigations at two New Jersey hospitals. Projects involved Phase II soil and groundwater investigations to naturally monitoring sites to bring them into NJDEP compliance. 2012 – 2013.

Field Station Dinosaurs, Environmental Compliance, New Jersey. *Technical advisor.* Provided technical assistance to client and project managers covering environmental compliance with environmental and civil engineering aspects of site design layout and remediation. 2013.

LITIGATION SUPPORT EXPERIENCE

White Plains Housing Authority, Litigation Support for N.W. Bernstein & Associates, LLC, White Plains, New York. *Team Member.* Reviewing and overseeing third-party consultant's work being conducted at the former Getty service station immediately adjacent to the WPHA property. Assisted preparing expert opinion reports regarding remedial investigation and remedial action being conducted. 2013 – ongoing.

APPENDIX E

LONG ISLAND / POLITICS

Nassau legislators OK $66.4M bond to pay for rerouting Long Beach sewage

An aerial view of the Bay Park Sewage Treatment Plant in East Rockaway, seen July 1, 2019. Credit: Newsday / John Keating

By Candice Ferrette
candice.ferrette@newsday.com @candiceferrette
Updated July 15, 2019 7:24 PM

Nassau County lawmakers on Monday approved County Executive Laura Curran's request to bond $66.4 million to reroute Long Beach sewage to the county's treatment facility and stop the flow of sewage into Reynolds Channel.

The agreement between the county and the City of Long Beach would consolidate sewage treatment at the county's Bay Park Water Pollution Control Plant.

The county would borrow for the construction cost of the project and Long Beach would repay the county with the sewer fees collected from its residents, legislators said.

The project is aimed at restoring the ecosystem in the bays of western Nassau, supporters and environmental groups say.

ADVERTISING

"We are all going to see the benefits of better water," said Legis. Denise Ford, a Long Beach Democrat who caucuses with the Republicans.

“This is a plan in the making for 15 years," said Adrienne Esposito, executive director of the Citizens Campaign for the Environment. "This critical puzzle piece is real progress in our quest to restore the Western Bays. Improving treatment for Long Beach’s 3 to 5 million gallons per day of sewage will help improve water quality, restore wetlands, bring back fin fish and shellfish and protect public health."

County Department of Public Works officials say the Bay Park plant has state-of-the-art treatment technologies after $830 million in upgrades and is better suited to address water quality than the Long Beach Sewage Treatment Plant.

Legislators voted 18-1, with Legis. Howard Kopel (R-Lawrence) casting the lone "no" vote citing concerns over the financial structure of the intermunicipal agreement, or IMA.

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Several legislators expressed concern about whether the county would suffer if the City of Long Beach, which is struggling fiscally, were to file for bankruptcy.

"I am not confident that, under the IMA, the taxpayers of Nassau County are sufficiently protected from liability for costs of the project, which should be borne strictly by the City of Long Beach," Kopel said. "Unfortunately, the recent management of the city does not give me great assurance that its promises will be honored in a timely fashion."

The timing of the construction also is unfair to the citizens of East Rockaway wholive near the Bay Park plant, Kopel said.

The county has started preliminary designs, which could lead to the start of construction next year.

Officials said repairing and updating the city's wastewater plant would cost more than $175 million, but construction of the pump station and 3-mile connection pipe would cost about $77 million. The project is expected to be completed by the end of 2022.

Long Beach would plan to transfer as much as 5 million gallons of raw sewage per day to Bay Park, limiting the amount of treated effluent flowing into Reynolds Channel and reducing ammonia and nitrogen levels in the water.

After the vote, Curran spokeswoman Christine Geed applauded the legislature's support of the project's funding, calling it "a win for the environment and the residents of the county."

"Effluent from the City of Long Beach's antiquated sewage treatment plant does not meet New York State's current water quality standards," Geed said.

Last month, facing a deadline for state grant funding, Curran, a Democrat, sought the emergency vote from the GOP-controlled legislature.

By Candice Ferrette
candice.ferrette@newsday.com @candiceferrette
Candice Ferrette covers Nassau County government and politics on Long Island. She has been a reporter at Newsday since 2011.

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LONG BEACH WPCP PHASE II ESI

121 West 27th Street, Suite 702
New York, NY 10001
(646) 606-2332

April 23, 2020

Precision Environmental, Inc.
38-15A 23rd Street
Long Island City, NY 11106

Attn: Michael Parpounas

Re: Phase II Environmental Site Investigation
Long Beach Wastewater Treatment Plant
2 West Pine Street – Long Beach, NY 11561
Section 59, Block 278, Lot 29

Dear Michael,

On April 14, 2020, Tenen Environmental, LLC (Tenen) conducted soil and groundwater sampling at the above Site on behalf of Precision Environmental, Inc. This letter report provides a summary of our findings, including the results of the laboratory analysis, conclusions and recommendations.

Background

The Site, located at 2 West Pine Street, Long Beach, New York (Tax Section 59, Block 278, Lot 29) is an irregular-shaped parcel that fronts the north side of West Pine Street, as shown on Figure 1. The Site is currently developed with the Long Beach Wastewater Treatment Plant. The total Site area is approximately 12.27 acres. The Site is zoned for recreation and entertainment space. The Site lot is currently occupied with a wastewater treatment plant and recreational facilities.

The planned development of the property consists of a new building for the existing wastewater treatment plant. Soil and groundwater sampling was completed to further investigate the potential presence of petroleum or hazardous materials at the Site on the above date in April 2020.

Hydrogeology

The Site is underlain by sands extending to at least ten feet below grade (ft-bg). The sand is fine to coarse with few cobbles. Wood debris was encountered between 7 and 8 ft-bg in one soil boring. Groundwater was encountered at depths ranging from 3.98 ft-bg in MW-1 to 5.44 ft-bg in MW-2 and is assumed to flow north, towards the Wreck Lead Channel. Boring logs for SB-1 through SB-4 are presented in Attachment 2. Purge logs for MW-1 and MW-2 are presented in Attachment 3.

Geophysical Investigation

On April 14, 2020, a geophysical survey was performed at the Site by AARCO Environmental Services (AARCO) in the area of the proposed building and associated areas to be disturbed to investigate/confirm the presence of any underground storage tanks (USTs) and to clear proposed boring locations. One UST was identified onsite during the performance of the geophysical investigation. One tank was noted on a historic Sanborn map dated circa 1930. It is unclear if the tank was an aboveground storage tank (AST) or UST. The suspect tank location was screened as part of the geophysical investigation and no tank was detected.

Sample Collection

Soil
On April 14, 2020, four soil borings (SB-1 through SB-4) were advanced on the Site to a depth of 10 ft-bg. Two soil borings (SB-1 and SB-2) were also converted to temporary groundwater monitoring wells (MW-1 and MW-2). Boring locations are shown on Figure 2. A table detailing the soil sampling locations and sample designations is included below.

Soil Sample Borings, Sample Designations and Descriptions of Location

Sample Name	Depth Below Sidewalk Grade (ft-bg)	Location
SB-1 (0-2)	0-2	Parking lot within proposed building/utility trench footprint
SB-2 (2-4)	2-4	Grass field within proposed building/utility trench footprint
SB-3 (7-9)	7-9	North of suspected former UST/AST location
SB-4 (1-3)	1-3	North of active UST

The boring and monitoring well installation was performed by AARCO utilizing a direct push track-mounted Geoprobe®. All borings were hand-cleared to approximately 5 ft-bg. The soil from all borings was screened with a PID from grade to termination depth. Sample PID readings ranged from 30.7 ppm in SB-1 (0-2) to 288.1 ppm in SB-3 (7-9). No PID readings above background were detected in soils from borings SB-2 or SB-4. All samples were collected using dedicated acetate liners from five-foot macrocores.

No grossly contaminated soil cuttings were encountered during this investigation. Excess soil cuttings were drummed onsite in a 55-gallon drum provided by AARCO and sampled for disposal. The results indicate that the drummed soil is not a hazardous waste as defined by the US Environmental Protection Agency (EPA) characteristics of hazardous waste (40CFR Part 261) and should be disposed as non-hazardous solid waste. Following the completion of the soil sampling, boreholes were backfilled with clean sand. Borings SB-1 and SB-2 were converted to temporary monitoring wells, as detailed in the following section. Boring and monitoring well construction logs are included as Attachment 2. Laboratory deliverables of the disposal characterization sample are included in Attachment 1.

Soil samples were containerized in accordance with EPA analytical protocols. Each sample was labeled, sealed, and placed in a chilled cooler for shipment to the laboratory. A record of each sample, including notation of any odors, color, and sample matrix, was kept in the sampler's field log book. A chain of custody was maintained throughout the field sampling, transport of samples to the laboratory and lab analysis. All soil samples were analyzed for volatile organic compounds (VOCs) plus 15 tentatively identified compounds (TICs), semivolatile organic compounds (SVOCs) plus 15 TICs, target analyte list (TAL) metals, pesticides, polychlorinated biphenyls (PCBs), and total cyanide. A field blank and trip blank was submitted along with the soil samples for VOC analysis as a quality assurance/quality control (QA/QC) measure.

Groundwater
Two 1-inch diameter, temporary groundwater monitoring wells, MW-1 and MW-2, were installed at SB-1 and SB-2, respectively, on April 14, 2020 using a direct push track-mounted Geoprobe®. Both monitoring wells were installed to a depth of 10 ft-bg based upon groundwater depths encountered in soil borings SB-1 and SB-2. Groundwater was measured at depths ranging from approximately 3.98 ft-bg in MW-1 to 5.44 ft-bg in MW-2.

Monitoring Well Locations, Sample Designations, and Descriptions of Location

Well Location	Sample Name	Description of Location
MW-1	MW-1	Parking lot within proposed building/utility trench footprint
MW-2	MW-2	Grass field within proposed building/utility trench footprint

Monitoring wells MW-1 and MW-2 were developed and sampled on April 14, 2020. A PID was used to measure head-space readings in the wells prior to sampling. Headspace readings were non-detect in both monitoring wells. Field instrumentation was employed to measure water temperature, pH, turbidity, and dissolved oxygen in the sampled wells in order to stabilize parameters before sample collection. Sampling was completed using a low-flow peristaltic pump. No visual evidence of petroleum impacts was observed in the purged groundwater.

Groundwater samples were containerized in accordance with EPA analytical protocols. Each sample was labeled, sealed, and placed in a chilled cooler for shipment to the laboratory. A record of each sample, including notation of any odors, color, and sample matrix, was kept in the sampler's field log book. A chain of custody was maintained throughout the field sampling, transport of samples to the laboratory and lab analysis. All groundwater samples were analyzed for VOCs plus 15 TICs, SVOCs plus 15 TICs, TAL metals, pesticides, PCBs, total cyanide, 1,2-dibromoethane, 1,2-diobromo-3-chloropropane, and 1,4-dioxane. A field blank and trip blank was submitted along with the groundwater samples for VOC analysis to the analytical laboratory as a QA/QC measure.

Monitoring well construction logs are included as Attachment 2. Groundwater purge logs are included as Attachment 3.

Sample Analysis

The samples were sent under chain-of-custody documentation to Alpha Analytical, Inc. (Alpha). Alpha is certified by the NYSDOH Environmental Laboratory Approval Program (ELAP) as LABIDs 11627 and 11148. Soil and groundwater samples were analyzed for VOCs plus 15 TICs, SVOCs plus 15 TICs, TAL metals, pesticides, PCBs, and total cyanide. Groundwater samples were also analyzed for 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,4-dioxane.

Analytical Results

Soil

The soil results were compared to the New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use soil cleanup objectives (SCOs) as listed in 6 NYCRR Part 375-6.8(a). The Unrestricted Use SCOs are used as a screening value. Soil sample results are included in Tables 1 through 4 and Figure 3. Laboratory deliverables are included in Attachment 1. The analytical results are summarized below.

All SVOCs and PCBs were detected below the Unrestricted Use SCOs in all four soil samples collected. In addition, all VOCs, metals, and pesticides were detected below the Unrestricted Use SCOs in all but one soil sample, SB-1 (0-2).

One VOC, acetone, was detected in exceedance of its Unrestricted Use SCO in one soil sample, SB-1 (0-2). Acetone was detected at a concentration of 0.2 milligrams per kilogram (mg/kg) with an Unrestricted Use SCO of 0.05 mg/kg. Acetone is a common laboratory artifact. All other VOCs were detected below the Unrestricted

Use SCOs. However, it should be noted that a variety of petroleum-related VOCs were detected in SB-1 (0-2) at concentrations below Unrestricted Use SCOs. SB-1 was not located in the area of any known or suspected USTs. Ethylbenzene was detected at a concentration of 0.14 mg/kg; toluene was detected at a concentration of 0.0015 mg/kg; total xylenes were detected at a concentration of 0.11 mg/kg; 1,2,4-trimethylbenzene was detected at a concentration of 0.0036 mg/kg; 1,3,5-trimethylbenzene was detected at a concentration of 0.0013 mg/kg; and n-propylbenzene was detected at a concentration of 0.00053 mg/kg. In addition, a variety of VOC temporary identified compounds (TICs) were detected in SB-1 (0-2) only, including one benzene, three alkanes, four cyclohexanes, and two octanes. Total TIC compounds in SB-1 (0-2) was 0.0785 mg/kg.

One or more SVOC TICs were detected in three of four soil samples collected. The maximum total TIC concentration was 2.51 mg/kg in SB-4 (1-3).

One metal, mercury, was detected slightly in exceedance of its Unrestricted Use SCO in one soil sample, SB-1 (0-2). Mercury was detected at a concentration of 0.193 mg/kg with an Unrestricted Use SCO of 0.18 mg/kg. All other metals were detected below the Unrestricted Use SCOs.

One pesticide, 4,4'-DDE, was detected slightly in exceedance of its Unrestricted Use SCO in one soil sample, SB-1 (0-2). 4,4'-DDE was detected at a concentration of 0.00467 mg/kg with an Unrestricted Use SCO of 0.0033 mg/kg. All other pesticides were detected below the Unrestricted Use SCOs.

Groundwater

The groundwater results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Class GA Water Quality Standards and Guidance Values (Class GA Standards).

Groundwater sample results are included in Tables 5 through 8 and Figure 4. Laboratory deliverables are included in Attachment 1. The analytical results are summarized below.

All VOCs, pesticides and PCBs were detected at concentrations below the Class GA Standards in both groundwater samples. VOC TICs were not detected in either groundwater sample and SVOC TICs were not detected in MW-2.

Two SVOCs, specifically polyaromatic hydrocarbons (PAHs), were detected in well MW-1 slightly in exceedance of the Class GA Standards. Benzo(b)fluoranthene and chrysene were both detected at a concentration of 0.01 micrograms per liter (ug/l); both analytes have a Class GA Standard of 0.002 ug/l. One SVOC TIC was also detected in MW-1.

Total and dissolved naturally occurring earth metals were detected in both groundwater samples in exceedance of Class GA Standards. Total iron was detected at a maximum concentration of 973 ug/l in MW-2 with a Class GA Standard of 300 ug/l, and total sodium was detected at a maximum concentration of 75,100 ug/l in MW-1 with a Class GA Standard of 20,000 ug/l. Of these analytes, only dissolved sodium was detected in exceedance of its Class GA Standard in both groundwater samples. Dissolved sodium was detected at a maximum concentration of 72,600 ug/l in MW-1.

Findings and Conclusions

The Phase II Environmental Site Investigation indicated the following:

Soil:

- SVOCs and PCBs were not detected in exceedance of Unrestricted Use SCOs in any soil samples collected.
- One VOC, acetone, was detected in exceedance of it Unrestricted Use SCO in SB-1 (0-2) only. Acetone is a common laboratory artifact. A variety of VOC TICs were also detected in SB-1 (0-2) only.
- One metal, mercury, was detected slightly in exceedance of its Unrestricted Use SCO in SB-1 (0-2) only.
- One pesticide, 4,4'-DDE, was detected slightly in exceedance of its Unrestricted Use SCO in SB-1 (0-2) only.

Groundwater:

- VOCs, pesticides and PCBs were not detected in exceedance of Class GA Standards in any groundwater samples collected.
- Two PAHs were detected slightly in exceedance of Class GA Standards in one groundwater sample, MW-1. One SVOC TIC was also detected in MW-1 only.
- Naturally-occurring earth metals iron and sodium were detected in both total groundwater samples in exceedance of Class GA Standards. Of these, only sodium was detected in both dissolved groundwater samples in exceedance of its Class GA Standard.

Petroleum Storage Tanks:

- A geophysical survey was completed at the Site and one UST was identified. The location of a suspected tank was screened and the results did not indicate the presence of a tank.
- The results of the soil and groundwater samples indicate no evidence of a petroleum release in the areas of the known or suspected tanks.

Solid Waste/Groundwater Management:

- One 55-gallon drum of investigation derived waste (IDW) was left at the Site following the investigation. The results of the waste characterization sample collected from the drum indicate the material is not hazardous and should be disposed at a licensed disposal facility as non-hazardous solid waste. The waste characterization sampling results are included in Attachment 1.
- While limited, soil impacts are present above the Unrestricted Use SCOs. All soil generated from the Site should be characterized for disposal, including additional sampling if required by the receiving facility, and disposed of in accordance with all applicable federal, state and municipal regulations, including 6NYCRR Parts 360 and 364.
- If dewatering is required during construction, groundwater should be disposed of in accordance with all applicable federal, state and municipal regulations, including the NY State Pollutant Discharge Elimination System (SPDES) program if discharging to surface water.

Sincerely,
Tenen Environmental, LLC

Matthew Carroll, P.E.
Principal / Environmental Engineer

Figure 1 Site Location
Figure 2 Sample Locations
Figure 3 Soil Analytical Results in Exceedance of Unrestricted Use SCOs
Figure 4 Groundwater Analytical Results in Exceedance of Class GA Standards

Table 1 Volatile Organic Compounds in Soil
Table 2 Semivolatile Organic Compounds in Soil
Table 3 Total Metals in Soil
Table 4 Pesticides and Polychlorinated Biphenyls in Soil
Table 5 Volatile Organic Compounds in Groundwater
Table 6 Semivolatile Organic Compounds in Groundwater
Table 7 Total and Dissolved Metals in Groundwater
Table 8 Pesticides and Polychlorinated Biphenyls in Groundwater

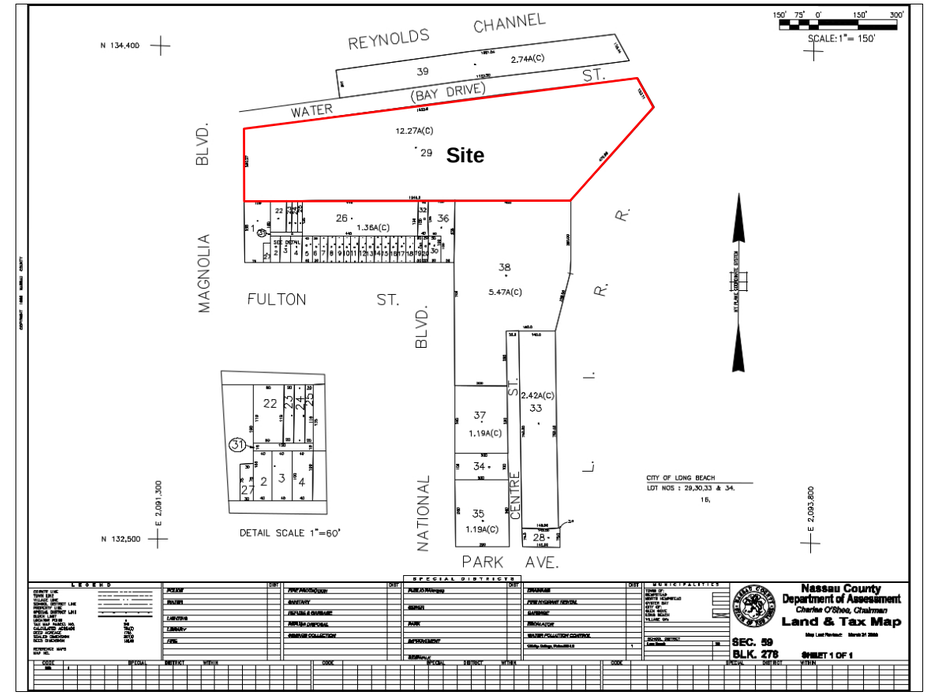
Attachment 1 Laboratory Deliverables
Attachment 2 Boring and Monitoring Well Construction Logs
Attachment 3 Groundwater Purge Logs

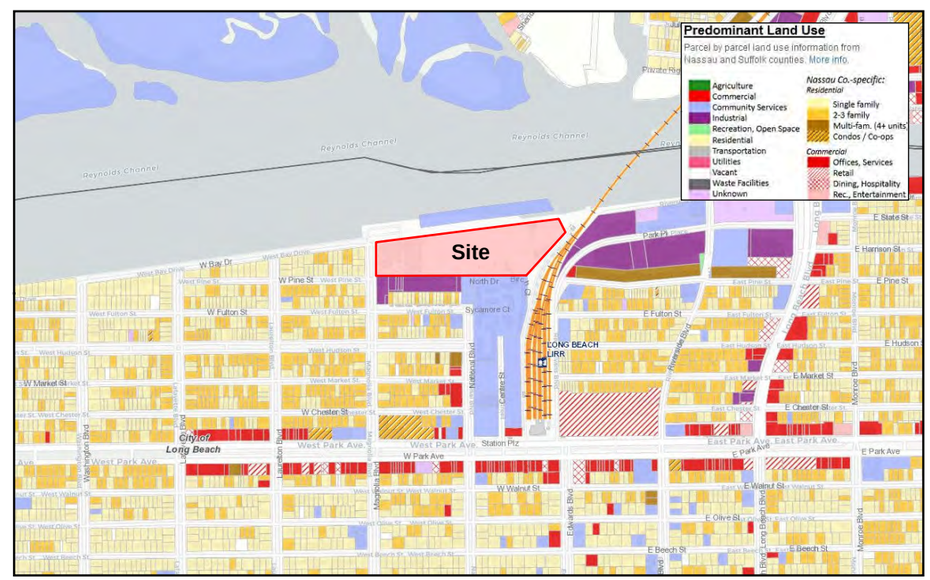
Figures

Basemap: USGS Topographic Map, 7.5 Minute Quadrangle, Lawrence, NY, 2019

Site Location

0 1,000 2,000 4,000 Feet





Long Island Index Map - Predominant Land Use

Long Beach
Wastewater Treatment Plant
Section 59, Block 278, Lot 29
Long Beach, New York
Nassau County, New york

Site

TENEN ENVIRONMENTAL
Tenen Environmental, LLC
121 West 27th Street
Suite 702
New York, NY 10001
O: (646) 606-2332
F: (646) 606-2379

Drawn By	LM
Checked By	AP
Date	April 2020
Scale	As Noted
Drawing Title	Site Location Map
Drawing No	Figure 1

Legend

- Soil Boring Sample Location
- Soil Boring/Monitoring Well Sample Location
- Known UST Location
- Suspect Former UST/AST Location

0 15 30 60 Feet

Site

Long Beach Wastewater Treatment Plant
Section 59, Block 278, Lot 29
Long Beach, New York
Nassau County, New york

TENEN ENVIRONMENTAL
Tenen Environmental, LLC
121 West 27th Street
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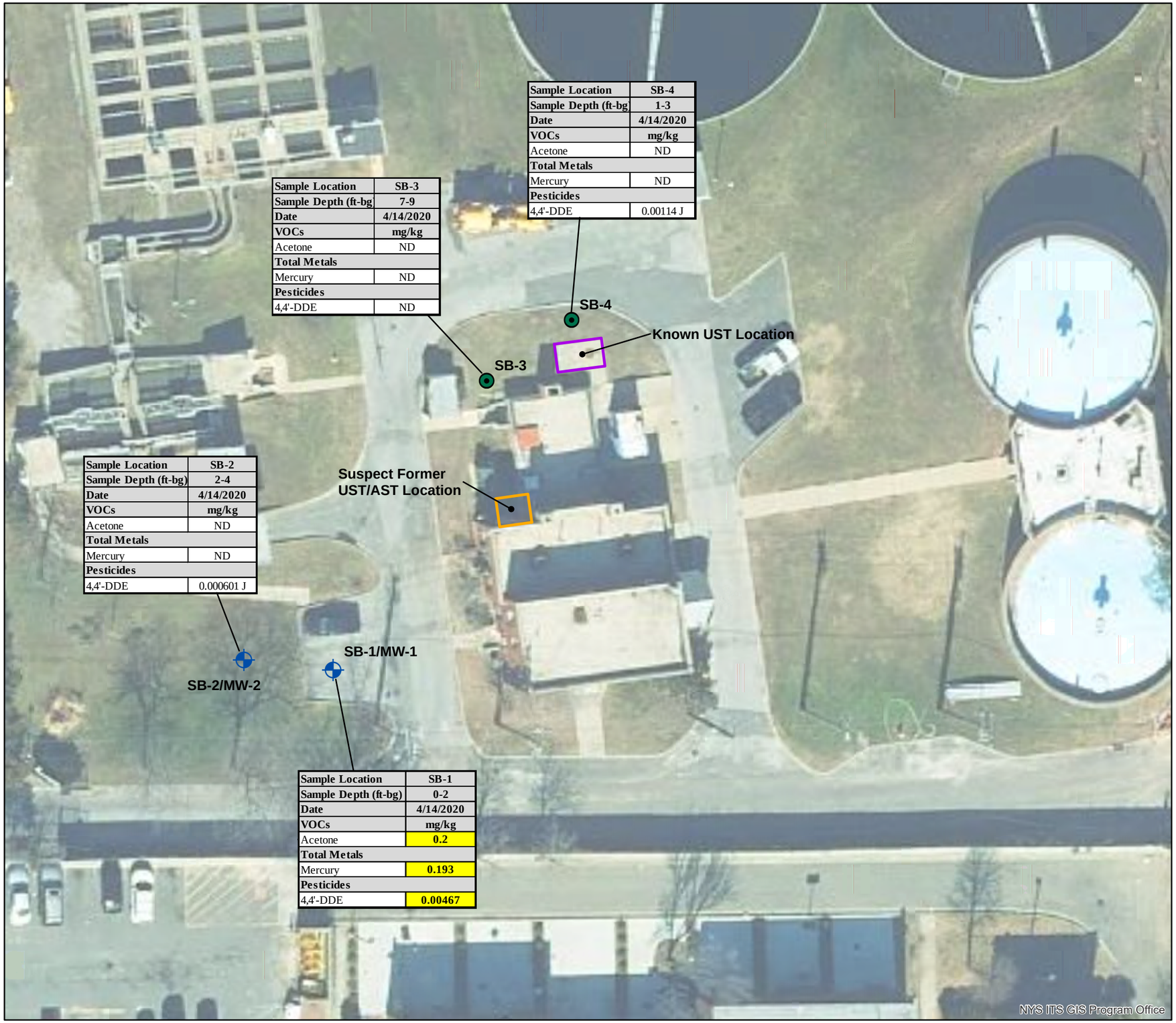
Date	April 2020
Scale	As Noted

Drawing Title: **Sampling Locations**

Drawing No: **Figure 2**



Sample Location	SB-4
Sample Depth (ft-bg)	1-3
Date	4/14/2020
VOCs	mg/kg
Acetone	ND
Total Metals	
Mercury	ND
Pesticides	
4,4'-DDE	0.00114 J

Sample Location	SB-3
Sample Depth (ft-bg)	7-9
Date	4/14/2020
VOCs	mg/kg
Acetone	ND
Total Metals	
Mercury	ND
Pesticides	
4,4'-DDE	ND

Sample Location	SB-2
Sample Depth (ft-bg)	2-4
Date	4/14/2020
VOCs	mg/kg
Acetone	ND
Total Metals	
Mercury	ND
Pesticides	
4,4'-DDE	0.000601 J

Sample Location	SB-1
Sample Depth (ft-bg)	0-2
Date	4/14/2020
VOCs	mg/kg
Acetone	**0.2**
Total Metals	
Mercury	**0.193**
Pesticides	
4,4'-DDE	**0.00467**

Analyte	NY-UNRES
VOCs	mg/kg
Acetone	0.05
Total Metals	
Mercury	0.18
Pesticides	
4,4'-DDE	0.0033

Notes:
1. Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs
2. NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
3. J = Estimated value
4. ND = Not detected

Legend

- Soil Boring Sample Location
- Soil Boring/Monitoring Well Sample Location
- Known UST Location
- Suspect Former UST/AST Location

0 15 30 60 Feet

Site: Long Beach Wastewater Treatment Plant Section 59, Block 278, Lot 29 Long Beach, New York Nassau County, New york

TENEN ENVIRONMENTAL
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Drawn By: LM
Checked By: AP
Date: April 2020
Scale: As Noted

Drawing Title: Soil Analytical Results in Exceedance of Unrestricted Use SCOs

Drawing No: Figure 3

Sample ID	MW-2
Date	4/14/2020
SVOCS	µg/l
Benzo(b)fluoranthene	ND
Chrysene	ND
Total Metals	
Iron	973
Sodium	38800
Dissolved Metals	
Sodium	37000

Sample ID	MW-1
Date	4/14/2020
SVOCS	µg/l
Benzo(b)fluoranthene	0.01 J
Chrysene	0.01 J
Total Metals	
Iron	633
Sodium	75100
Dissolved Metals	
Sodium	72600

Analyte	NY-AWQS
SVOCS	µg/l
Benzo(b)fluoranthene	0.002
Chrysene	0.002
Total Metals	
Iron	300
Sodium	20000
Dissolved Metals	
Sodium	20000

Notes:

1. **Bold and shaded yellow value indicates concentration exceeds NY-AWQS**
2. NY-AWQS = NYSDEC Division of Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS)
3. J = Estimated value
4. ND = Not detected
5. µg/l = micrograms per liter

Legend

- Soil Boring/Monitoring Well Sample Location
- Known UST Location
- Suspect Former UST/AST Location

0 15 30 60 Feet

Site

Long Beach Wastewater Treatment Plant
Section 59, Block 278, Lot 29
Long Beach, New York
Nassau County, New york

TENEN ENVIRONMENTAL
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Drawn By: LM
Checked By: AP
Date: April 2020
Scale: As Noted

Drawing Title: **Groundwater Analytical Results in Exceedance of Class GA Standards**

Drawing No: **Figure 4**

Tables

Table 1. Volatile Organic Compounds in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)	SB-3 (7-9)	SB-4 (1-3)
SAMPLING DATE			4/14/2020		4/14/2020	4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-01		L2015639-02	L2015639-03	L2015639-04
				Qual	Qual	Qual	Qual
General Chemistry							
Solids, Total	NS	%	93.3		93.3	84	89.7
Volatile Organics by EPA 5035							
1,1,1,2-Tetrachloroethane	NS	mg/kg	ND		ND	ND	ND
1,1,1-Trichloroethane	0.68	mg/kg	ND		ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	mg/kg	ND		ND	ND	ND
1,1,2-Trichloroethane	NS	mg/kg	ND		ND	ND	ND
1,1-Dichloroethane	0.27	mg/kg	ND		ND	ND	ND
1,1-Dichloroethene	0.33	mg/kg	ND		ND	ND	ND
1,1-Dichloropropene	NS	mg/kg	ND		ND	ND	ND
1,2,3-Trichlorobenzene	NS	mg/kg	ND		ND	ND	ND
1,2,3-Trichloropropane	NS	mg/kg	ND		ND	ND	ND
1,2,4,5-Tetramethylbenzene	NS	mg/kg	ND		ND	ND	ND
1,2,4-Trichlorobenzene	NS	mg/kg	ND		ND	ND	ND
1,2,4-Trimethylbenzene	3.6	mg/kg	0.0036		ND	ND	ND
1,2-Dibromo-3-chloropropane	NS	mg/kg	ND		ND	ND	ND
1,2-Dibromoethane	NS	mg/kg	ND		ND	ND	ND
1,2-Dichlorobenzene	1.1	mg/kg	ND		ND	ND	ND
1,2-Dichloroethane	0.02	mg/kg	ND		ND	ND	ND
1,2-Dichloroethene, Total	NS	mg/kg	ND		ND	ND	ND
1,2-Dichloropropane	NS	mg/kg	ND		ND	ND	ND
1,3,5-Trimethylbenzene	8.4	mg/kg	0.0013	J	ND	ND	ND
1,3-Dichlorobenzene	2.4	mg/kg	ND		ND	ND	ND
1,3-Dichloropropane	NS	mg/kg	ND		ND	ND	ND
1,3-Dichloropropene, Total	NS	mg/kg	ND		ND	ND	ND
1,4-Dichlorobenzene	1.8	mg/kg	ND		ND	ND	ND
1,4-Dioxane	0.1	mg/kg	ND		ND	ND	ND
2,2-Dichloropropane	NS	mg/kg	ND		ND	ND	ND
2-Butanone	0.12	mg/kg	ND		ND	ND	ND
2-Hexanone	NS	mg/kg	ND		ND	ND	ND
4-Methyl-2-pentanone	NS	mg/kg	ND		ND	ND	ND
Acetone	0.05	mg/kg	**0.2**		ND	ND	ND
Acrylonitrile	NS	mg/kg	ND		ND	ND	ND
Benzene	0.06	mg/kg	ND		ND	ND	ND
Bromobenzene	NS	mg/kg	ND		ND	ND	ND
Bromochloromethane	NS	mg/kg	ND		ND	ND	ND
Bromodichloromethane	NS	mg/kg	ND		ND	ND	ND
Bromoform	NS	mg/kg	ND		ND	ND	ND
Bromomethane	NS	mg/kg	ND		ND	ND	ND
Carbon disulfide	NS	mg/kg	ND		ND	ND	ND
Carbon tetrachloride	0.76	mg/kg	ND		ND	ND	ND
Chlorobenzene	1.1	mg/kg	ND		ND	ND	ND
Chloroethane	NS	mg/kg	ND		ND	ND	ND
Chloroform	0.37	mg/kg	ND		ND	ND	ND
Chloromethane	NS	mg/kg	ND		ND	ND	ND
cis-1,2-Dichloroethene	0.25	mg/kg	ND		ND	ND	ND
cis-1,3-Dichloropropene	NS	mg/kg	ND		ND	ND	ND

Table 1. Volatile Organic Compounds in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)	SB-3 (7-9)	SB-4 (1-3)
SAMPLING DATE			4/14/2020		4/14/2020	4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-01		L2015639-02	L2015639-03	L2015639-04
				Qual	Qual	Qual	Qual
Dibromochloromethane	NS	mg/kg	ND		ND	ND	ND
Dibromomethane	NS	mg/kg	ND		ND	ND	ND
Dichlorodifluoromethane	NS	mg/kg	ND		ND	ND	ND
Ethyl ether	NS	mg/kg	ND		ND	ND	ND
Ethylbenzene	1	mg/kg	0.014		ND	ND	ND
Hexachlorobutadiene	NS	mg/kg	ND		ND	ND	ND
Isopropylbenzene	NS	mg/kg	0.00049	J	ND	ND	ND
Methyl tert butyl ether	0.93	mg/kg	ND		ND	ND	ND
Methylene chloride	0.05	mg/kg	ND		ND	ND	ND
n-Butylbenzene	12	mg/kg	ND		ND	ND	ND
n-Propylbenzene	3.9	mg/kg	0.00053	J	ND	ND	ND
Naphthalene	12	mg/kg	ND		ND	ND	ND
o-Chlorotoluene	NS	mg/kg	ND		ND	ND	ND
o-Xylene	NS	mg/kg	0.032		ND	ND	ND
p-Chlorotoluene	NS	mg/kg	ND		ND	ND	ND
p-Diethylbenzene	NS	mg/kg	0.00088	J	ND	ND	ND
p-Ethyltoluene	NS	mg/kg	0.0038		ND	ND	ND
p-Isopropyltoluene	NS	mg/kg	0.00015	J	ND	ND	ND
p/m-Xylene	NS	mg/kg	0.078		ND	ND	ND
sec-Butylbenzene	11	mg/kg	ND		ND	ND	ND
Styrene	NS	mg/kg	ND		ND	ND	ND
tert-Butylbenzene	5.9	mg/kg	ND		ND	ND	ND
Tetrachloroethene	1.3	mg/kg	ND		ND	ND	ND
Toluene	0.7	mg/kg	0.0015		ND	ND	ND
trans-1,2-Dichloroethene	0.19	mg/kg	ND		ND	ND	ND
trans-1,3-Dichloropropene	NS	mg/kg	ND		ND	ND	ND
trans-1,4-Dichloro-2-butene	NS	mg/kg	ND		ND	ND	ND
Trichloroethene	0.47	mg/kg	ND		ND	ND	ND
Trichlorofluoromethane	NS	mg/kg	ND		ND	ND	ND
Vinyl acetate	NS	mg/kg	ND		ND	ND	ND
Vinyl chloride	0.02	mg/kg	ND		ND	ND	ND
Xylenes, Total	0.26	mg/kg	0.11		ND	ND	ND
No Tentatively Identified Compounds - TIC ()	NS	mg/kg	--		ND	ND	ND
Total TIC Compounds - TIC ()	NS	mg/kg	0.0785	J	--	--	--
Cyclohexane, 1,1,3-trimethyl- - TIC (7.95)	NS	mg/kg	0.00274	NJ	--	--	--
Octane - TIC (6.98)	NS	mg/kg	0.00783	NJ	--	--	--
Octane, 3-methyl- - TIC (8.411)	NS	mg/kg	0.00372	NJ	--	--	--
Unknown - TIC (11.232)	NS	mg/kg	0.005	J	--	--	--
Unknown - TIC (11.526)	NS	mg/kg	0.0134	J	--	--	--
Unknown - TIC (7.777)	NS	mg/kg	0.00238	J	--	--	--
Unknown - TIC (8.794)	NS	mg/kg	0.00357	J	--	--	--
Unknown Alkane - TIC (11.059)	NS	mg/kg	0.00661	J	--	--	--
Unknown Alkane - TIC (11.683)	NS	mg/kg	0.0048	J	--	--	--
Unknown Alkane - TIC (8.265)	NS	mg/kg	0.00382	J	--	--	--
Unknown Benzene - TIC (11.479)	NS	mg/kg	0.00494	J	--	--	--
Unknown Cyclohexane - TIC (6.718)	NS	mg/kg	0.00858	J	--	--	--
Unknown Cyclohexane - TIC (8.223)	NS	mg/kg	0.00348	J	--	--	--

Table 1. Volatile Organic Compounds in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)	SB-3 (7-9)	SB-4 (1-3)
SAMPLING DATE			4/14/2020		4/14/2020	4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-01		L2015639-02	L2015639-03	L2015639-04
				Qual	Qual	Qual	Qual
Unknown Cyclohexane - TIC (8.716)	NS	mg/kg	0.00239	J	--	--	--
Unknown Cyclohexane - TIC (9.282)	NS	mg/kg	0.00519	J	--	--	--

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 2. Semivolatile Organic Compounds in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)		SB-3 (7-9)		SB-4 (1-3)	
SAMPLING DATE			4/14/2020		4/14/2020		4/14/2020		4/14/2020	
LAB SAMPLE ID			L2015639-01		L2015639-02		L2015639-03		L2015639-04	
				Qual		Qual		Qual		Qual
Semivolatile Organics by GC/MS										
1,2,4,5-Tetrachlorobenzene	NS	mg/kg	ND		ND		ND		ND	
1,2,4-Trichlorobenzene	NS	mg/kg	ND		ND		ND		ND	
1,2-Dichlorobenzene	1.1	mg/kg	ND		ND		ND		ND	
1,3-Dichlorobenzene	2.4	mg/kg	ND		ND		ND		ND	
1,4-Dichlorobenzene	1.8	mg/kg	ND		ND		ND		ND	
1,4-Dioxane	0.1	mg/kg	ND		ND		ND		ND	
2,4,5-Trichlorophenol	NS	mg/kg	ND		ND		ND		ND	
2,4,6-Trichlorophenol	NS	mg/kg	ND		ND		ND		ND	
2,4-Dichlorophenol	NS	mg/kg	ND		ND		ND		ND	
2,4-Dimethylphenol	NS	mg/kg	ND		ND		ND		ND	
2,4-Dinitrophenol	NS	mg/kg	ND		ND		ND		ND	
2,4-Dinitrotoluene	NS	mg/kg	ND		ND		ND		ND	
2,6-Dinitrotoluene	NS	mg/kg	ND		ND		ND		ND	
2-Chloronaphthalene	NS	mg/kg	ND		ND		ND		ND	
2-Chlorophenol	NS	mg/kg	ND		ND		ND		ND	
2-Methylnaphthalene	NS	mg/kg	ND		ND		ND		ND	
2-Methylphenol	0.33	mg/kg	ND		ND		ND		ND	
2-Nitroaniline	NS	mg/kg	ND		ND		ND		ND	
2-Nitrophenol	NS	mg/kg	ND		ND		ND		ND	
3,3'-Dichlorobenzidine	NS	mg/kg	ND		ND		ND		ND	
3-Methylphenol/4-Methylphenol	0.33	mg/kg	ND		ND		ND		ND	
3-Nitroaniline	NS	mg/kg	ND		ND		ND		ND	
4,6-Dinitro-o-cresol	NS	mg/kg	ND		ND		ND		ND	
4-Bromophenyl phenyl ether	NS	mg/kg	ND		ND		ND		ND	
4-Chloroaniline	NS	mg/kg	ND		ND		ND		ND	
4-Chlorophenyl phenyl ether	NS	mg/kg	ND		ND		ND		ND	
4-Nitroaniline	NS	mg/kg	ND		ND		ND		ND	
4-Nitrophenol	NS	mg/kg	ND		ND		ND		ND	
Acenaphthene	20	mg/kg	ND		ND		ND		ND	
Acenaphthylene	100	mg/kg	ND		ND		ND		0.069	J
Acetophenone	NS	mg/kg	ND		ND		ND		ND	
Anthracene	100	mg/kg	ND		ND		ND		0.11	
Benzo(a)anthracene	1	mg/kg	0.057	J	0.039	J	0.074	J	0.3	
Benzo(a)pyrene	1	mg/kg	0.072	J	ND		0.068	J	0.25	
Benzo(b)fluoranthene	1	mg/kg	0.11		0.052	J	0.079	J	0.3	
Benzo(ghi)perylene	100	mg/kg	0.064	J	0.028	J	0.043	J	0.13	J
Benzo(k)fluoranthene	0.8	mg/kg	0.044	J	ND		ND		0.14	
Benzoic Acid	NS	mg/kg	ND		ND		ND		ND	
Benzyl Alcohol	NS	mg/kg	ND		ND		ND		ND	
Biphenyl	NS	mg/kg	ND		ND		ND		ND	
Bis(2-chloroethoxy)methane	NS	mg/kg	ND		ND		ND		ND	
Bis(2-chloroethyl)ether	NS	mg/kg	ND		ND		ND		ND	
Bis(2-chloroisopropyl)ether	NS	mg/kg	ND		ND		ND		ND	
Bis(2-ethylhexyl)phthalate	NS	mg/kg	ND		ND		ND		ND	
Butyl benzyl phthalate	NS	mg/kg	ND		ND		ND		ND	
Carbazole	NS	mg/kg	ND		ND		ND		0.022	J

Table 2. Semivolatile Organic Compounds in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)		SB-3 (7-9)		SB-4 (1-3)	
SAMPLING DATE			4/14/2020		4/14/2020		4/14/2020		4/14/2020	
LAB SAMPLE ID			L2015639-01		L2015639-02		L2015639-03		L2015639-04	
				Qual		Qual		Qual		Qual
Chrysene	1	mg/kg	0.078	J	0.037	J	0.072	J	0.25	
Di-n-butylphthalate	NS	mg/kg	ND		ND		ND		ND	
Di-n-octylphthalate	NS	mg/kg	ND		ND		ND		ND	
Dibenzo(a,h)anthracene	0.33	mg/kg	ND		ND		ND		0.027	J
Dibenzofuran	7	mg/kg	ND		ND		ND		0.019	J
Diethyl phthalate	NS	mg/kg	ND		ND		ND		ND	
Dimethyl phthalate	NS	mg/kg	ND		ND		ND		ND	
Fluoranthene	100	mg/kg	0.11		0.05	J	0.13		0.56	
Fluorene	30	mg/kg	ND		ND		0.02	J	0.032	J
Hexachlorobenzene	0.33	mg/kg	ND		ND		ND		ND	
Hexachlorobutadiene	NS	mg/kg	ND		ND		ND		ND	
Hexachlorocyclopentadiene	NS	mg/kg	ND		ND		ND		ND	
Hexachloroethane	NS	mg/kg	ND		ND		ND		ND	
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	0.06	J	0.025	J	0.037	J	0.13	J
Isophorone	NS	mg/kg	ND		ND		ND		ND	
n-Nitrosodi-n-propylamine	NS	mg/kg	ND		ND		ND		ND	
Naphthalene	12	mg/kg	ND		ND		0.026	J	0.033	J
NDPA/DPA	NS	mg/kg	ND		ND		ND		ND	
Nitrobenzene	NS	mg/kg	ND		ND		ND		ND	
p-Chloro-m-cresol	NS	mg/kg	ND		ND		ND		ND	
Pentachlorophenol	0.8	mg/kg	ND		ND		ND		ND	
Phenanthrene	100	mg/kg	0.033	J	0.028	J	0.14		0.31	
Phenol	0.33	mg/kg	ND		ND		ND		ND	
Pyrene	100	mg/kg	0.098	J	0.053	J	0.14		0.5	
No Tentatively Identified Compounds - TIC ()	NS	mg/kg	--		--		ND		--	
Total TIC Compounds - TIC ()	NS	mg/kg	1.63	J	0.303	J	--		2.51	J
Unknown - TIC (1.692)	NS	mg/kg	--		0.151	J	--		--	
Unknown - TIC (11.752)	NS	mg/kg	0.783	J	--		--		--	
Unknown - TIC (11.827)	NS	mg/kg	--		--		--		0.798	J
Unknown - TIC (2.002)	NS	mg/kg	--		0.152	J	--		--	
Unknown - TIC (7.296)	NS	mg/kg	--		--		--		0.186	J
Unknown - TIC (7.355)	NS	mg/kg	--		--		--		0.183	J
Unknown - TIC (7.991)	NS	mg/kg	--		--		--		0.353	J
Unknown - TIC (8.039)	NS	mg/kg	0.321	J	--		--		--	
Unknown Organic Acid - TIC (8.092)	NS	mg/kg	0.529	J	--		--		--	
Unknown Organic Acid - TIC (8.098)	NS	mg/kg	--		--		--		0.989	J

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 3. Metals in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)		SB-3 (7-9)		SB-4 (1-3)	
SAMPLING DATE			4/14/2020		4/14/2020		4/14/2020		4/14/2020	
LAB SAMPLE ID			L2015639-01		L2015639-02		L2015639-03		L2015639-04	
				Qual		Qual		Qual		Qual
General Chemistry										
Cyanide, Total	27	mg/kg	ND		ND		ND		ND	
Total Metals										
Aluminum, Total	NS	mg/kg	1830		988		583		1270	
Antimony, Total	NS	mg/kg	ND		ND		ND		0.363	J
Arsenic, Total	13	mg/kg	6.04		1.5		1.33		2.19	
Barium, Total	350	mg/kg	12.3		7.45		5.28		12.6	
Beryllium, Total	7.2	mg/kg	0.042	J	0.05	J	ND		0.059	J
Cadmium, Total	2.5	mg/kg	0.118	J	ND		ND		ND	
Calcium, Total	NS	mg/kg	36000		627		342		1120	
Chromium, Total	NS	mg/kg	4.36		3.49		2.04		4.08	
Cobalt, Total	NS	mg/kg	1.63	J	0.98	J	0.536	J	1.21	J
Copper, Total	50	mg/kg	11.4		4.69		3.75		8.99	
Iron, Total	NS	mg/kg	4480		2430		1740		3090	
Lead, Total	63	mg/kg	24.5		55.6		5.43		17.9	
Magnesium, Total	NS	mg/kg	20900		363		182		503	
Manganese, Total	1600	mg/kg	86.6		21.6		9.04		26.6	
Mercury, Total	0.18	mg/kg	**0.193**		ND		ND		ND	
Nickel, Total	30	mg/kg	3.62		1.98	J	1.2	J	2.64	
Potassium, Total	NS	mg/kg	163	J	218		134	J	226	
Selenium, Total	3.9	mg/kg	ND		ND		ND		ND	
Silver, Total	2	mg/kg	ND		ND		ND		ND	
Sodium, Total	NS	mg/kg	112	J	17.6	J	13.8	J	18.1	J
Thallium, Total	NS	mg/kg	ND		ND		ND		ND	
Vanadium, Total	NS	mg/kg	7.82		4.17		2.32		4.94	
Zinc, Total	109	mg/kg	22.6		12.7		7.2		18.7	

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 4. Pesticides and Polychlorinated Biphenyls in Soil
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-UNRES	Units	SB-1 (0-2)		SB-2 (2-4)		SB-3 (7-9)		SB-4 (1-3)	
SAMPLING DATE			4/14/2020		4/14/2020		4/14/2020		4/14/2020	
LAB SAMPLE ID			L2015639-01		L2015639-02		L2015639-03		L2015639-04	
				Qual		Qual		Qual		Qual
Polychlorinated Biphenyls by GC										
Aroclor 1016	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1221	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1232	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1242	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1248	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1254	0.1	mg/kg	0.018	J	ND		ND		0.0117	J
Aroclor 1260	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1262	0.1	mg/kg	ND		ND		ND		ND	
Aroclor 1268	0.1	mg/kg	ND		ND		ND		ND	
PCBs, Total	0.1	mg/kg	0.018	J	ND		ND		0.0117	J
Organochlorine Pesticides by GC										
4,4'-DDD	0.0033	mg/kg	ND		ND		ND		ND	
4,4'-DDE	0.0033	mg/kg	**0.00467**		0.000601	J	ND		0.00114	J
4,4'-DDT	0.0033	mg/kg	0.00266	J	ND		ND		0.00247	J
Aldrin	0.005	mg/kg	ND		ND		ND		ND	
Alpha-BHC	0.02	mg/kg	ND		ND		ND		ND	
Beta-BHC	0.036	mg/kg	ND		ND		ND		ND	
Chlordane	NS	mg/kg	ND		ND		ND		ND	
cis-Chlordane	0.094	mg/kg	ND		ND		ND		ND	
Delta-BHC	0.04	mg/kg	ND		ND		ND		ND	
Dieldrin	0.005	mg/kg	ND		ND		ND		ND	
Endosulfan I	2.4	mg/kg	ND		ND		ND		ND	
Endosulfan II	2.4	mg/kg	ND		ND		ND		ND	
Endosulfan sulfate	2.4	mg/kg	ND		ND		ND		ND	
Endrin	0.014	mg/kg	ND		ND		ND		ND	
Endrin aldehyde	NS	mg/kg	ND		ND		ND		ND	
Endrin ketone	NS	mg/kg	ND		ND		ND		ND	
Heptachlor	0.042	mg/kg	ND		ND		ND		ND	
Heptachlor epoxide	NS	mg/kg	ND		ND		ND		ND	
Lindane	0.1	mg/kg	ND		ND		ND		ND	
Methoxychlor	NS	mg/kg	ND		ND		ND		ND	
Toxaphene	NS	mg/kg	ND		ND		ND		ND	
trans-Chlordane	NS	mg/kg	ND		ND		ND		ND	

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-UNRES SCOs

NY-UNRES = 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

J = Estimated value

ND = Not detected

NS = No standard

Table 5. Volatile Organic Compounds in Groundwater
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1	MW-2	FIELD BLANK	TRIP BLANK
SAMPLING DATE			4/14/2020	4/14/2020	4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-05	L2015639-06	L2015639-07	L2015639-08
			Qual	Qual	Qual	Qual
Microextractables by GC						
1,2-Dibromo-3-chloropropane	0.04	ug/l	ND	ND	--	--
1,2-Dibromoethane	0.0006	ug/l	ND	ND	--	--
Volatile Organics by GC/MS						
1,1,1,2-Tetrachloroethane	5	ug/l	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ug/l	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ug/l	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ug/l	ND	ND	ND	ND
1,1-Dichloroethane	5	ug/l	ND	ND	ND	ND
1,1-Dichloroethene	5	ug/l	ND	ND	ND	ND
1,1-Dichloropropene	5	ug/l	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ug/l	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ug/l	ND	ND	ND	ND
1,2,4,5-Tetramethylbenzene	5	ug/l	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ug/l	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ug/l	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.04	ug/l	ND	ND	ND	ND
1,2-Dibromoethane	0.0006	ug/l	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ug/l	ND	ND	ND	ND
1,2-Dichloroethane	0.6	ug/l	ND	ND	ND	ND
1,2-Dichloroethene, Total	NS	ug/l	ND	ND	ND	ND
1,2-Dichloropropane	1	ug/l	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ug/l	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ug/l	ND	ND	ND	ND
1,3-Dichloropropane	5	ug/l	ND	ND	ND	ND
1,3-Dichloropropene, Total	NS	ug/l	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ug/l	ND	ND	ND	ND
1,4-Dioxane	NS	ug/l	ND	ND	ND	ND
2,2-Dichloropropane	5	ug/l	ND	ND	ND	ND
2-Butanone	50	ug/l	ND	ND	ND	ND
2-Hexanone	50	ug/l	ND	ND	ND	ND
4-Methyl-2-pentanone	NS	ug/l	ND	ND	ND	ND
Acetone	50	ug/l	ND	ND	ND	ND
Acrylonitrile	5	ug/l	ND	ND	ND	ND
Benzene	1	ug/l	ND	ND	ND	ND
Bromobenzene	5	ug/l	ND	ND	ND	ND
Bromochloromethane	5	ug/l	ND	ND	ND	ND
Bromodichloromethane	50	ug/l	ND	ND	ND	ND
Bromoform	50	ug/l	ND	ND	ND	ND
Bromomethane	5	ug/l	ND	ND	ND	ND
Carbon disulfide	60	ug/l	ND	ND	ND	ND
Carbon tetrachloride	5	ug/l	ND	ND	ND	ND
Chlorobenzene	5	ug/l	ND	ND	ND	ND
Chloroethane	5	ug/l	ND	ND	ND	ND
Chloroform	7	ug/l	ND	ND	ND	ND
Chloromethane	NS	ug/l	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ug/l	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	ug/l	ND	ND	ND	ND

Table 5. Volatile Organic Compounds in Groundwater
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1	MW-2	FIELD BLANK	TRIP BLANK
SAMPLING DATE			4/14/2020	4/14/2020	4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-05	L2015639-06	L2015639-07	L2015639-08
			Qual	Qual	Qual	Qual
Dibromochloromethane	50	ug/l	ND	ND	ND	ND
Dibromomethane	5	ug/l	ND	ND	ND	ND
Dichlorodifluoromethane	5	ug/l	ND	ND	ND	ND
Ethyl ether	NS	ug/l	ND	ND	ND	ND
Ethylbenzene	5	ug/l	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ug/l	ND	ND	ND	ND
Isopropylbenzene	5	ug/l	ND	ND	ND	ND
Methyl tert butyl ether	10	ug/l	ND	ND	ND	ND
Methylene chloride	5	ug/l	ND	ND	ND	ND
n-Butylbenzene	5	ug/l	ND	ND	ND	ND
n-Propylbenzene	5	ug/l	ND	ND	ND	ND
Naphthalene	10	ug/l	ND	ND	ND	ND
o-Chlorotoluene	5	ug/l	ND	ND	ND	ND
o-Xylene	5	ug/l	ND	ND	ND	ND
p-Chlorotoluene	5	ug/l	ND	ND	ND	ND
p-Diethylbenzene	NS	ug/l	ND	ND	ND	ND
p-Ethyltoluene	NS	ug/l	ND	ND	ND	ND
p-Isopropyltoluene	5	ug/l	ND	ND	ND	ND
p/m-Xylene	5	ug/l	ND	ND	ND	ND
sec-Butylbenzene	5	ug/l	ND	ND	ND	ND
Styrene	5	ug/l	ND	ND	ND	ND
tert-Butylbenzene	5	ug/l	ND	ND	ND	ND
Tetrachloroethene	5	ug/l	ND	ND	ND	ND
Toluene	5	ug/l	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	ug/l	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	ug/l	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	5	ug/l	ND	ND	ND	ND
Trichloroethene	5	ug/l	ND	ND	ND	ND
Trichlorofluoromethane	5	ug/l	ND	ND	ND	ND
Vinyl acetate	NS	ug/l	ND	ND	ND	ND
Vinyl chloride	2	ug/l	ND	ND	ND	ND
Xylenes, Total	NS	ug/l	ND	ND	ND	ND
No Tentatively Identified Compounds - TIC ()	NS	ug/l	ND	ND	ND	ND

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-AWQS

NY-AWQS = NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Class GA Water Quality Standards and Guidance Values

ND = Not detected

NS = No standard

-- = Not analyzed

Table 6. Semivolatile Organic Compounds in Groundwater
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1	MW-2
SAMPLING DATE			4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-05	L2015639-06
			Qual	Qual
Semivolatile Organics by GC/MS				
1,2,4,5-Tetrachlorobenzene	5	ug/l	ND	ND
1,2,4-Trichlorobenzene	5	ug/l	ND	ND
1,2-Dichlorobenzene	3	ug/l	ND	ND
1,3-Dichlorobenzene	3	ug/l	ND	ND
1,4-Dichlorobenzene	3	ug/l	ND	ND
2,4,5-Trichlorophenol	NS	ug/l	ND	ND
2,4,6-Trichlorophenol	NS	ug/l	ND	ND
2,4-Dichlorophenol	1	ug/l	ND	ND
2,4-Dimethylphenol	50	ug/l	ND	ND
2,4-Dinitrophenol	10	ug/l	ND	ND
2,4-Dinitrotoluene	5	ug/l	ND	ND
2,6-Dinitrotoluene	5	ug/l	ND	ND
2-Chlorophenol	NS	ug/l	ND	ND
2-Methylphenol	NS	ug/l	ND	ND
2-Nitroaniline	5	ug/l	ND	ND
2-Nitrophenol	NS	ug/l	ND	ND
3,3'-Dichlorobenzidine	5	ug/l	ND	ND
3-Methylphenol/4-Methylphenol	NS	ug/l	ND	ND
3-Nitroaniline	5	ug/l	ND	ND
4,6-Dinitro-o-cresol	NS	ug/l	ND	ND
4-Bromophenyl phenyl ether	NS	ug/l	ND	ND
4-Chloroaniline	5	ug/l	ND	ND
4-Chlorophenyl phenyl ether	NS	ug/l	ND	ND
4-Nitroaniline	5	ug/l	ND	ND
4-Nitrophenol	NS	ug/l	ND	ND
Acetophenone	NS	ug/l	ND	ND
Benzoic Acid	NS	ug/l	ND	ND
Benzyl Alcohol	NS	ug/l	ND	ND
Biphenyl	NS	ug/l	ND	ND
Bis(2-chloroethoxy)methane	5	ug/l	ND	ND
Bis(2-chloroethyl)ether	1	ug/l	ND	ND
Bis(2-chloroisopropyl)ether	5	ug/l	ND	ND
Bis(2-ethylhexyl)phthalate	5	ug/l	ND	ND
Butyl benzyl phthalate	50	ug/l	ND	ND
Carbazole	NS	ug/l	ND	ND
Di-n-butylphthalate	50	ug/l	ND	ND
Di-n-octylphthalate	50	ug/l	ND	ND
Dibenzofuran	NS	ug/l	ND	ND
Diethyl phthalate	50	ug/l	ND	ND
Dimethyl phthalate	50	ug/l	ND	ND
Hexachlorocyclopentadiene	5	ug/l	ND	ND
Isophorone	50	ug/l	ND	ND
n-Nitrosodi-n-propylamine	NS	ug/l	ND	ND

Table 6. Semivolatile Organic Compounds in Groundwater
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1		MW-2	
SAMPLING DATE			4/14/2020		4/14/2020	
LAB SAMPLE ID			L2015639-05		L2015639-06	
				Qual		Qual
NDPA/DPA	50	ug/l	ND		ND	
Nitrobenzene	0.4	ug/l	ND		ND	
p-Chloro-m-cresol	NS	ug/l	ND		ND	
Phenol	1	ug/l	ND		ND	
Total TIC Compounds - TIC ()	NS	ug/l	1.85	J	--	
No Tentatively Identified Compounds - TIC ()	NS	ug/l	--		ND	
Unknown - TIC (2.487)	NS	ug/l	1.85	J	--	
Semivolatile Organics by GC/MS-SIM						
2-Chloronaphthalene	10	ug/l	ND		ND	
2-Methylnaphthalene	NS	ug/l	ND		ND	
Acenaphthene	20	ug/l	ND		ND	
Acenaphthylene	NS	ug/l	ND		ND	
Anthracene	50	ug/l	ND		ND	
Benzo(a)anthracene	0.002	ug/l	ND		ND	
Benzo(a)pyrene	NS	ug/l	ND		ND	
Benzo(b)fluoranthene	0.002	ug/l	**0.01**	**J**	ND	
Benzo(ghi)perylene	NS	ug/l	ND		ND	
Benzo(k)fluoranthene	0.002	ug/l	ND		ND	
Chrysene	0.002	ug/l	**0.01**	**J**	ND	
Dibenzo(a,h)anthracene	NS	ug/l	ND		ND	
Fluoranthene	50	ug/l	ND		ND	
Fluorene	50	ug/l	0.02	J	ND	
Hexachlorobenzene	0.04	ug/l	ND		ND	
Hexachlorobutadiene	0.5	ug/l	ND		ND	
Hexachloroethane	5	ug/l	ND		ND	
Indeno(1,2,3-cd)pyrene	0.002	ug/l	ND		ND	
Naphthalene	10	ug/l	ND		ND	
Pentachlorophenol	1	ug/l	ND		ND	
Phenanthrene	50	ug/l	0.08	J	0.04	J
Pyrene	50	ug/l	ND		ND	
1,4 Dioxane by 8270D-SIM						
1,4-Dioxane	NS	ug/l	ND		ND	

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-AWQS

NY-AWQS = NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Class GA Water Quality Standards and Guidance Values

J = Estimated value

ND = Not detected

NS = No standard

-- = Not analyzed

Table 7. Total and Dissolved Metals in Groundwater
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1		MW-2	
SAMPLING DATE			4/14/2020		4/14/2020	
LAB SAMPLE ID			L2015639-05		L2015639-06	
				Qual		Qual
General Chemistry						
Cyanide, Total	200	ug/l	ND		ND	
Total Metals						
Aluminum, Total	NS	ug/l	73.1		1640	
Antimony, Total	3	ug/l	0.9	J	ND	
Arsenic, Total	25	ug/l	3.51		1.41	
Barium, Total	1000	ug/l	15.91		4.6	
Beryllium, Total	3	ug/l	ND		ND	
Cadmium, Total	5	ug/l	ND		ND	
Calcium, Total	NS	ug/l	82100		35200	
Chromium, Total	50	ug/l	0.88	J	1.74	
Cobalt, Total	NS	ug/l	0.65		0.41	J
Copper, Total	200	ug/l	1.46		1.19	
Iron, Total	300	ug/l	**633**		**973**	
Lead, Total	25	ug/l	0.54	J	0.69	J
Magnesium, Total	35000	ug/l	13100		6770	
Manganese, Total	300	ug/l	58.92		25.95	
Mercury, Total	0.7	ug/l	0.14	J	0.13	J
Nickel, Total	100	ug/l	1.63	J	1.26	J
Potassium, Total	NS	ug/l	4120		2490	
Selenium, Total	10	ug/l	2.37	J	ND	
Silver, Total	50	ug/l	ND		ND	
Sodium, Total	20000	ug/l	**75100**		**38800**	
Thallium, Total	0.5	ug/l	ND		ND	
Vanadium, Total	NS	ug/l	2.12	J	2.24	J
Zinc, Total	2000	ug/l	ND		ND	
Dissolved Metals						
Aluminum, Dissolved	NS	ug/l	6.81	J	18.9	
Antimony, Dissolved	3	ug/l	0.88	J	ND	
Arsenic, Dissolved	25	ug/l	1.98		1.13	
Barium, Dissolved	1000	ug/l	15.59		3.04	
Beryllium, Dissolved	3	ug/l	ND		ND	
Cadmium, Dissolved	5	ug/l	ND		ND	
Calcium, Dissolved	NS	ug/l	87800		34200	
Chromium, Dissolved	50	ug/l	0.4	J	0.42	J
Cobalt, Dissolved	NS	ug/l	0.74		0.22	J
Copper, Dissolved	200	ug/l	1.26		0.75	J
Iron, Dissolved	300	ug/l	129		254	
Lead, Dissolved	25	ug/l	1.17		0.93	J
Magnesium, Dissolved	35000	ug/l	12300		6290	
Manganese, Dissolved	300	ug/l	63.24		21.58	
Mercury, Dissolved	0.7	ug/l	ND		ND	
Nickel, Dissolved	100	ug/l	1.57	J	0.83	J
Potassium, Dissolved	NS	ug/l	4200		2320	
Selenium, Dissolved	10	ug/l	ND		ND	
Silver, Dissolved	50	ug/l	ND		ND	
Sodium, Dissolved	20000	ug/l	**72600**		**37000**	
Thallium, Dissolved	0.5	ug/l	ND		ND	
Vanadium, Dissolved	NS	ug/l	1.85	J	ND	
Zinc, Dissolved	2000	ug/l	ND		ND	

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-AWQS

NY-AWQS = NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Class GA Water Quality Standards and Guidance Values

J = Estimated value

ND = Not detected

NS = No standard

Table 8. Pesticides and Polychlorinated Biphenyls in Groundwater
Long Beach Wastewater Treatment Plant
Phase II Environmental Site Investigation

CLIENT SAMPLE ID	NY-AWQS	Units	MW-1	MW-2
SAMPLING DATE			4/14/2020	4/14/2020
LAB SAMPLE ID			L2015639-05	L2015639-06
			Qual	Qual
Polychlorinated Biphenyls by GC				
Aroclor 1016	0.09	ug/l	ND	ND
Aroclor 1221	0.09	ug/l	ND	ND
Aroclor 1232	0.09	ug/l	ND	ND
Aroclor 1242	0.09	ug/l	ND	ND
Aroclor 1248	0.09	ug/l	ND	ND
Aroclor 1254	0.09	ug/l	ND	ND
Aroclor 1260	0.09	ug/l	ND	ND
Aroclor 1262	0.09	ug/l	ND	ND
Aroclor 1268	0.09	ug/l	ND	ND
PCBs, Total	NS	ug/l	ND	ND
Organochlorine Pesticides by GC				
4,4'-DDD	0.3	ug/l	ND	ND
4,4'-DDE	0.2	ug/l	ND	ND
4,4'-DDT	0.2	ug/l	ND	ND
Aldrin	NS	ug/l	ND	ND
Alpha-BHC	0.01	ug/l	ND	ND
Beta-BHC	0.04	ug/l	ND	ND
Chlordane	0.05	ug/l	ND	ND
cis-Chlordane	NS	ug/l	ND	ND
Delta-BHC	0.04	ug/l	ND	ND
Dieldrin	0.004	ug/l	ND	ND
Endosulfan I	NS	ug/l	ND	ND
Endosulfan II	NS	ug/l	ND	ND
Endosulfan sulfate	NS	ug/l	ND	ND
Endrin	NS	ug/l	ND	ND
Endrin aldehyde	5	ug/l	ND	ND
Endrin ketone	5	ug/l	ND	ND
Heptachlor	0.04	ug/l	ND	ND
Heptachlor epoxide	0.03	ug/l	ND	ND
Lindane	0.05	ug/l	ND	ND
Methoxychlor	35	ug/l	ND	ND
Toxaphene	0.06	ug/l	ND	ND
trans-Chlordane	NS	ug/l	ND	ND

Notes:

Bold and shaded yellow value indicates concentration exceeds NY-AWQS

NY-AWQS = NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Class GA Water Quality Standards and Guidance Values

J = Estimated value

ND = Not detected

NS = No standard

Attachment 1
Laboratory Deliverables

ANALYTICAL REPORT

Lab Number:	L2015639
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	LONG BEACH WWTP
Project Number:	LONG BEACH WWTP
Report Date:	04/21/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2015639-01	SB-1 (0-2)	SOIL	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 10:15	04/14/20
L2015639-02	SB-2 (2-4)	SOIL	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 10:45	04/14/20
L2015639-03	SB-3 (7-9)	SOIL	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 12:25	04/14/20
L2015639-04	SB-4 (1-3)	SOIL	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 12:30	04/14/20
L2015639-05	MW-1	WATER	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 11:40	04/14/20
L2015639-06	MW-2	WATER	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 13:00	04/14/20
L2015639-07	FIELD BLANK	WATER	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 10:00	04/14/20
L2015639-08	TRIP BLANK	WATER	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 00:00	04/14/20

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015639
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015639
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Semivolatile Organics

The WG1362106-2/-3 LCS/LCSD recoveries, associated with L2015639-05 and -06, are below the acceptance criteria for benzoic acid (0%/0%); however, it has been identified as a "difficult" analyte. The results of the associated samples are reported.

Total Metals

L2015639-01 through -04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

Cyanide, Total

The WG1361380-3 LCSD recovery for cyanide, total (68%), associated with L2015639-01 through -04, is outside our in-house acceptance criteria, but within the vendor-certified acceptance limits. The results of the original analyses are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 04/21/20

ORGANICS

VOLATILES

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01
Client ID: SB-1 (0-2)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:15
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/16/20 08:24
Analyst: JC
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	4.9	2.2	1
1,1-Dichloroethane	ND		ug/kg	0.98	0.14	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	0.98	0.22	1
1,2-Dichloropropane	ND		ug/kg	0.98	0.12	1
Dibromochloromethane	ND		ug/kg	0.98	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	0.98	0.26	1
Tetrachloroethene	ND		ug/kg	0.49	0.19	1
Chlorobenzene	ND		ug/kg	0.49	0.12	1
Trichlorofluoromethane	ND		ug/kg	3.9	0.68	1
1,2-Dichloroethane	ND		ug/kg	0.98	0.25	1
1,1,1-Trichloroethane	ND		ug/kg	0.49	0.16	1
Bromodichloromethane	ND		ug/kg	0.49	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	0.98	0.27	1
cis-1,3-Dichloropropene	ND		ug/kg	0.49	0.15	1
1,3-Dichloropropene, Total	ND		ug/kg	0.49	0.15	1
1,1-Dichloropropene	ND		ug/kg	0.49	0.16	1
Bromoform	ND		ug/kg	3.9	0.24	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.49	0.16	1
Benzene	ND		ug/kg	0.49	0.16	1
Toluene	1.5		ug/kg	0.98	0.53	1
Ethylbenzene	14		ug/kg	0.98	0.14	1
Chloromethane	ND		ug/kg	3.9	0.91	1
Bromomethane	ND		ug/kg	2.0	0.57	1
Vinyl chloride	ND		ug/kg	0.98	0.33	1
Chloroethane	ND		ug/kg	2.0	0.44	1
1,1-Dichloroethene	ND		ug/kg	0.98	0.23	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.13	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01 Date Collected: 04/14/20 10:15

Client ID: SB-1 (0-2) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.49	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	78		ug/kg	2.0	0.55	1
o-Xylene	32		ug/kg	0.98	0.28	1
Xylenes, Total	110		ug/kg	0.98	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.98	0.17	1
1,2-Dichloroethene, Total	ND		ug/kg	0.98	0.13	1
Dibromomethane	ND		ug/kg	2.0	0.23	1
Styrene	ND		ug/kg	0.98	0.19	1
Dichlorodifluoromethane	ND		ug/kg	9.8	0.89	1
Acetone	200		ug/kg	9.8	4.7	1
Carbon disulfide	ND		ug/kg	9.8	4.4	1
2-Butanone	ND		ug/kg	9.8	2.2	1
Vinyl acetate	ND		ug/kg	9.8	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	9.8	1.2	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.12	1
2-Hexanone	ND		ug/kg	9.8	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.20	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	0.98	0.27	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.16	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.49	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.14	1
n-Butylbenzene	ND		ug/kg	0.98	0.16	1
sec-Butylbenzene	ND		ug/kg	0.98	0.14	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.10	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	2.9	0.98	1
Hexachlorobutadiene	ND		ug/kg	3.9	0.16	1
Isopropylbenzene	0.49	J	ug/kg	0.98	0.11	1
p-Isopropyltoluene	0.15	J	ug/kg	0.98	0.11	1
Naphthalene	ND		ug/kg	3.9	0.64	1
Acrylonitrile	ND		ug/kg	3.9	1.1	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01 Date Collected: 04/14/20 10:15

Client ID: SB-1 (0-2) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	0.53	J	ug/kg	0.98	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.31	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.26	1
1,3,5-Trimethylbenzene	1.3	J	ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	3.6		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	78	34.	1
p-Diethylbenzene	0.88	J	ug/kg	2.0	0.17	1
p-Ethyltoluene	3.8		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	4.9	1.4	1

Tentatively Identified Compounds				
Total TIC Compounds	78.5	J	ug/kg	1
Unknown Cyclohexane	3.48	J	ug/kg	1
Unknown Cyclohexane	8.58	J	ug/kg	1
Unknown Cyclohexane	5.19	J	ug/kg	1
Unknown	2.38	J	ug/kg	1
Unknown	5.00	J	ug/kg	1
Octane, 3-methyl-	3.72	NJ	ug/kg	1
Unknown Alkane	3.82	J	ug/kg	1
Unknown Alkane	4.80	J	ug/kg	1
Unknown Benzene	4.94	J	ug/kg	1
Octane	7.83	NJ	ug/kg	1
Unknown	3.57	J	ug/kg	1
Unknown	13.4	J	ug/kg	1
Unknown Alkane	6.61	J	ug/kg	1
Unknown Cyclohexane	2.39	J	ug/kg	1
Cyclohexane, 1,1,3-trimethyl-	2.74	NJ	ug/kg	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01 Date Collected: 04/14/20 10:15

Client ID: SB-1 (0-2) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	117		70-130
Dibromofluoromethane	93		70-130

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02
Client ID: SB-2 (2-4)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:45
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/16/20 08:49
Analyst: JC
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.8	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.14	1
Dibromochloromethane	ND		ug/kg	1.2	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.31	1
Tetrachloroethene	ND		ug/kg	0.58	0.23	1
Chlorobenzene	ND		ug/kg	0.58	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.6	0.80	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.30	1
1,1,1-Trichloroethane	ND		ug/kg	0.58	0.19	1
Bromodichloromethane	ND		ug/kg	0.58	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.58	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.58	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.58	0.18	1
Bromoform	ND		ug/kg	4.6	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.58	0.19	1
Benzene	ND		ug/kg	0.58	0.19	1
Toluene	ND		ug/kg	1.2	0.63	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	4.6	1.1	1
Bromomethane	ND		ug/kg	2.3	0.67	1
Vinyl chloride	ND		ug/kg	1.2	0.39	1
Chloroethane	ND		ug/kg	2.3	0.52	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.16	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02 Date Collected: 04/14/20 10:45

Client ID: SB-2 (2-4) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.58	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.3	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.3	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.23	1
p/m-Xylene	ND		ug/kg	2.3	0.65	1
o-Xylene	ND		ug/kg	1.2	0.34	1
Xylenes, Total	ND		ug/kg	1.2	0.34	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.3	0.27	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.0	1
Acetone	ND		ug/kg	12	5.6	1
Carbon disulfide	ND		ug/kg	12	5.2	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.3	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.3	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.3	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.32	1
1,3-Dichloropropane	ND		ug/kg	2.3	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.58	0.15	1
Bromobenzene	ND		ug/kg	2.3	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.19	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.3	0.14	1
o-Chlorotoluene	ND		ug/kg	2.3	0.22	1
p-Chlorotoluene	ND		ug/kg	2.3	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.5	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.6	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.12	1
Naphthalene	ND		ug/kg	4.6	0.75	1
Acrylonitrile	ND		ug/kg	4.6	1.3	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02 Date Collected: 04/14/20 10:45

Client ID: SB-2 (2-4) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.3	0.37	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.3	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.3	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.3	0.38	1
1,4-Dioxane	ND		ug/kg	92	40.	1
p-Diethylbenzene	ND		ug/kg	2.3	0.20	1
p-Ethyltoluene	ND		ug/kg	2.3	0.44	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.3	0.22	1
Ethyl ether	ND		ug/kg	2.3	0.39	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.8	1.6	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	93		70-130

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03
Client ID: SB-3 (7-9)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:25
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/16/20 09:15
Analyst: JC
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.56	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.18	1
Benzene	ND		ug/kg	0.56	0.18	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.65	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.15	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03 Date Collected: 04/14/20 12:25

Client ID: SB-3 (7-9) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	ND		ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.56	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.72	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03 Date Collected: 04/14/20 12:25

Client ID: SB-3 (7-9) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	89	39.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.43	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	1.6	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	93		70-130

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04
Client ID: SB-4 (1-3)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:30
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 04/16/20 09:41
Analyst: JC
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	7.4	3.4	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.21	1
Chloroform	ND		ug/kg	2.2	0.21	1
Carbon tetrachloride	ND		ug/kg	1.5	0.34	1
1,2-Dichloropropane	ND		ug/kg	1.5	0.18	1
Dibromochloromethane	ND		ug/kg	1.5	0.21	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.39	1
Tetrachloroethene	ND		ug/kg	0.74	0.29	1
Chlorobenzene	ND		ug/kg	0.74	0.19	1
Trichlorofluoromethane	ND		ug/kg	5.9	1.0	1
1,2-Dichloroethane	ND		ug/kg	1.5	0.38	1
1,1,1-Trichloroethane	ND		ug/kg	0.74	0.25	1
Bromodichloromethane	ND		ug/kg	0.74	0.16	1
trans-1,3-Dichloropropene	ND		ug/kg	1.5	0.40	1
cis-1,3-Dichloropropene	ND		ug/kg	0.74	0.23	1
1,3-Dichloropropene, Total	ND		ug/kg	0.74	0.23	1
1,1-Dichloropropene	ND		ug/kg	0.74	0.23	1
Bromoform	ND		ug/kg	5.9	0.36	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.74	0.24	1
Benzene	ND		ug/kg	0.74	0.24	1
Toluene	ND		ug/kg	1.5	0.80	1
Ethylbenzene	ND		ug/kg	1.5	0.21	1
Chloromethane	ND		ug/kg	5.9	1.4	1
Bromomethane	ND		ug/kg	2.9	0.86	1
Vinyl chloride	ND		ug/kg	1.5	0.49	1
Chloroethane	ND		ug/kg	2.9	0.67	1
1,1-Dichloroethene	ND		ug/kg	1.5	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	2.2	0.20	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04 Date Collected: 04/14/20 12:30

Client ID: SB-4 (1-3) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.74	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	2.9	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	2.9	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	2.9	0.25	1
Methyl tert butyl ether	ND		ug/kg	2.9	0.30	1
p/m-Xylene	ND		ug/kg	2.9	0.82	1
o-Xylene	ND		ug/kg	1.5	0.43	1
Xylenes, Total	ND		ug/kg	1.5	0.43	1
cis-1,2-Dichloroethene	ND		ug/kg	1.5	0.26	1
1,2-Dichloroethene, Total	ND		ug/kg	1.5	0.20	1
Dibromomethane	ND		ug/kg	2.9	0.35	1
Styrene	ND		ug/kg	1.5	0.29	1
Dichlorodifluoromethane	ND		ug/kg	15	1.3	1
Acetone	ND		ug/kg	15	7.1	1
Carbon disulfide	ND		ug/kg	15	6.7	1
2-Butanone	ND		ug/kg	15	3.3	1
Vinyl acetate	ND		ug/kg	15	3.2	1
4-Methyl-2-pentanone	ND		ug/kg	15	1.9	1
1,2,3-Trichloropropane	ND		ug/kg	2.9	0.19	1
2-Hexanone	ND		ug/kg	15	1.7	1
Bromochloromethane	ND		ug/kg	2.9	0.30	1
2,2-Dichloropropane	ND		ug/kg	2.9	0.30	1
1,2-Dibromoethane	ND		ug/kg	1.5	0.41	1
1,3-Dichloropropane	ND		ug/kg	2.9	0.25	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.74	0.19	1
Bromobenzene	ND		ug/kg	2.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.5	0.25	1
sec-Butylbenzene	ND		ug/kg	1.5	0.22	1
tert-Butylbenzene	ND		ug/kg	2.9	0.17	1
o-Chlorotoluene	ND		ug/kg	2.9	0.28	1
p-Chlorotoluene	ND		ug/kg	2.9	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	1.5	1
Hexachlorobutadiene	ND		ug/kg	5.9	0.25	1
Isopropylbenzene	ND		ug/kg	1.5	0.16	1
p-Isopropyltoluene	ND		ug/kg	1.5	0.16	1
Naphthalene	ND		ug/kg	5.9	0.96	1
Acrylonitrile	ND		ug/kg	5.9	1.7	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04 Date Collected: 04/14/20 12:30

Client ID: SB-4 (1-3) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
n-Propylbenzene	ND		ug/kg	1.5	0.25	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.9	0.47	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.9	0.40	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.9	0.28	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.9	0.49	1
1,4-Dioxane	ND		ug/kg	120	52.	1
p-Diethylbenzene	ND		ug/kg	2.9	0.26	1
p-Ethyltoluene	ND		ug/kg	2.9	0.57	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.9	0.28	1
Ethyl ether	ND		ug/kg	2.9	0.50	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	7.4	2.1	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	94		70-130

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8011
Analytical Date: 04/16/20 14:06
Analyst: AMM

Extraction Method: EPA 8011
Extraction Date: 04/16/20 09:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.004	1	A
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	0.005	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/16/20 13:24
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05 Date Collected: 04/14/20 11:40

Client ID: MW-1 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05 Date Collected: 04/14/20 11:40

Client ID: MW-1 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8011
Analytical Date: 04/16/20 14:23
Analyst: AMM

Extraction Method: EPA 8011
Extraction Date: 04/16/20 09:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Microextractables by GC - Westborough Lab							
1,2-Dibromoethane	ND		ug/l	0.010	0.004	1	A
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	0.005	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/16/20 13:47
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06 Date Collected: 04/14/20 13:00

Client ID: MW-2 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06 Date Collected: 04/14/20 13:00

Client ID: MW-2 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-07
Client ID: FIELD BLANK
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/16/20 14:10
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-07 Date Collected: 04/14/20 10:00

Client ID: FIELD BLANK Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-07 Date Collected: 04/14/20 10:00

Client ID: FIELD BLANK Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	100		70-130

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-08
Client ID: TRIP BLANK
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 00:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/16/20 14:33
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-08 Date Collected: 04/14/20 00:00

Client ID: TRIP BLANK Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-08 Date Collected: 04/14/20 00:00

Client ID: TRIP BLANK Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 07:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1361685-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	0.18	J	ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 07:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1361685-5					
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 07:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1361685-5					
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 07:59
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01-04 Batch: WG1361685-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	91		70-130

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8011
Analytical Date: 04/16/20 11:39
Analyst: AMM

Extraction Method: EPA 8011
Extraction Date: 04/16/20 09:56

Parameter	Result	Qualifier	Units	RL	MDL	
Microextractables by GC - Westborough Lab for sample(s): 05-06 Batch: WG1361693-1						
1,2-Dibromoethane	ND		ug/l	0.010	0.004	A
1,2-Dibromo-3-chloropropane	ND		ug/l	0.010	0.005	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 08:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG1361817-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 08:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG1361817-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 08:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG1361817-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/16/20 08:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG1361817-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1361685-3 WG1361685-4								
Methylene chloride	88		84		70-130	5		30
1,1-Dichloroethane	101		96		70-130	5		30
Chloroform	88		84		70-130	5		30
Carbon tetrachloride	100		96		70-130	4		30
1,2-Dichloropropane	99		95		70-130	4		30
Dibromochloromethane	94		95		70-130	1		30
1,1,2-Trichloroethane	94		95		70-130	1		30
Tetrachloroethene	98		93		70-130	5		30
Chlorobenzene	88		85		70-130	3		30
Trichlorofluoromethane	101		94		70-139	7		30
1,2-Dichloroethane	94		94		70-130	0		30
1,1,1-Trichloroethane	95		90		70-130	5		30
Bromodichloromethane	83		81		70-130	2		30
trans-1,3-Dichloropropene	103		102		70-130	1		30
cis-1,3-Dichloropropene	96		94		70-130	2		30
1,1-Dichloropropene	100		95		70-130	5		30
Bromoform	100		102		70-130	2		30
1,1,2,2-Tetrachloroethane	94		97		70-130	3		30
Benzene	88		83		70-130	6		30
Toluene	95		90		70-130	5		30
Ethylbenzene	98		94		70-130	4		30
Chloromethane	120		113		52-130	6		30
Bromomethane	72		68		57-147	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1361685-3 WG1361685-4								
Vinyl chloride	89		83		67-130	7		30
Chloroethane	63		59		50-151	7		30
1,1-Dichloroethene	101		95		65-135	6		30
trans-1,2-Dichloroethene	90		85		70-130	6		30
Trichloroethene	93		88		70-130	6		30
1,2-Dichlorobenzene	95		93		70-130	2		30
1,3-Dichlorobenzene	96		93		70-130	3		30
1,4-Dichlorobenzene	96		92		70-130	4		30
Methyl tert butyl ether	95		96		66-130	1		30
p/m-Xylene	99		94		70-130	5		30
o-Xylene	93		90		70-130	3		30
cis-1,2-Dichloroethene	95		92		70-130	3		30
Dibromomethane	87		87		70-130	0		30
Styrene	94		92		70-130	2		30
Dichlorodifluoromethane	118		110		30-146	7		30
Acetone	125		128		54-140	2		30
Carbon disulfide	88		82		59-130	7		30
2-Butanone	127		121		70-130	5		30
Vinyl acetate	124		126		70-130	2		30
4-Methyl-2-pentanone	119		123		70-130	3		30
1,2,3-Trichloropropane	98		101		68-130	3		30
2-Hexanone	130		**135**	Q	70-130	4		30
Bromochloromethane	88		87		70-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1361685-3 WG1361685-4								
2,2-Dichloropropane	98		91		70-130	7		30
1,2-Dibromoethane	96		97		70-130	1		30
1,3-Dichloropropane	96		96		69-130	0		30
1,1,1,2-Tetrachloroethane	95		92		70-130	3		30
Bromobenzene	96		95		70-130	1		30
n-Butylbenzene	106		100		70-130	6		30
sec-Butylbenzene	102		97		70-130	5		30
tert-Butylbenzene	112		106		70-130	6		30
o-Chlorotoluene	100		96		70-130	4		30
p-Chlorotoluene	103		99		70-130	4		30
1,2-Dibromo-3-chloropropane	104		108		68-130	4		30
Hexachlorobutadiene	100		97		67-130	3		30
Isopropylbenzene	111		106		70-130	5		30
p-Isopropyltoluene	114		108		70-130	5		30
Naphthalene	120		123		70-130	2		30
Acrylonitrile	124		128		70-130	3		30
n-Propylbenzene	106		101		70-130	5		30
1,2,3-Trichlorobenzene	101		101		70-130	0		30
1,2,4-Trichlorobenzene	102		100		70-130	2		30
1,3,5-Trimethylbenzene	110		105		70-130	5		30
1,2,4-Trimethylbenzene	109		105		70-130	4		30
1,4-Dioxane	108		113		65-136	5		30
p-Diethylbenzene	112		106		70-130	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-04 Batch: WG1361685-3 WG1361685-4								
p-Ethyltoluene	107		102		70-130	5		30
1,2,4,5-Tetramethylbenzene	113		108		70-130	5		30
Ethyl ether	98		99		67-130	1		30
trans-1,4-Dichloro-2-butene	127		129		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	99		100		70-130
Toluene-d8	99		100		70-130
4-Bromofluorobenzene	108		108		70-130
Dibromofluoromethane	92		93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 05-06 Batch: WG1361693-2									
1,2-Dibromoethane	92		-		80-120	-		20	A
1,2-Dibromo-3-chloropropane	92		-		80-120	-		20	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG1361817-3 WG1361817-4								
Methylene chloride	96		97		70-130	1		20
1,1-Dichloroethane	98		99		70-130	1		20
Chloroform	92		94		70-130	2		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	97		99		70-130	2		20
Dibromochloromethane	85		88		63-130	3		20
1,1,2-Trichloroethane	85		88		70-130	3		20
Tetrachloroethene	93		96		70-130	3		20
Chlorobenzene	91		94		75-130	3		20
Trichlorofluoromethane	110		120		62-150	9		20
1,2-Dichloroethane	89		90		70-130	1		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	95		96		67-130	1		20
trans-1,3-Dichloropropene	87		88		70-130	1		20
cis-1,3-Dichloropropene	97		99		70-130	2		20
1,1-Dichloropropene	100		100		70-130	0		20
Bromoform	85		88		54-136	3		20
1,1,2,2-Tetrachloroethane	84		85		67-130	1		20
Benzene	100		100		70-130	0		20
Toluene	92		95		70-130	3		20
Ethylbenzene	90		92		70-130	2		20
Chloromethane	100		100		64-130	0		20
Bromomethane	100		100		39-139	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG1361817-3 WG1361817-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	85		88		70-130	3		20
1,3-Dichlorobenzene	87		89		70-130	2		20
1,4-Dichlorobenzene	87		89		70-130	2		20
Methyl tert butyl ether	90		92		63-130	2		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		90		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	96		99		70-130	3		20
1,2,3-Trichloropropane	74		78		64-130	5		20
Acrylonitrile	84		84		70-130	0		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	140		140		36-147	0		20
Acetone	83		74		58-148	11		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	77		79		63-138	3		20
Vinyl acetate	77		82		70-130	6		20
4-Methyl-2-pentanone	79		80		59-130	1		20
2-Hexanone	69		69		57-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG1361817-3 WG1361817-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	85		89		70-130	5		20
1,3-Dichloropropane	84		86		70-130	2		20
1,1,1,2-Tetrachloroethane	89		92		64-130	3		20
Bromobenzene	93		95		70-130	2		20
n-Butylbenzene	87		89		53-136	2		20
sec-Butylbenzene	88		90		70-130	2		20
tert-Butylbenzene	89		91		70-130	2		20
o-Chlorotoluene	89		91		70-130	2		20
p-Chlorotoluene	89		90		70-130	1		20
1,2-Dibromo-3-chloropropane	73		77		41-144	5		20
Hexachlorobutadiene	88		92		63-130	4		20
Isopropylbenzene	92		93		70-130	1		20
p-Isopropyltoluene	89		89		70-130	0		20
Naphthalene	**66**	Q	72		70-130	9		20
n-Propylbenzene	91		92		69-130	1		20
1,2,3-Trichlorobenzene	72		78		70-130	8		20
1,2,4-Trichlorobenzene	80		83		70-130	4		20
1,3,5-Trimethylbenzene	89		89		64-130	0		20
1,2,4-Trimethylbenzene	88		89		70-130	1		20
1,4-Dioxane	104		108		56-162	4		20
p-Diethylbenzene	89		90		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG1361817-3 WG1361817-4								
p-Ethyltoluene	91		93		70-130	2		20
1,2,4,5-Tetramethylbenzene	87		88		70-130	1		20
Ethyl ether	95		97		59-134	2		20
trans-1,4-Dichloro-2-butene	76		83		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		90		70-130
Toluene-d8	96		95		70-130
4-Bromofluorobenzene	102		102		70-130
Dibromofluoromethane	101		100		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Microextractables by GC - Westborough Lab Associated sample(s): 05-06 QC Batch ID: WG1361693-3 QC Sample: L2015639-05 Client ID: MW-1													
1,2-Dibromoethane	ND	0.248	0.211	85		-	-		80-120	-		20	A
1,2-Dibromo-3-chloropropane	ND	0.248	0.216	87		-	-		80-120	-		20	A

SEMIVOLATILES

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01
Client ID: SB-1 (0-2)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:15
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/16/20 04:23
Analyst: IM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	110		ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01 Date Collected: 04/14/20 10:15

Client ID: SB-1 (0-2) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	57	J	ug/kg	110	20.	1
Benzo(a)pyrene	72	J	ug/kg	140	43.	1
Benzo(b)fluoranthene	110		ug/kg	110	30.	1
Benzo(k)fluoranthene	44	J	ug/kg	110	28.	1
Chrysene	78	J	ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	34.	1
Benzo(ghi)perylene	64	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	33	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	60	J	ug/kg	140	25.	1
Pyrene	98	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01 Date Collected: 04/14/20 10:15

Client ID: SB-1 (0-2) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Tentatively Identified Compounds				
Total TIC Compounds	1630	J	ug/kg	1
Unknown	321	J	ug/kg	1
Unknown Organic Acid	529	J	ug/kg	1
Unknown	783	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	72		18-120

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02
Client ID: SB-2 (2-4)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:45
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/16/20 03:16
Analyst: IM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	50	J	ug/kg	110	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02 Date Collected: 04/14/20 10:45

Client ID: SB-2 (2-4) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	39	J	ug/kg	110	20.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	52	J	ug/kg	110	30.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	37	J	ug/kg	110	18.	1
Acenaphthylene	ND		ug/kg	140	27.	1
Anthracene	ND		ug/kg	110	35.	1
Benzo(ghi)perylene	28	J	ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	28	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	20.	1
Indeno(1,2,3-cd)pyrene	25	J	ug/kg	140	25.	1
Pyrene	53	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	74.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	59.	1
2-Nitrophenol	ND		ug/kg	380	67.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	850	83.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	85.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02 Date Collected: 04/14/20 10:45

Client ID: SB-2 (2-4) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	580	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	ND		ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	27	8.2	1

Tentatively Identified Compounds				
Total TIC Compounds	303	J	ug/kg	1
Unknown	152	J	ug/kg	1
Unknown	151	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	83		18-120

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03
Client ID: SB-3 (7-9)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:25
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/16/20 02:09
Analyst: IM
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	130		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	26	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03 Date Collected: 04/14/20 12:25

Client ID: SB-3 (7-9) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	74	J	ug/kg	120	22.	1
Benzo(a)pyrene	68	J	ug/kg	160	48.	1
Benzo(b)fluoranthene	79	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	72	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	43	J	ug/kg	160	23.	1
Fluorene	20	J	ug/kg	200	19.	1
Phenanthrene	140		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	37	J	ug/kg	160	28.	1
Pyrene	140		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03 Date Collected: 04/14/20 12:25

Client ID: SB-3 (7-9) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	640	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	ND		ug/kg	200	19.	1
1,4-Dioxane	ND		ug/kg	30	9.1	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	65		10-136
4-Terphenyl-d14	61		18-120

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04
Client ID: SB-4 (1-3)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:30
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/16/20 04:01
Analyst: IM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	21.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
1,2-Dichlorobenzene	ND		ug/kg	180	33.	1
1,3-Dichlorobenzene	ND		ug/kg	180	32.	1
1,4-Dichlorobenzene	ND		ug/kg	180	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	560		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	33	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04 Date Collected: 04/14/20 12:30

Client ID: SB-4 (1-3) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	300		ug/kg	110	21.	1
Benzo(a)pyrene	250		ug/kg	150	45.	1
Benzo(b)fluoranthene	300		ug/kg	110	31.	1
Benzo(k)fluoranthene	140		ug/kg	110	30.	1
Chrysene	250		ug/kg	110	19.	1
Acenaphthylene	69	J	ug/kg	150	28.	1
Anthracene	110		ug/kg	110	36.	1
Benzo(ghi)perylene	130	J	ug/kg	150	22.	1
Fluorene	32	J	ug/kg	180	18.	1
Phenanthrene	310		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	27	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	150	26.	1
Pyrene	500		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	19	J	ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	69.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	880	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	88.	1
Pentachlorophenol	ND		ug/kg	150	40.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	29.	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04 Date Collected: 04/14/20 12:30

Client ID: SB-4 (1-3) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Benzoic Acid	ND		ug/kg	600	190	1
Benzyl Alcohol	ND		ug/kg	180	56.	1
Carbazole	22	J	ug/kg	180	18.	1
1,4-Dioxane	ND		ug/kg	28	8.5	1

Tentatively Identified Compounds				
Total TIC Compounds	2510	J	ug/kg	1
Unknown Organic Acid	989	J	ug/kg	1
Unknown	183	J	ug/kg	1
Unknown	186	J	ug/kg	1
Unknown	798	J	ug/kg	1
Unknown	353	J	ug/kg	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	75		18-120

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/18/20 04:47
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05 Date Collected: 04/14/20 11:40

Client ID: MW-1 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Tentatively Identified Compounds				
Total TIC Compounds	1.85	J	ug/l	1
Unknown	1.85	J	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	80		41-149

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/17/20 14:09
Analyst: PS

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 04/15/20 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	156	35.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	43		15-110

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/18/20 16:34
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.02	J	ug/l	0.10	0.01	1
Phenanthrene	0.08	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05 Date Collected: 04/14/20 11:40

Client ID: MW-1 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	69		15-120
2,4,6-Tribromophenol	90		10-120
4-Terphenyl-d14	90		41-149

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/21/20 01:20
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06 Date Collected: 04/14/20 13:00

Client ID: MW-2 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/l	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	49		15-120
2,4,6-Tribromophenol	37		10-120
4-Terphenyl-d14	56		41-149

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/17/20 14:35
Analyst: PS

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 04/15/20 08:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ng/l	150	33.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	42		15-110

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/18/20 16:51
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:59

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06 Date Collected: 04/14/20 13:00

Client ID: MW-2 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	94		10-120
4-Terphenyl-d14	97		41-149

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/17/20 10:29
Analyst: PS

Extraction Method: EPA 3510C
Extraction Date: 04/15/20 08:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 05-06 Batch: WG1361240-1					
1,4-Dioxane	ND		ng/l	150	33.9

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/16/20 00:39
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1361392-1					
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/16/20 00:39
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1361392-1					
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/16/20 00:39
Analyst: IM

Extraction Method: EPA 3546
Extraction Date: 04/15/20 13:50

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1361392-1					
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	50.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.5

Tentatively Identified Compounds

No Tentatively Identified Compounds	ND	ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	79		18-120

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/20/20 22:59
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-06 Batch: WG1362106-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
Fluoranthene	ND		ug/l	2.0	0.26
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/20/20 22:59
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-06 Batch: WG1362106-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
2-Methylnaphthalene	ND		ug/l	2.0	0.45
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/20/20 22:59
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-06 Batch: WG1362106-1					
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Pentachlorophenol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Tentatively Identified Compounds

Total TIC Compounds	8.65	J	ug/l
Unknown	1.60	J	ug/l
Unknown	2.14	J	ug/l
Unknown	2.07	J	ug/l
Unknown Organic Acid	2.84	J	ug/l

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/20/20 22:59
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-06 Batch: WG1362106-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	48		23-120
2-Fluorobiphenyl	47		15-120
2,4,6-Tribromophenol	39		10-120
4-Terphenyl-d14	56		41-149

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/18/20 15:28
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05-06 Batch: WG1362107-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/18/20 15:28
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 10:57

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05-06 Batch: WG1362107-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	91		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361240-2 WG1361240-3								
1,4-Dioxane	108		109		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	22		31		15-110

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1361392-2 WG1361392-3								
Acenaphthene	66		77		31-137	15		50
1,2,4-Trichlorobenzene	61		68		38-107	11		50
Hexachlorobenzene	64		77		40-140	18		50
Bis(2-chloroethyl)ether	69		75		40-140	8		50
2-Chloronaphthalene	62		73		40-140	16		50
1,2-Dichlorobenzene	64		69		40-140	8		50
1,3-Dichlorobenzene	64		70		40-140	9		50
1,4-Dichlorobenzene	63		69		28-104	9		50
3,3'-Dichlorobenzidine	55		63		40-140	14		50
2,4-Dinitrotoluene	70		83		40-132	17		50
2,6-Dinitrotoluene	66		82		40-140	22		50
Fluoranthene	67		79		40-140	16		50
4-Chlorophenyl phenyl ether	63		74		40-140	16		50
4-Bromophenyl phenyl ether	61		73		40-140	18		50
Bis(2-chloroisopropyl)ether	84		93		40-140	10		50
Bis(2-chloroethoxy)methane	71		81		40-117	13		50
Hexachlorobutadiene	59		68		40-140	14		50
Hexachlorocyclopentadiene	56		65		40-140	15		50
Hexachloroethane	66		73		40-140	10		50
Isophorone	76		87		40-140	13		50
Naphthalene	64		73		40-140	13		50
Nitrobenzene	71		80		40-140	12		50
NDPA/DPA	66		80		36-157	19		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1361392-2 WG1361392-3								
n-Nitrosodi-n-propylamine	77		88		32-121	13		50
Bis(2-ethylhexyl)phthalate	80		98		40-140	20		50
Butyl benzyl phthalate	75		90		40-140	18		50
Di-n-butylphthalate	76		91		40-140	18		50
Di-n-octylphthalate	77		94		40-140	20		50
Diethyl phthalate	71		84		40-140	17		50
Dimethyl phthalate	66		80		40-140	19		50
Benzo(a)anthracene	65		77		40-140	17		50
Benzo(a)pyrene	64		77		40-140	18		50
Benzo(b)fluoranthene	66		75		40-140	13		50
Benzo(k)fluoranthene	66		82		40-140	22		50
Chrysene	65		78		40-140	18		50
Acenaphthylene	65		79		40-140	19		50
Anthracene	69		81		40-140	16		50
Benzo(ghi)perylene	65		77		40-140	17		50
Fluorene	66		78		40-140	17		50
Phenanthrene	66		77		40-140	15		50
Dibenzo(a,h)anthracene	65		80		40-140	21		50
Indeno(1,2,3-cd)pyrene	60		79		40-140	27		50
Pyrene	69		80		35-142	15		50
Biphenyl	68		80		37-127	16		50
4-Chloroaniline	59		68		40-140	14		50
2-Nitroaniline	65		79		47-134	19		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1361392-2 WG1361392-3								
3-Nitroaniline	58		62		26-129	7		50
4-Nitroaniline	60		71		41-125	17		50
Dibenzofuran	65		77		40-140	17		50
2-Methylnaphthalene	64		74		40-140	14		50
1,2,4,5-Tetrachlorobenzene	68		77		40-117	12		50
Acetophenone	67		77		14-144	14		50
2,4,6-Trichlorophenol	61		77		30-130	23		50
p-Chloro-m-cresol	74		88		26-103	17		50
2-Chlorophenol	71		80		25-102	12		50
2,4-Dichlorophenol	71		82		30-130	14		50
2,4-Dimethylphenol	76		86		30-130	12		50
2-Nitrophenol	66		76		30-130	14		50
4-Nitrophenol	86		99		11-114	14		50
2,4-Dinitrophenol	56		69		4-130	21		50
4,6-Dinitro-o-cresol	65		79		10-130	19		50
Pentachlorophenol	58		71		17-109	20		50
Phenol	68		77		26-90	12		50
2-Methylphenol	74		84		30-130.	13		50
3-Methylphenol/4-Methylphenol	72		84		30-130	15		50
2,4,5-Trichlorophenol	65		76		30-130	16		50
Benzoic Acid	55		74		10-110	29		50
Benzyl Alcohol	74		86		40-140	15		50
Carbazole	70		81		54-128	15		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1361392-2 WG1361392-3								
1,4-Dioxane	56		54		40-140	4		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	74		83		25-120
Phenol-d6	77		87		10-120
Nitrobenzene-d5	73		84		23-120
2-Fluorobiphenyl	63		76		30-120
2,4,6-Tribromophenol	66		79		10-136
4-Terphenyl-d14	67		79		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1362106-2 WG1362106-3								
Acenaphthene	53		53		37-111	0		30
1,2,4-Trichlorobenzene	51		50		39-98	2		30
Hexachlorobenzene	51		52		40-140	2		30
Bis(2-chloroethyl)ether	57		54		40-140	5		30
2-Chloronaphthalene	53		54		40-140	2		30
1,2-Dichlorobenzene	49		48		40-140	2		30
1,3-Dichlorobenzene	49		48		40-140	2		30
1,4-Dichlorobenzene	50		49		36-97	2		30
3,3'-Dichlorobenzidine	**32**	Q	**34**	Q	40-140	6		30
2,4-Dinitrotoluene	51		53		48-143	4		30
2,6-Dinitrotoluene	53		58		40-140	9		30
Fluoranthene	52		53		40-140	2		30
4-Chlorophenyl phenyl ether	52		54		40-140	4		30
4-Bromophenyl phenyl ether	51		53		40-140	4		30
Bis(2-chloroisopropyl)ether	63		62		40-140	2		30
Bis(2-chloroethoxy)methane	58		58		40-140	0		30
Hexachlorobutadiene	47		47		40-140	0		30
Hexachlorocyclopentadiene	**37**	Q	**38**	Q	40-140	3		30
Hexachloroethane	51		49		40-140	4		30
Isophorone	56		58		40-140	4		30
Naphthalene	52		50		40-140	4		30
Nitrobenzene	57		54		40-140	5		30
NDPA/DPA	55		56		40-140	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1362106-2 WG1362106-3								
n-Nitrosodi-n-propylamine	60		59		29-132	2		30
Bis(2-ethylhexyl)phthalate	55		59		40-140	7		30
Butyl benzyl phthalate	55		59		40-140	7		30
Di-n-butylphthalate	50		54		40-140	8		30
Di-n-octylphthalate	56		57		40-140	2		30
Diethyl phthalate	56		59		40-140	5		30
Dimethyl phthalate	59		64		40-140	8		30
Benzo(a)anthracene	53		53		40-140	0		30
Benzo(a)pyrene	49		48		40-140	2		30
Benzo(b)fluoranthene	50		52		40-140	4		30
Benzo(k)fluoranthene	51		49		40-140	4		30
Chrysene	51		52		40-140	2		30
Acenaphthylene	54		53		45-123	2		30
Anthracene	51		53		40-140	4		30
Benzo(ghi)perylene	49		48		40-140	2		30
Fluorene	55		55		40-140	0		30
Phenanthrene	50		51		40-140	2		30
Dibenzo(a,h)anthracene	48		49		40-140	2		30
Indeno(1,2,3-cd)pyrene	46		48		40-140	4		30
Pyrene	50		52		26-127	4		30
Biphenyl	51		53		40-140	4		30
4-Chloroaniline	40		45		40-140	12		30
2-Nitroaniline	**50**	Q	**51**	Q	52-143	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1362106-2 WG1362106-3								
3-Nitroaniline	40		39		25-145	3		30
4-Nitroaniline	**43**	Q	**40**	Q	51-143	7		30
Dibenzofuran	53		53		40-140	0		30
2-Methylnaphthalene	52		51		40-140	2		30
1,2,4,5-Tetrachlorobenzene	48		48		2-134	0		30
Acetophenone	52		51		39-129	2		30
2,4,6-Trichlorophenol	51		53		30-130	4		30
p-Chloro-m-cresol	57		58		23-97	2		30
2-Chlorophenol	51		47		27-123	8		30
2,4-Dichlorophenol	56		56		30-130	0		30
2,4-Dimethylphenol	53		51		30-130	4		30
2-Nitrophenol	51		49		30-130	4		30
4-Nitrophenol	48		41		10-80	16		30
2,4-Dinitrophenol	47		52		20-130	10		30
4,6-Dinitro-o-cresol	59		61		20-164	3		30
Pentachlorophenol	36		41		9-103	13		30
Phenol	40		34		12-110	16		30
2-Methylphenol	52		47		30-130	10		30
3-Methylphenol/4-Methylphenol	52		48		30-130	8		30
2,4,5-Trichlorophenol	55		58		30-130	5		30
Benzoic Acid	**0**	Q	**0**	Q	10-164	NC		30
Benzyl Alcohol	47		41		26-116	14		30
Carbazole	**52**	Q	**52**	Q	55-144	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-06 Batch: WG1362106-2 WG1362106-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	42		46		21-120
Phenol-d6	37		41		10-120
Nitrobenzene-d5	52		53		23-120
2-Fluorobiphenyl	49		52		15-120
2,4,6-Tribromophenol	47		51		10-120
4-Terphenyl-d14	50		53		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05-06 Batch: WG1362107-2 WG1362107-3								
Acenaphthene	76		57		40-140	29		40
2-Chloronaphthalene	71		52		40-140	31		40
Fluoranthene	92		72		40-140	24		40
Hexachlorobutadiene	65		44		40-140	39		40
Naphthalene	67		46		40-140	37		40
Benzo(a)anthracene	96		74		40-140	26		40
Benzo(a)pyrene	106		79		40-140	29		40
Benzo(b)fluoranthene	104		80		40-140	26		40
Benzo(k)fluoranthene	107		76		40-140	34		40
Chrysene	90		75		40-140	18		40
Acenaphthylene	71		53		40-140	29		40
Anthracene	86		68		40-140	23		40
Benzo(ghi)perylene	104		76		40-140	31		40
Fluorene	82		63		40-140	26		40
Phenanthrene	85		67		40-140	24		40
Dibenzo(a,h)anthracene	112		80		40-140	33		40
Indeno(1,2,3-cd)pyrene	115		82		40-140	34		40
Pyrene	90		71		40-140	24		40
2-Methylnaphthalene	71		50		40-140	35		40
Pentachlorophenol	60		58		40-140	3		40
Hexachlorobenzene	91		70		40-140	26		40
Hexachloroethane	65		43		40-140	**41**	Q	40

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05-06 Batch: WG1362107-2 WG1362107-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	56		46		21-120
Phenol-d6	48		40		10-120
Nitrobenzene-d5	64		52		23-120
2-Fluorobiphenyl	62		56		15-120
2,4,6-Tribromophenol	91		84		10-120
4-Terphenyl-d14	88		85		41-149

PCBS

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01
Client ID: SB-1 (0-2)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:15
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/16/20 11:07
Analyst: KB
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 17:54
Cleanup Method: EPA 3665A
Cleanup Date: 04/16/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.0	3.11	1	A
Aroclor 1221	ND		ug/kg	35.0	3.50	1	A
Aroclor 1232	ND		ug/kg	35.0	7.42	1	A
Aroclor 1242	ND		ug/kg	35.0	4.72	1	A
Aroclor 1248	ND		ug/kg	35.0	5.25	1	A
Aroclor 1254	18.0	J	ug/kg	35.0	3.83	1	A
Aroclor 1260	ND		ug/kg	35.0	6.46	1	A
Aroclor 1262	ND		ug/kg	35.0	4.44	1	A
Aroclor 1268	ND		ug/kg	35.0	3.62	1	A
PCBs, Total	18.0	J	ug/kg	35.0	3.11	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02
Client ID: SB-2 (2-4)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:45
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/16/20 11:19
Analyst: KB
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 17:54
Cleanup Method: EPA 3665A
Cleanup Date: 04/16/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	34.2	3.04	1	A
Aroclor 1221	ND		ug/kg	34.2	3.43	1	A
Aroclor 1232	ND		ug/kg	34.2	7.25	1	A
Aroclor 1242	ND		ug/kg	34.2	4.61	1	A
Aroclor 1248	ND		ug/kg	34.2	5.13	1	A
Aroclor 1254	ND		ug/kg	34.2	3.74	1	A
Aroclor 1260	ND		ug/kg	34.2	6.32	1	A
Aroclor 1262	ND		ug/kg	34.2	4.34	1	A
Aroclor 1268	ND		ug/kg	34.2	3.54	1	A
PCBs, Total	ND		ug/kg	34.2	3.04	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	67		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03
Client ID: SB-3 (7-9)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:25
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/16/20 11:31
Analyst: KB
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 17:54
Cleanup Method: EPA 3665A
Cleanup Date: 04/16/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.3	3.31	1	A
Aroclor 1221	ND		ug/kg	37.3	3.74	1	A
Aroclor 1232	ND		ug/kg	37.3	7.91	1	A
Aroclor 1242	ND		ug/kg	37.3	5.03	1	A
Aroclor 1248	ND		ug/kg	37.3	5.59	1	A
Aroclor 1254	ND		ug/kg	37.3	4.08	1	A
Aroclor 1260	ND		ug/kg	37.3	6.89	1	A
Aroclor 1262	ND		ug/kg	37.3	4.74	1	A
Aroclor 1268	ND		ug/kg	37.3	3.86	1	A
PCBs, Total	ND		ug/kg	37.3	3.31	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	65		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04
Client ID: SB-4 (1-3)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:30
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 04/16/20 11:43
Analyst: KB
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 17:54
Cleanup Method: EPA 3665A
Cleanup Date: 04/16/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.7	3.17	1	A
Aroclor 1221	ND		ug/kg	35.7	3.58	1	A
Aroclor 1232	ND		ug/kg	35.7	7.58	1	A
Aroclor 1242	ND		ug/kg	35.7	4.82	1	A
Aroclor 1248	ND		ug/kg	35.7	5.36	1	A
Aroclor 1254	11.7	J	ug/kg	35.7	3.91	1	A
Aroclor 1260	ND		ug/kg	35.7	6.60	1	A
Aroclor 1262	ND		ug/kg	35.7	4.54	1	A
Aroclor 1268	ND		ug/kg	35.7	3.70	1	A
PCBs, Total	11.7	J	ug/kg	35.7	3.17	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	71		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 04/18/20 16:37
Analyst: CW

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 04:32
Cleanup Method: EPA 3665A
Cleanup Date: 04/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Sample Depth:
Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 04/18/20 16:50
Analyst: CW

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 04:32
Cleanup Method: EPA 3665A
Cleanup Date: 04/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.034	1	A
Aroclor 1221	ND		ug/l	0.083	0.067	1	A
Aroclor 1232	ND		ug/l	0.083	0.046	1	A
Aroclor 1242	ND		ug/l	0.083	0.039	1	A
Aroclor 1248	ND		ug/l	0.083	0.049	1	A
Aroclor 1254	ND		ug/l	0.083	0.039	1	A
Aroclor 1260	ND		ug/l	0.083	0.032	1	A
Aroclor 1262	ND		ug/l	0.083	0.035	1	A
Aroclor 1268	ND		ug/l	0.083	0.034	1	A
PCBs, Total	ND		ug/l	0.083	0.032	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 04/16/20 14:06
Analyst: KB

Extraction Method: EPA 3546
Extraction Date: 04/15/20 17:54
Cleanup Method: EPA 3665A
Cleanup Date: 04/16/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-04 Batch: WG1361480-1						
Aroclor 1016	ND		ug/kg	31.9	2.84	A
Aroclor 1221	ND		ug/kg	31.9	3.20	A
Aroclor 1232	ND		ug/kg	31.9	6.77	A
Aroclor 1242	ND		ug/kg	31.9	4.31	A
Aroclor 1248	ND		ug/kg	31.9	4.79	A
Aroclor 1254	ND		ug/kg	31.9	3.50	A
Aroclor 1260	ND		ug/kg	31.9	5.90	A
Aroclor 1262	ND		ug/kg	31.9	4.06	A
Aroclor 1268	ND		ug/kg	31.9	3.31	A
PCBs, Total	ND		ug/kg	31.9	2.84	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 04/18/20 15:15
Analyst: CW

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 04:32
Cleanup Method: EPA 3665A
Cleanup Date: 04/18/20
Cleanup Method: EPA 3660B
Cleanup Date: 04/18/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 05-06 Batch: WG1361965-1						
Aroclor 1016	ND		ug/l	0.083	0.034	A
Aroclor 1221	ND		ug/l	0.083	0.067	A
Aroclor 1232	ND		ug/l	0.083	0.046	A
Aroclor 1242	ND		ug/l	0.083	0.039	A
Aroclor 1248	ND		ug/l	0.083	0.049	A
Aroclor 1254	ND		ug/l	0.083	0.039	A
Aroclor 1260	ND		ug/l	0.083	0.032	A
Aroclor 1262	ND		ug/l	0.083	0.035	A
Aroclor 1268	ND		ug/l	0.083	0.034	A
PCBs, Total	ND		ug/l	0.083	0.032	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	80		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	75		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1361480-2 WG1361480-3									
Aroclor 1016	84		83		40-140	1		50	A
Aroclor 1260	78		78		40-140	0		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		71		30-150	A
Decachlorobiphenyl	63		64		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		70		30-150	B
Decachlorobiphenyl	71		69		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 05-06 Batch: WG1361965-2 WG1361965-3									
Aroclor 1016	84		80		40-140	6		50	A
Aroclor 1260	81		77		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		70		30-150	A
Decachlorobiphenyl	84		79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		68		30-150	B
Decachlorobiphenyl	80		73		30-150	B

PESTICIDES

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01
Client ID: SB-1 (0-2)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:15
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/17/20 01:57
Analyst: BM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 21:12
Cleanup Method: EPA 3620B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.62	0.317	1	A
Lindane	ND		ug/kg	0.674	0.302	1	A
Alpha-BHC	ND		ug/kg	0.674	0.192	1	A
Beta-BHC	ND		ug/kg	1.62	0.614	1	A
Heptachlor	ND		ug/kg	0.809	0.363	1	A
Aldrin	ND		ug/kg	1.62	0.570	1	A
Heptachlor epoxide	ND		ug/kg	3.04	0.911	1	A
Endrin	ND		ug/kg	0.674	0.276	1	A
Endrin aldehyde	ND		ug/kg	2.02	0.708	1	A
Endrin ketone	ND		ug/kg	1.62	0.417	1	A
Dieldrin	ND		ug/kg	1.01	0.506	1	A
4,4'-DDE	4.67		ug/kg	1.62	0.374	1	A
4,4'-DDD	ND		ug/kg	1.62	0.577	1	A
4,4'-DDT	2.66	JIP	ug/kg	3.04	1.30	1	A
Endosulfan I	ND		ug/kg	1.62	0.382	1	A
Endosulfan II	ND		ug/kg	1.62	0.541	1	A
Endosulfan sulfate	ND		ug/kg	0.674	0.321	1	A
Methoxychlor	ND		ug/kg	3.04	0.944	1	A
Toxaphene	ND		ug/kg	30.4	8.50	1	A
cis-Chlordane	ND		ug/kg	2.02	0.564	1	A
trans-Chlordane	ND		ug/kg	2.02	0.534	1	A
Chlordane	ND		ug/kg	13.5	5.36	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01 Date Collected: 04/14/20 10:15

Client ID: SB-1 (0-2) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	104		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02
Client ID: SB-2 (2-4)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:45
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/17/20 02:10
Analyst: BM
Percent Solids: 93%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 21:12
Cleanup Method: EPA 3620B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.63	0.318	1	A
Lindane	ND		ug/kg	0.678	0.303	1	A
Alpha-BHC	ND		ug/kg	0.678	0.192	1	A
Beta-BHC	ND		ug/kg	1.63	0.616	1	A
Heptachlor	ND		ug/kg	0.813	0.364	1	A
Aldrin	ND		ug/kg	1.63	0.572	1	A
Heptachlor epoxide	ND		ug/kg	3.05	0.915	1	A
Endrin	ND		ug/kg	0.678	0.278	1	A
Endrin aldehyde	ND		ug/kg	2.03	0.711	1	A
Endrin ketone	ND		ug/kg	1.63	0.419	1	A
Dieldrin	ND		ug/kg	1.02	0.508	1	A
4,4'-DDE	0.601	JP	ug/kg	1.63	0.376	1	B
4,4'-DDD	ND		ug/kg	1.63	0.580	1	A
4,4'-DDT	ND		ug/kg	3.05	1.31	1	B
Endosulfan I	ND		ug/kg	1.63	0.384	1	A
Endosulfan II	ND		ug/kg	1.63	0.543	1	A
Endosulfan sulfate	ND		ug/kg	0.678	0.322	1	A
Methoxychlor	ND		ug/kg	3.05	0.948	1	A
Toxaphene	ND		ug/kg	30.5	8.54	1	A
cis-Chlordane	ND		ug/kg	2.03	0.566	1	A
trans-Chlordane	ND		ug/kg	2.03	0.536	1	A
Chlordane	ND		ug/kg	13.6	5.39	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02 Date Collected: 04/14/20 10:45

Client ID: SB-2 (2-4) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	107		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	97		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03
Client ID: SB-3 (7-9)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:25
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/17/20 02:22
Analyst: BM
Percent Solids: 84%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 21:12
Cleanup Method: EPA 3620B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.87	0.367	1	A
Lindane	ND		ug/kg	0.781	0.349	1	A
Alpha-BHC	ND		ug/kg	0.781	0.222	1	A
Beta-BHC	ND		ug/kg	1.87	0.710	1	A
Heptachlor	ND		ug/kg	0.937	0.420	1	A
Aldrin	ND		ug/kg	1.87	0.660	1	A
Heptachlor epoxide	ND		ug/kg	3.51	1.05	1	A
Endrin	ND		ug/kg	0.781	0.320	1	A
Endrin aldehyde	ND		ug/kg	2.34	0.820	1	A
Endrin ketone	ND		ug/kg	1.87	0.482	1	A
Dieldrin	ND		ug/kg	1.17	0.585	1	A
4,4'-DDE	ND		ug/kg	1.87	0.433	1	A
4,4'-DDD	ND		ug/kg	1.87	0.668	1	A
4,4'-DDT	ND		ug/kg	3.51	1.51	1	A
Endosulfan I	ND		ug/kg	1.87	0.443	1	A
Endosulfan II	ND		ug/kg	1.87	0.626	1	A
Endosulfan sulfate	ND		ug/kg	0.781	0.372	1	A
Methoxychlor	ND		ug/kg	3.51	1.09	1	A
Toxaphene	ND		ug/kg	35.1	9.84	1	A
cis-Chlordane	ND		ug/kg	2.34	0.653	1	A
trans-Chlordane	ND		ug/kg	2.34	0.618	1	A
Chlordane	ND		ug/kg	15.6	6.21	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03 Date Collected: 04/14/20 12:25

Client ID: SB-3 (7-9) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	**160**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	121		30-150	B
Decachlorobiphenyl	139		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04
Client ID: SB-4 (1-3)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:30
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 04/17/20 01:45
Analyst: BM
Percent Solids: 90%

Extraction Method: EPA 3546
Extraction Date: 04/15/20 21:12
Cleanup Method: EPA 3620B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.346	1	A
Lindane	ND		ug/kg	0.736	0.329	1	A
Alpha-BHC	ND		ug/kg	0.736	0.209	1	A
Beta-BHC	ND		ug/kg	1.77	0.670	1	A
Heptachlor	ND		ug/kg	0.884	0.396	1	A
Aldrin	ND		ug/kg	1.77	0.622	1	A
Heptachlor epoxide	ND		ug/kg	3.31	0.994	1	A
Endrin	ND		ug/kg	0.736	0.302	1	A
Endrin aldehyde	ND		ug/kg	2.21	0.773	1	A
Endrin ketone	ND		ug/kg	1.77	0.455	1	A
Dieldrin	ND		ug/kg	1.10	0.552	1	A
4,4'-DDE	1.14	JP	ug/kg	1.77	0.409	1	B
4,4'-DDD	ND		ug/kg	1.77	0.630	1	A
4,4'-DDT	2.47	JIP	ug/kg	3.31	1.42	1	A
Endosulfan I	ND		ug/kg	1.77	0.418	1	A
Endosulfan II	ND		ug/kg	1.77	0.590	1	A
Endosulfan sulfate	ND		ug/kg	0.736	0.350	1	A
Methoxychlor	ND		ug/kg	3.31	1.03	1	A
Toxaphene	ND		ug/kg	33.1	9.28	1	A
cis-Chlordane	ND		ug/kg	2.21	0.616	1	A
trans-Chlordane	ND		ug/kg	2.21	0.583	1	A
Chlordane	ND		ug/kg	14.7	5.85	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04 Date Collected: 04/14/20 12:30

Client ID: SB-4 (1-3) Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		30-150	A
Decachlorobiphenyl	125		30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		30-150	B
Decachlorobiphenyl	120		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 04/17/20 10:51
Analyst: SM

Extraction Method: EPA 3510C
Extraction Date: 04/16/20 11:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID:	L2015639-05	Date Collected:	04/14/20 11:40
Client ID:	MW-1	Date Received:	04/14/20
Sample Location:	2 WEST PINE STREET, LONG BEACH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	60		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 04/17/20 11:01
Analyst: SM

Extraction Method: EPA 3510C
Extraction Date: 04/16/20 11:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.014	0.003	1	A
Lindane	ND		ug/l	0.014	0.003	1	A
Alpha-BHC	ND		ug/l	0.014	0.003	1	A
Beta-BHC	ND		ug/l	0.014	0.004	1	A
Heptachlor	ND		ug/l	0.014	0.002	1	A
Aldrin	ND		ug/l	0.014	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	1	A
Endrin	ND		ug/l	0.029	0.003	1	A
Endrin aldehyde	ND		ug/l	0.029	0.006	1	A
Endrin ketone	ND		ug/l	0.029	0.003	1	A
Dieldrin	ND		ug/l	0.029	0.003	1	A
4,4'-DDE	ND		ug/l	0.029	0.003	1	A
4,4'-DDD	ND		ug/l	0.029	0.003	1	A
4,4'-DDT	ND		ug/l	0.029	0.003	1	A
Endosulfan I	ND		ug/l	0.014	0.002	1	A
Endosulfan II	ND		ug/l	0.029	0.004	1	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	1	A
Methoxychlor	ND		ug/l	0.143	0.005	1	A
Toxaphene	ND		ug/l	0.143	0.045	1	A
cis-Chlordane	ND		ug/l	0.014	0.005	1	A
trans-Chlordane	ND		ug/l	0.014	0.004	1	A
Chlordane	ND		ug/l	0.143	0.033	1	A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID:	L2015639-06	Date Collected:	04/14/20 13:00
Client ID:	MW-2	Date Received:	04/14/20
Sample Location:	2 WEST PINE STREET, LONG BEACH, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/17/20 00:04
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 04/15/20 21:12
Cleanup Method: EPA 3620B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1361505-1						
Delta-BHC	ND		ug/kg	1.56	0.306	A
Lindane	ND		ug/kg	0.650	0.291	A
Alpha-BHC	ND		ug/kg	0.650	0.185	A
Beta-BHC	ND		ug/kg	1.56	0.592	A
Heptachlor	ND		ug/kg	0.780	0.350	A
Aldrin	ND		ug/kg	1.56	0.549	A
Heptachlor epoxide	ND		ug/kg	2.92	0.878	A
Endrin	ND		ug/kg	0.650	0.266	A
Endrin aldehyde	ND		ug/kg	1.95	0.683	A
Endrin ketone	ND		ug/kg	1.56	0.402	A
Dieldrin	ND		ug/kg	0.975	0.488	A
4,4'-DDE	ND		ug/kg	1.56	0.361	A
4,4'-DDD	ND		ug/kg	1.56	0.556	A
4,4'-DDT	ND		ug/kg	2.92	1.25	A
Endosulfan I	ND		ug/kg	1.56	0.369	A
Endosulfan II	ND		ug/kg	1.56	0.521	A
Endosulfan sulfate	ND		ug/kg	0.650	0.309	A
Methoxychlor	ND		ug/kg	2.92	0.910	A
Toxaphene	ND		ug/kg	29.2	8.19	A
cis-Chlordane	ND		ug/kg	1.95	0.544	A
trans-Chlordane	ND		ug/kg	1.95	0.515	A
Chlordane	ND		ug/kg	13.0	5.17	A

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/17/20 00:04
Analyst: BM

Extraction Method: EPA 3546
Extraction Date: 04/15/20 21:12
Cleanup Method: EPA 3620B
Cleanup Date: 04/16/20

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-04 Batch: WG1361505-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	**166**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	132		30-150	B

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/17/20 08:14
Analyst: SM

Extraction Method: EPA 3510C
Extraction Date: 04/16/20 09:36

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 05-06 Batch: WG1361690-1						
Delta-BHC	ND		ug/l	0.014	0.003	A
Lindane	ND		ug/l	0.014	0.003	A
Alpha-BHC	ND		ug/l	0.014	0.003	A
Beta-BHC	ND		ug/l	0.014	0.004	A
Heptachlor	ND		ug/l	0.014	0.002	A
Aldrin	ND		ug/l	0.014	0.002	A
Heptachlor epoxide	ND		ug/l	0.014	0.003	A
Endrin	ND		ug/l	0.029	0.003	A
Endrin aldehyde	ND		ug/l	0.029	0.006	A
Endrin ketone	ND		ug/l	0.029	0.003	A
Dieldrin	ND		ug/l	0.029	0.003	A
4,4'-DDE	ND		ug/l	0.029	0.003	A
4,4'-DDD	ND		ug/l	0.029	0.003	A
4,4'-DDT	ND		ug/l	0.029	0.003	A
Endosulfan I	ND		ug/l	0.014	0.002	A
Endosulfan II	ND		ug/l	0.029	0.004	A
Endosulfan sulfate	ND		ug/l	0.029	0.003	A
Methoxychlor	ND		ug/l	0.143	0.005	A
Toxaphene	ND		ug/l	0.143	0.045	A
cis-Chlordane	ND		ug/l	0.014	0.005	A
trans-Chlordane	ND		ug/l	0.014	0.004	A
Chlordane	ND		ug/l	0.143	0.033	A

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 04/17/20 08:14
Analyst: SM

Extraction Method: EPA 3510C
Extraction Date: 04/16/20 09:36

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 05-06 Batch: WG1361690-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	75		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	72		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1361505-2 WG1361505-3									
Delta-BHC	104		104		30-150	0		30	A
Lindane	105		103		30-150	2		30	A
Alpha-BHC	102		98		30-150	4		30	A
Beta-BHC	95		92		30-150	3		30	A
Heptachlor	83		81		30-150	2		30	A
Aldrin	97		96		30-150	1		30	A
Heptachlor epoxide	101		108		30-150	7		30	A
Endrin	113		116		30-150	3		30	A
Endrin aldehyde	93		92		30-150	1		30	A
Endrin ketone	118		117		30-150	1		30	A
Dieldrin	111		111		30-150	0		30	A
4,4'-DDE	103		98		30-150	5		30	A
4,4'-DDD	107		111		30-150	4		30	A
4,4'-DDT	118		119		30-150	1		30	A
Endosulfan I	101		101		30-150	0		30	A
Endosulfan II	113		119		30-150	5		30	A
Endosulfan sulfate	101		107		30-150	6		30	A
Methoxychlor	138		134		30-150	3		30	A
cis-Chlordane	87		86		30-150	1		30	A
trans-Chlordane	107		108		30-150	1		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-04 Batch: WG1361505-2 WG1361505-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		83		30-150	A
Decachlorobiphenyl	123		**156**	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	100		98		30-150	B
Decachlorobiphenyl	122		122		30-150	B

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 05-06 Batch: WG1361690-2 WG1361690-3									
Delta-BHC	63		65		30-150	3		20	A
Lindane	73		71		30-150	2		20	A
Alpha-BHC	74		73		30-150	1		20	A
Beta-BHC	77		76		30-150	1		20	A
Heptachlor	71		70		30-150	1		20	A
Aldrin	71		68		30-150	5		20	A
Heptachlor epoxide	75		75		30-150	0		20	A
Endrin	74		75		30-150	1		20	A
Endrin aldehyde	72		78		30-150	8		20	A
Endrin ketone	78		80		30-150	2		20	A
Dieldrin	77		77		30-150	0		20	A
4,4'-DDE	72		72		30-150	0		20	A
4,4'-DDD	71		72		30-150	1		20	A
4,4'-DDT	77		77		30-150	0		20	A
Endosulfan I	70		70		30-150	0		20	A
Endosulfan II	72		76		30-150	5		20	A
Endosulfan sulfate	67		71		30-150	7		20	A
Methoxychlor	92		93		30-150	1		20	A
cis-Chlordane	67		67		30-150	1		20	A
trans-Chlordane	69		68		30-150	1		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 05-06 Batch: WG1361690-2 WG1361690-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		62		30-150	A
Decachlorobiphenyl	76		77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		56		30-150	B
Decachlorobiphenyl	72		75		30-150	B

METALS

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01
Client ID: SB-1 (0-2)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:15
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1830		mg/kg	8.45	2.28	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.23	0.321	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Arsenic, Total	6.04		mg/kg	0.845	0.176	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Barium, Total	12.3		mg/kg	0.845	0.147	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Beryllium, Total	0.042	J	mg/kg	0.423	0.028	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Cadmium, Total	0.118	J	mg/kg	0.845	0.083	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Calcium, Total	36000		mg/kg	8.45	2.96	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Chromium, Total	4.36		mg/kg	0.845	0.081	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Cobalt, Total	1.63	J	mg/kg	1.69	0.140	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Copper, Total	11.4		mg/kg	0.845	0.218	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Iron, Total	4480		mg/kg	4.23	0.763	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Lead, Total	24.5		mg/kg	4.23	0.226	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Magnesium, Total	20900		mg/kg	8.45	1.30	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Manganese, Total	86.6		mg/kg	0.845	0.134	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Mercury, Total	0.193		mg/kg	0.068	0.044	1	04/15/20 07:45	04/15/20 14:17	EPA 7471B	1,7471B	GD
Nickel, Total	3.62		mg/kg	2.11	0.204	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Potassium, Total	163	J	mg/kg	211	12.2	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.69	0.218	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.845	0.239	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Sodium, Total	112	J	mg/kg	169	2.66	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.266	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Vanadium, Total	7.82		mg/kg	0.845	0.172	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC
Zinc, Total	22.6		mg/kg	4.23	0.248	2	04/15/20 07:10	04/17/20 11:41	EPA 3050B	1,6010D	LC

Project Name: LONG BEACH WWTP
Lab Number: L2015639
Project Number: LONG BEACH WWTP
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02
Client ID: SB-2 (2-4)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:45
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 93%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	988		mg/kg	8.38	2.26	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.19	0.318	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Arsenic, Total	1.50		mg/kg	0.838	0.174	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Barium, Total	7.45		mg/kg	0.838	0.146	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Beryllium, Total	0.050	J	mg/kg	0.419	0.028	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.838	0.082	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Calcium, Total	627		mg/kg	8.38	2.93	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Chromium, Total	3.49		mg/kg	0.838	0.080	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Cobalt, Total	0.980	J	mg/kg	1.68	0.139	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Copper, Total	4.69		mg/kg	0.838	0.216	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Iron, Total	2430		mg/kg	4.19	0.757	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Lead, Total	55.6		mg/kg	4.19	0.224	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Magnesium, Total	363		mg/kg	8.38	1.29	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Manganese, Total	21.6		mg/kg	0.838	0.133	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.067	0.044	1	04/15/20 07:45	04/15/20 14:27	EPA 7471B	1,7471B	GD
Nickel, Total	1.98	J	mg/kg	2.10	0.203	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Potassium, Total	218		mg/kg	210	12.1	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.68	0.216	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.838	0.237	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Sodium, Total	17.6	J	mg/kg	168	2.64	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.68	0.264	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Vanadium, Total	4.17		mg/kg	0.838	0.170	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC
Zinc, Total	12.7		mg/kg	4.19	0.246	2	04/15/20 07:10	04/17/20 11:46	EPA 3050B	1,6010D	LC

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03
Client ID: SB-3 (7-9)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY
Date Collected: 04/14/20 12:25
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	583		mg/kg	9.08	2.45	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.54	0.345	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Arsenic, Total	1.33		mg/kg	0.908	0.189	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Barium, Total	5.28		mg/kg	0.908	0.158	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.454	0.030	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.908	0.089	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Calcium, Total	342		mg/kg	9.08	3.18	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Chromium, Total	2.04		mg/kg	0.908	0.087	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Cobalt, Total	0.536	J	mg/kg	1.82	0.151	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Copper, Total	3.75		mg/kg	0.908	0.234	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Iron, Total	1740		mg/kg	4.54	0.820	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Lead, Total	5.43		mg/kg	4.54	0.243	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Magnesium, Total	182		mg/kg	9.08	1.40	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Manganese, Total	9.04		mg/kg	0.908	0.144	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.075	0.049	1	04/15/20 07:45	04/15/20 14:30	EPA 7471B	1,7471B	GD
Nickel, Total	1.20	J	mg/kg	2.27	0.220	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Potassium, Total	134	J	mg/kg	227	13.1	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.82	0.234	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.908	0.257	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Sodium, Total	13.8	J	mg/kg	182	2.86	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.82	0.286	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Vanadium, Total	2.32		mg/kg	0.908	0.184	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC
Zinc, Total	7.20		mg/kg	4.54	0.266	2	04/15/20 07:10	04/17/20 11:50	EPA 3050B	1,6010D	LC

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04
Client ID: SB-4 (1-3)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY
Date Collected: 04/14/20 12:30
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1270		mg/kg	8.44	2.28	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Antimony, Total	0.363	J	mg/kg	4.22	0.321	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Arsenic, Total	2.19		mg/kg	0.844	0.176	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Barium, Total	12.6		mg/kg	0.844	0.147	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Beryllium, Total	0.059	J	mg/kg	0.422	0.028	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.844	0.083	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Calcium, Total	1120		mg/kg	8.44	2.96	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Chromium, Total	4.08		mg/kg	0.844	0.081	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Cobalt, Total	1.21	J	mg/kg	1.69	0.140	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Copper, Total	8.99		mg/kg	0.844	0.218	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Iron, Total	3090		mg/kg	4.22	0.763	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Lead, Total	17.9		mg/kg	4.22	0.226	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Magnesium, Total	503		mg/kg	8.44	1.30	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Manganese, Total	26.6		mg/kg	0.844	0.134	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.070	0.046	1	04/15/20 07:45	04/15/20 14:33	EPA 7471B	1,7471B	GD
Nickel, Total	2.64		mg/kg	2.11	0.204	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Potassium, Total	226		mg/kg	211	12.2	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.69	0.218	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.844	0.239	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Sodium, Total	18.1	J	mg/kg	169	2.66	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.266	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Vanadium, Total	4.94		mg/kg	0.844	0.171	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC
Zinc, Total	18.7		mg/kg	4.22	0.247	2	04/15/20 07:10	04/17/20 12:03	EPA 3050B	1,6010D	LC

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.0731		mg/l	0.0100	0.00327	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Antimony, Total	0.00090	J	mg/l	0.00400	0.00042	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00351		mg/l	0.00050	0.00016	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Barium, Total	0.01591		mg/l	0.00050	0.00017	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Calcium, Total	82.1		mg/l	0.100	0.0394	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Chromium, Total	0.00088	J	mg/l	0.00100	0.00017	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00065		mg/l	0.00050	0.00016	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Copper, Total	0.00146		mg/l	0.00100	0.00038	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Iron, Total	0.633		mg/l	0.0500	0.0191	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Lead, Total	0.00054	J	mg/l	0.00100	0.00034	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Magnesium, Total	13.1		mg/l	0.0700	0.0242	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Manganese, Total	0.05892		mg/l	0.00100	0.00044	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Mercury, Total	0.00014	J	mg/l	0.00020	0.00009	1	04/15/20 16:42	04/16/20 16:16	EPA 7470A	1,7470A	AL
Nickel, Total	0.00163	J	mg/l	0.00200	0.00055	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Potassium, Total	4.12		mg/l	0.100	0.0309	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Selenium, Total	0.00237	J	mg/l	0.00500	0.00173	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Sodium, Total	75.1		mg/l	0.100	0.0293	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00212	J	mg/l	0.00500	0.00157	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/15/20 19:22	04/21/20 09:18	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.00681	J	mg/l	0.0100	0.00327	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00088	J	mg/l	0.00400	0.00042	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00198		mg/l	0.00050	0.00016	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.01559		mg/l	0.00050	0.00017	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY
Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Calcium, Dissolved	87.8		mg/l	0.100	0.0394	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00040	J	mg/l	0.00100	0.00017	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00074		mg/l	0.00050	0.00016	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00126		mg/l	0.00100	0.00038	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.129		mg/l	0.0500	0.0191	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00117		mg/l	0.00100	0.00034	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	12.3		mg/l	0.0700	0.0242	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.06324		mg/l	0.00100	0.00044	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/16/20 01:20	04/16/20 11:08	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00157	J	mg/l	0.00200	0.00055	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Potassium, Dissolved	4.20		mg/l	0.100	0.0309	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Sodium, Dissolved	72.6		mg/l	0.100	0.0293	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	0.00185	J	mg/l	0.00500	0.00157	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/16/20 00:50	04/20/20 16:39	EPA 3005A	1,6020B	AM

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.64		mg/l	0.0100	0.00327	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00141		mg/l	0.00050	0.00016	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Barium, Total	0.00460		mg/l	0.00050	0.00017	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Calcium, Total	35.2		mg/l	0.100	0.0394	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Chromium, Total	0.00174		mg/l	0.00100	0.00017	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00041	J	mg/l	0.00050	0.00016	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Copper, Total	0.00119		mg/l	0.00100	0.00038	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Iron, Total	0.973		mg/l	0.0500	0.0191	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Lead, Total	0.00069	J	mg/l	0.00100	0.00034	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Magnesium, Total	6.77		mg/l	0.0700	0.0242	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Manganese, Total	0.02595		mg/l	0.00100	0.00044	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Mercury, Total	0.00013	J	mg/l	0.00020	0.00009	1	04/15/20 16:42	04/16/20 16:18	EPA 7470A	1,7470A	AL
Nickel, Total	0.00126	J	mg/l	0.00200	0.00055	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Potassium, Total	2.49		mg/l	0.100	0.0309	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Sodium, Total	38.8		mg/l	0.100	0.0293	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00224	J	mg/l	0.00500	0.00157	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/15/20 19:22	04/21/20 09:23	EPA 3005A	1,6020B	AM
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0189		mg/l	0.0100	0.00327	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00113		mg/l	0.00050	0.00016	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00304		mg/l	0.00050	0.00017	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY
Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Calcium, Dissolved	34.2		mg/l	0.100	0.0394	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00042	J	mg/l	0.00100	0.00017	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	0.00022	J	mg/l	0.00050	0.00016	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00075	J	mg/l	0.00100	0.00038	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.254		mg/l	0.0500	0.0191	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Lead, Dissolved	0.00093	J	mg/l	0.00100	0.00034	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	6.29		mg/l	0.0700	0.0242	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.02158		mg/l	0.00100	0.00044	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/16/20 01:20	04/16/20 11:15	EPA 7470A	1,7470A	GD
Nickel, Dissolved	0.00083	J	mg/l	0.00200	0.00055	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Potassium, Dissolved	2.32		mg/l	0.100	0.0309	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Sodium, Dissolved	37.0		mg/l	0.100	0.0293	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/16/20 00:50	04/21/20 09:28	EPA 3005A	1,6020B	AM

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1361042-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	04/15/20 07:45	04/15/20 13:01	1,7471B	GD

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-04 Batch: WG1361124-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Copper, Total	ND		mg/kg	0.400	0.103	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Iron, Total	0.480	J	mg/kg	2.00	0.361	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Manganese, Total	0.072	J	mg/kg	0.400	0.064	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Potassium, Total	13.4	J	mg/kg	100	5.76	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Sodium, Total	18.1	J	mg/kg	80.0	1.26	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	04/15/20 07:10	04/15/20 20:42	1,6010D	LC

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 05-06 Batch: WG1361374-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	04/15/20 16:42	04/16/20 15:52	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 05-06 Batch: WG1361375-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Vanadium, Total	ND		mg/l	0.00500	0.00157	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	04/15/20 19:22	04/20/20 17:00	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 05-06 Batch: WG1361376-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Antimony, Dissolved	ND		mg/l	0.00400	0.00042	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Chromium, Dissolved	0.00028	J	mg/l	0.00100	0.00017	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Manganese, Dissolved	ND		mg/l	0.00100	0.00044	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/16/20 00:50	04/20/20 15:58	1,6020B	AM

Prep Information

Digestion Method: EPA 3005A

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 05-06 Batch: WG1361378-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/16/20 01:20	04/16/20 10:52	1,7470A	GD

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1361042-2 SRM Lot Number: D105-540								
Mercury, Total	92		-		60-141	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1361124-2 SRM Lot Number: D105-540					
Aluminum, Total	65	-	51-149	-	
Antimony, Total	148	-	19-249	-	
Arsenic, Total	98	-	70-130	-	
Barium, Total	100	-	75-125	-	
Beryllium, Total	103	-	75-125	-	
Cadmium, Total	97	-	75-125	-	
Calcium, Total	93	-	73-127	-	
Chromium, Total	95	-	70-130	-	
Cobalt, Total	94	-	75-125	-	
Copper, Total	97	-	75-125	-	
Iron, Total	84	-	38-162	-	
Lead, Total	93	-	71-128	-	
Magnesium, Total	81	-	63-137	-	
Manganese, Total	94	-	76-124	-	
Nickel, Total	94	-	70-131	-	
Potassium, Total	83	-	60-140	-	
Selenium, Total	100	-	63-137	-	
Silver, Total	96	-	69-131	-	
Sodium, Total	107	-	37-162	-	
Thallium, Total	96	-	68-132	-	
Vanadium, Total	94	-	65-135	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 Batch: WG1361124-2 SRM Lot Number: D105-540					
Zinc, Total	95	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361374-2					
Mercury, Total	103	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361375-2					
Aluminum, Total	112	-	80-120	-	
Antimony, Total	98	-	80-120	-	
Arsenic, Total	110	-	80-120	-	
Barium, Total	112	-	80-120	-	
Beryllium, Total	102	-	80-120	-	
Cadmium, Total	112	-	80-120	-	
Calcium, Total	112	-	80-120	-	
Chromium, Total	115	-	80-120	-	
Cobalt, Total	114	-	80-120	-	
Copper, Total	112	-	80-120	-	
Iron, Total	108	-	80-120	-	
Lead, Total	110	-	80-120	-	
Magnesium, Total	101	-	80-120	-	
Manganese, Total	114	-	80-120	-	
Nickel, Total	114	-	80-120	-	
Potassium, Total	112	-	80-120	-	
Selenium, Total	105	-	80-120	-	
Silver, Total	107	-	80-120	-	
Sodium, Total	98	-	80-120	-	
Thallium, Total	107	-	80-120	-	
Vanadium, Total	115	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361375-2					
Zinc, Total	116	-	80-120	-	

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361376-2					
Aluminum, Dissolved	114	-	80-120	-	
Antimony, Dissolved	96	-	80-120	-	
Arsenic, Dissolved	104	-	80-120	-	
Barium, Dissolved	108	-	80-120	-	
Beryllium, Dissolved	111	-	80-120	-	
Cadmium, Dissolved	106	-	80-120	-	
Calcium, Dissolved	116	-	80-120	-	
Chromium, Dissolved	116	-	80-120	-	
Cobalt, Dissolved	115	-	80-120	-	
Copper, Dissolved	112	-	80-120	-	
Iron, Dissolved	119	-	80-120	-	
Lead, Dissolved	107	-	80-120	-	
Magnesium, Dissolved	101	-	80-120	-	
Manganese, Dissolved	115	-	80-120	-	
Nickel, Dissolved	114	-	80-120	-	
Potassium, Dissolved	112	-	80-120	-	
Selenium, Dissolved	92	-	80-120	-	
Silver, Dissolved	108	-	80-120	-	
Sodium, Dissolved	98	-	80-120	-	
Thallium, Dissolved	103	-	80-120	-	
Vanadium, Dissolved	116	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361376-2					
Zinc, Dissolved	112	-	80-120	-	
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 Batch: WG1361378-2					
Mercury, Dissolved	104	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1361042-3 QC Sample: L2015345-01 Client ID: MS Sample												
Mercury, Total	7.24	0.396	6.98	**0**	Q	-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1361124-3 QC Sample: L2015629-01 Client ID: MS Sample										
Aluminum, Total	3020	176	5330	**1310**	Q	-	-	75-125	-	20
Antimony, Total	1.72J	44	41.1	93		-	-	75-125	-	20
Arsenic, Total	1.11	10.6	10.9	93		-	-	75-125	-	20
Barium, Total	9.90	176	189	102		-	-	75-125	-	20
Beryllium, Total	0.043J	4.4	4.65	106		-	-	75-125	-	20
Cadmium, Total	0.231J	4.49	4.64	103		-	-	75-125	-	20
Calcium, Total	726	880	1520	90		-	-	75-125	-	20
Chromium, Total	4.57	17.6	24.8	115		-	-	75-125	-	20
Cobalt, Total	0.675J	44	44.4	101		-	-	75-125	-	20
Copper, Total	12.8	22	27.2	**65**	Q	-	-	75-125	-	20
Iron, Total	2870	88	3830	**1090**	Q	-	-	75-125	-	20
Lead, Total	6.52	44.9	48.1	93		-	-	75-125	-	20
Magnesium, Total	257	880	1150	101		-	-	75-125	-	20
Manganese, Total	14.1	44	53.3	89		-	-	75-125	-	20
Nickel, Total	1.78J	44	45.5	103		-	-	75-125	-	20
Potassium, Total	145J	880	1020	116		-	-	75-125	-	20
Selenium, Total	ND	10.6	9.40	89		-	-	75-125	-	20
Silver, Total	ND	26.4	25.9	98		-	-	75-125	-	20
Sodium, Total	169J	880	953	108		-	-	75-125	-	20
Thallium, Total	ND	10.6	9.45	89		-	-	75-125	-	20
Vanadium, Total	5.97	44	54.0	109		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1361124-3 QC Sample: L2015629-01 Client ID: MS Sample										
Zinc, Total	103	44	76.0	**0**	Q	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361374-3 WG1361374-4 QC Sample: L2015727-04 Client ID: MS Sample										
Mercury, Total	ND	0.005	0.00533	107		0.00505	101	75-125	5	20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361375-3 QC Sample: L2015627-01 Client ID: MS Sample										
Aluminum, Total	0.422	2	2.68	113		-	-	75-125	-	20
Antimony, Total	ND	0.5	0.5060	101		-	-	75-125	-	20
Arsenic, Total	0.00020J	0.12	0.1299	108		-	-	75-125	-	20
Barium, Total	0.08259	2	2.254	108		-	-	75-125	-	20
Beryllium, Total	ND	0.05	0.05079	102		-	-	75-125	-	20
Cadmium, Total	ND	0.051	0.05523	108		-	-	75-125	-	20
Calcium, Total	91.6	10	97.0	**54**	Q	-	-	75-125	-	20
Chromium, Total	0.00324	0.2	0.2270	112		-	-	75-125	-	20
Cobalt, Total	0.00151	0.5	0.5597	112		-	-	75-125	-	20
Copper, Total	0.00162	0.25	0.2758	110		-	-	75-125	-	20
Iron, Total	1.34	1	2.44	110		-	-	75-125	-	20
Lead, Total	0.00053J	0.51	0.5468	107		-	-	75-125	-	20
Magnesium, Total	21.7	10	30.8	91		-	-	75-125	-	20
Manganese, Total	0.7277	0.5	1.270	108		-	-	75-125	-	20
Nickel, Total	0.00342	0.5	0.5654	112		-	-	75-125	-	20
Potassium, Total	11.6	10	21.9	103		-	-	75-125	-	20
Selenium, Total	0.00256J	0.12	0.126	105		-	-	75-125	-	20
Silver, Total	ND	0.05	0.05116	102		-	-	75-125	-	20
Sodium, Total	79.6	10	106	**264**	Q	-	-	75-125	-	20
Thallium, Total	ND	0.12	0.1246	104		-	-	75-125	-	20
Vanadium, Total	0.00160J	0.5	0.5736	115		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361375-3 QC Sample: L2015627-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.5553	111	-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361376-3 QC Sample: L2015627-01 Client ID: MS Sample										
Aluminum, Dissolved	0.0310	4	4.61	114		-	-	75-125	-	20
Antimony, Dissolved	0.00096J	1	1.126	113		-	-	75-125	-	20
Arsenic, Dissolved	0.00018J	0.24	0.2440	102		-	-	75-125	-	20
Barium, Dissolved	0.07820	4	4.485	110		-	-	75-125	-	20
Beryllium, Dissolved	ND	0.1	0.1055	106		-	-	75-125	-	20
Cadmium, Dissolved	ND	0.102	0.1082	106		-	-	75-125	-	20
Calcium, Dissolved	90.3	20	113	114		-	-	75-125	-	20
Chromium, Dissolved	0.00107	0.4	0.4650	116		-	-	75-125	-	20
Cobalt, Dissolved	0.00055	1	1.152	115		-	-	75-125	-	20
Copper, Dissolved	0.00049J	0.5	0.5512	110		-	-	75-125	-	20
Iron, Dissolved	0.0359J	2	2.50	125		-	-	75-125	-	20
Lead, Dissolved	ND	1.02	1.091	107		-	-	75-125	-	20
Magnesium, Dissolved	21.2	20	41.6	102		-	-	75-125	-	20
Manganese, Dissolved	0.6262	1	1.768	114		-	-	75-125	-	20
Nickel, Dissolved	0.00251	1	1.128	112		-	-	75-125	-	20
Potassium, Dissolved	11.2	20	33.8	113		-	-	75-125	-	20
Selenium, Dissolved	0.00186J	0.24	0.248	103		-	-	75-125	-	20
Silver, Dissolved	ND	0.1	0.1048	105		-	-	75-125	-	20
Sodium, Dissolved	76.2	20	117	**204**	Q	-	-	75-125	-	20
Thallium, Dissolved	ND	0.24	0.2488	104		-	-	75-125	-	20
Vanadium, Dissolved	ND	1	1.190	119		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361376-3 QC Sample: L2015627-01 Client ID: MS Sample									
Zinc, Dissolved	ND	1	1.101	110	-	-	75-125	-	20
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361378-3 QC Sample: L2015627-01 Client ID: MS Sample									
Mercury, Dissolved	ND	0.005	0.00496	99	-	-	75-125	-	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1361042-4 QC Sample: L2015345-01 Client ID: DUP Sample						
Mercury, Total	7.24	7.75	mg/kg	7		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1361124-4 QC Sample: L2015629-01 Client ID: DUP Sample						
Aluminum, Total	3020	4270	mg/kg	**34**	Q	20
Antimony, Total	1.72J	ND	mg/kg	NC		20
Arsenic, Total	1.11	1.22	mg/kg	9		20
Barium, Total	9.90	9.80	mg/kg	1		20
Beryllium, Total	0.043J	0.053J	mg/kg	NC		20
Cadmium, Total	0.231J	0.150J	mg/kg	NC		20
Calcium, Total	726	572	mg/kg	**24**	Q	20
Chromium, Total	4.57	6.00	mg/kg	**27**	Q	20
Cobalt, Total	0.675J	0.529J	mg/kg	NC		20
Copper, Total	12.8	10.9	mg/kg	16		20
Iron, Total	2870	3540	mg/kg	**21**	Q	20
Lead, Total	6.52	5.93	mg/kg	9		20
Magnesium, Total	257	164	mg/kg	**44**	Q	20
Manganese, Total	14.1	10.3	mg/kg	**31**	Q	20
Nickel, Total	1.78J	1.90J	mg/kg	NC		20
Potassium, Total	145J	114J	mg/kg	NC		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	169J	57.8J	mg/kg	NC		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-04 QC Batch ID: WG1361124-4 QC Sample: L2015629-01 Client ID: DUP Sample						
Thallium, Total	ND	ND	mg/kg	NC		20
Vanadium, Total	5.97	7.22	mg/kg	19		20
Zinc, Total	103	25.9	mg/kg	**120**	Q	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361375-4 QC Sample: L2015627-01 Client ID: DUP Sample					
Aluminum, Total	0.422	0.408	mg/l	3	20
Antimony, Total	ND	0.00053J	mg/l	NC	20
Arsenic, Total	0.00020J	0.00029J	mg/l	NC	20
Barium, Total	0.08259	0.07949	mg/l	4	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	91.6	85.2	mg/l	7	20
Chromium, Total	0.00324	0.00309	mg/l	5	20
Cobalt, Total	0.00151	0.00146	mg/l	3	20
Copper, Total	0.00162	0.00158	mg/l	2	20
Iron, Total	1.34	1.29	mg/l	4	20
Lead, Total	0.00053J	0.00053J	mg/l	NC	20
Magnesium, Total	21.7	20.5	mg/l	6	20
Manganese, Total	0.7277	0.6812	mg/l	7	20
Nickel, Total	0.00342	0.00304	mg/l	12	20
Potassium, Total	11.6	10.8	mg/l	7	20
Selenium, Total	0.00256J	0.00214J	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	79.6	73.9	mg/l	7	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361375-4 QC Sample: L2015627-01 Client ID: DUP Sample					
Thallium, Total	ND	0.00032J	mg/l	NC	20
Vanadium, Total	0.00160J	ND	mg/l	NC	20
Zinc, Total	ND	ND	mg/l	NC	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361376-4 QC Sample: L2015627-01 Client ID: DUP Sample					
Aluminum, Dissolved	0.0310	0.0309	mg/l	0	20
Antimony, Dissolved	0.00096J	0.00120J	mg/l	NC	20
Arsenic, Dissolved	0.00018J	ND	mg/l	NC	20
Barium, Dissolved	0.07820	0.07533	mg/l	4	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	90.3	88.6	mg/l	2	20
Chromium, Dissolved	0.00107	0.00111	mg/l	4	20
Cobalt, Dissolved	0.00055	0.00058	mg/l	6	20
Copper, Dissolved	0.00049J	0.00042J	mg/l	NC	20
Iron, Dissolved	0.0359J	0.0432J	mg/l	NC	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	21.2	20.7	mg/l	2	20
Manganese, Dissolved	0.6262	0.6194	mg/l	1	20
Nickel, Dissolved	0.00251	0.00240	mg/l	5	20
Potassium, Dissolved	11.2	11.2	mg/l	0	20
Selenium, Dissolved	0.00186J	0.00183J	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Sodium, Dissolved	76.2	74.4	mg/l	2	20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361376-4 QC Sample: L2015627-01 Client ID: DUP Sample					
Thallium, Dissolved	ND	0.00035J	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	ND	ND	mg/l	NC	20
Dissolved Metals - Mansfield Lab Associated sample(s): 05-06 QC Batch ID: WG1361378-4 QC Sample: L2015627-01 Client ID: DUP Sample					
Mercury, Dissolved	ND	ND	mg/l	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-01
Client ID: SB-1 (0-2)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:15
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.3		%	0.100	NA	1	-	04/15/20 10:15	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.0	0.22	1	04/15/20 13:50	04/16/20 11:51	1,9010C/9012B	LH

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-02
Client ID: SB-2 (2-4)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 10:45
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.3		%	0.100	NA	1	-	04/15/20 10:15	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	04/15/20 13:50	04/16/20 11:54	1,9010C/9012B	LH

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-03
Client ID: SB-3 (7-9)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:25
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.0		%	0.100	NA	1	-	04/15/20 10:15	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.24	1	04/15/20 13:50	04/16/20 11:55	1,9010C/9012B	LH

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-04
Client ID: SB-4 (1-3)
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:30
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	04/15/20 10:15	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.23	1	04/15/20 13:50	04/16/20 11:56	1,9010C/9012B	LH

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-05
Client ID: MW-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 11:40
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	04/15/20 11:00	04/15/20 13:33	1,9010C/9012B	LH

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015639-06
Client ID: MW-2
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 13:00
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Cyanide, Total	ND		mg/l	0.005	0.001	1	04/15/20 11:00	04/15/20 13:34	1,9010C/9012B	LH

Project Name: LONG BEACH WWTP **Lab Number:** L2015639

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 05-06 Batch: WG1361292-1										
Cyanide, Total	ND		mg/l	0.005	0.001	1	04/15/20 11:00	04/15/20 13:07	1,9010C/9012B	LH
General Chemistry - Westborough Lab for sample(s): 01-04 Batch: WG1361380-1										
Cyanide, Total	ND		mg/kg	0.86	0.18	1	04/15/20 13:50	04/16/20 14:17	1,9010C/9012B	LH

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 05-06 Batch: WG1361292-2 WG1361292-3								
Cyanide, Total	101		103		85-115	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 Batch: WG1361380-2 WG1361380-3								
Cyanide, Total	94		**68**	Q	80-120	32		35

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 05-06 QC Batch ID: WG1361292-4 WG1361292-5 QC Sample: L2015721-05 Client ID: MS Sample												
Cyanide, Total	0.004J	0.2	0.188	94		0.189	94		80-120	1		20
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1361380-4 WG1361380-5 QC Sample: L2015639-01 Client ID: SB-1 (0-2)												
Cyanide, Total	ND	9.8	9.6	98		10	96		75-125	4		35

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015639

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1361249-1 QC Sample: L2015673-01 Client ID: DUP Sample						
Solids, Total	80.1	80.1	%	0		20

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2015639-01A	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-01B	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-01C	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-01D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),SB-TI(180),CO-TI(180),V-TI(180),MG-TI(180),MN-TI(180),HG-T(28),FE-TI(180),K-TI(180),CA-TI(180),NA-TI(180),CD-TI(180)
L2015639-01E	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L2015639-01F	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L2015639-01X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-01Y	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-01Z	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-02A	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-02B	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-02C	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-02D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),TL-TI(180),NI-TI(180),CR-TI(180),AL-TI(180),SE-TI(180),PB-TI(180),SB-TI(180),CU-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),HG-T(28),MN-TI(180),MG-TI(180),FE-TI(180),K-TI(180),NA-TI(180),CA-TI(180),CD-TI(180)
L2015639-02E	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L2015639-02F	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TCN-9010(14),NYTCL-8081(14),NYTCL-8082(14)
L2015639-02X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2015639-02Y	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-02Z	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-03A	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-03B	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-03C	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-03D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),NI-TI(180),TL-TI(180),AL-TI(180),CR-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),SB-TI(180),CO-TI(180),V-TI(180),FE-TI(180),MN-TI(180),MG-TI(180),HG-T(28),K-TI(180),CD-TI(180),NA-TI(180),CA-TI(180)
L2015639-03E	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L2015639-03F	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2015639-03X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-03Y	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-03Z	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-04A	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-04B	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-04C	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-04D	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),BA-TI(180),AS-TI(180),AG-TI(180),CR-TI(180),NI-TI(180),AL-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SE-TI(180),ZN-TI(180),SB-TI(180),V-TI(180),CO-TI(180),MG-TI(180),MN-TI(180),FE-TI(180),HG-T(28),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L2015639-04E	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L2015639-04F	Glass 250ml/8oz unpreserved	A	NA		3.2	Y	Absent		TCN-9010(14),NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L2015639-04X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L2015639-04Y	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-04Z	Vial Water preserved split	A	NA		3.2	Y	Absent	15-APR-20 02:30	NYTCL-8260HLW(14)
L2015639-05A	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2015639-05B	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)
L2015639-05C	Vial HCl preserved	A	NA		3.2	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2015639-05D	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		8011(14)
L2015639-05E	Vial Na2S2O3 preserved	A	NA		3.2	Y	Absent		8011(14)
L2015639-05F	Plastic 250ml unpreserved	A	7	7	3.2	Y	Absent		-
L2015639-05G	Plastic 250ml HNO3 preserved	A	<2	<2	3.2	Y	Absent		BA-6020T(180),SE-6020T(180),TL-6020T(180),FE-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),SB-6020T(180),AS-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),AG-6020T(180),MG-6020T(180),CO-6020T(180)
L2015639-05H	Plastic 250ml NaOH preserved	A	>12	>12	3.2	Y	Absent		TCN-9010(14)
L2015639-05I	Amber 120ml unpreserved	A	7	7	3.2	Y	Absent		NYTCL-8081(7)
L2015639-05J	Amber 120ml unpreserved	A	7	7	3.2	Y	Absent		NYTCL-8081(7)
L2015639-05K	Amber 120ml unpreserved	A	7	7	3.2	Y	Absent		NYTCL-8082-LVI(7)
L2015639-05L	Amber 120ml unpreserved	A	7	7	3.2	Y	Absent		NYTCL-8082-LVI(7)
L2015639-05M	Amber 250ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2015639-05N	Amber 250ml unpreserved	A	7	7	3.2	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2015639-05O	Amber 250ml unpreserved	A	7	7	3.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2015639-05P	Amber 250ml unpreserved	A	7	7	3.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2015639-05X	Plastic 120ml HNO3 preserved Filtrates	A	NA		3.2	Y	Absent		K-6020S(180),SE-6020S(180),V-6020S(180),CU-6020S(180),MN-6020S(180),MG-6020S(180),CO-6020S(180),ZN-6020S(180),BE-6020S(180),CR-6020S(180),FE-6020S(180),CA-6020S(180),TL-6020S(180),NA-6020S(180),NI-6020S(180),BA-6020S(180),PB-6020S(180),AG-6020S(180),SB-6020S(180),AS-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L2015639-06A	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-06B	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-06C	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-06D	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		8011(14)
L2015639-06E	Vial Na2S2O3 preserved	B	NA		3.7	Y	Absent		8011(14)

*Values in parentheses indicate holding time in days

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015639
Report Date: 04/21/20

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2015639-06F	Plastic 250ml unpreserved	B	7	7	3.7	Y	Absent		-
L2015639-06G	Plastic 250ml HNO3 preserved	B	<2	<2	3.7	Y	Absent		BA-6020T(180),SE-6020T(180),TL-6020T(180),FE-6020T(180),K-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),ZN-6020T(180),CU-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),SB-6020T(180),V-6020T(180),AS-6020T(180),MG-6020T(180),HG-T(28),AG-6020T(180),AL-6020T(180),CD-6020T(180),CO-6020T(180)
L2015639-06H	Plastic 250ml NaOH preserved	B	>12	>12	3.7	Y	Absent		TCN-9010(14)
L2015639-06I	Amber 120ml unpreserved	B	7	7	3.7	Y	Absent		NYTCL-8081(7)
L2015639-06J	Amber 120ml unpreserved	B	7	7	3.7	Y	Absent		NYTCL-8081(7)
L2015639-06K	Amber 120ml unpreserved	B	7	7	3.7	Y	Absent		NYTCL-8082-LVI(7)
L2015639-06L	Amber 120ml unpreserved	B	7	7	3.7	Y	Absent		NYTCL-8082-LVI(7)
L2015639-06M	Amber 250ml unpreserved	B	7	7	3.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2015639-06N	Amber 250ml unpreserved	B	7	7	3.7	Y	Absent		A2-1,4-DIOXANE-SIM(7)
L2015639-06O	Amber 250ml unpreserved	B	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2015639-06P	Amber 250ml unpreserved	B	7	7	3.7	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2015639-06X	Plastic 120ml HNO3 preserved Filtrates	B	NA		3.7	Y	Absent		K-6020S(180),V-6020S(180),CU-6020S(180),SE-6020S(180),MN-6020S(180),CO-6020S(180),ZN-6020S(180),BE-6020S(180),MG-6020S(180),CR-6020S(180),CA-6020S(180),FE-6020S(180),NI-6020S(180),BA-6020S(180),NA-6020S(180),TL-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L2015639-07A	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-07B	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-07C	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-08A	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)
L2015639-08B	Vial HCl preserved	B	NA		3.7	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015639
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015639
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015639
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 04/14/20

ALPHA Job #: L2015639

Project Information
Project Name: Long Beach WWTP
Project Location: 2 West Pine Street, Long Beach, NY
Project #
(Use Project name as Project #) ☒
Project Manager: M. Carroll
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: Tenen Environmental
Address: 121 West 27th Street
Suite 702, NY, NY 10001
Phone: 646-606-2332
Fax:
Email: mcarroll@tenen-env.com

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☒ NY TOGS ☒ NY Part 375
☒ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☒ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Total + Dissolved metals for groundwater

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs + 15 TICs	SVOCs + 15 TICs	TAL Metals	Total Cyanide	PCBs/Pesticides	1,2-Dibromoethane	1,2-Dibromo-3-chloropropane	1,4-dioxane	Sample Specific Comments	Total Bottle
15639-01	SB-1 (0-2)	4/14/20	10:15	Soil	AP	X	X	X	X	X					6
-02	SB-2 (2-4)		10:45			X	X	X	X	X					6
-03	SB-3 (7-9)		12:25			X	X	X	X	X					6
-04	SB-4 (1-3)		12:30			X	X	X	X	X					6
-05	MW-1		11:40	Water		X	X	X	X	X	X	X	X	Total + Dissolved Metals	16
-06	MW-2		13:00			X	X	X	X	X	X	X	X	Total + Dissolved Metals	16
-07	Field Blank		10:00			X									3
-08	Trip Blank					X									2

	VOCs + 15 TICs	SVOCs + 15 TICs	TAL Metals	Total Cyanide	PCBs/Pesticides	1,2-Dibromoethane	1,2-Dibromo-3-chloropropane	1,4-dioxane
Container Type	E/V	A	A/P	A/P	A	V	V	A
Preservative	A/B	A	A/C	A/E	A	H	H	A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
A. Platt / Tenen	4/14/2020 13:40	MG AR	4/14/2020 13:40
MG AR	4-14-20 1710	[illegible]	4/14/20 1710
[illegible]	4/14/20 2052	[illegible]	4/14/20 2052

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L2015643
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	LONG BEACH WWTP
Project Number:	LONG BEACH WWTP
Report Date:	04/21/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2015643-01	WC-1	SOIL	2 WEST PINE STREET, LONG BEACH, NY	04/14/20 12:50	04/14/20

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015643
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015643
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2015643-01: The collection date and time on the chain of custody was 14-APR-20 12:50; however, the collection date/time on the container label was 14-APR-20 13:40. At the client's request, the collection date/time is reported as 14-APR-20 12:50.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Jennifer L Clements

Title: Technical Director/Representative

Date: 04/21/20

ORGANICS

VOLATILES

Project Name: LONG BEACH WWTP **Lab Number:** L2015643

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

SAMPLE RESULTS

Lab ID: L2015643-01 Date Collected: 04/14/20 12:50

Client ID: WC-1 Date Received: 04/14/20

Sample Location: 2 WEST PINE STREET, LONG BEACH, NY Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Analytical Method: 1,8260C

Analytical Date: 04/17/20 07:37

Analyst: MM

TCLP/SPLP Ext. Date: 04/15/20 09:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Volatiles by EPA 1311 - Westborough Lab						
Chloroform	ND		ug/l	7.5	2.2	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
Tetrachloroethene	ND		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	5.0	1.8	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
Benzene	ND		ug/l	5.0	1.6	10
Vinyl chloride	ND		ug/l	10	0.71	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,4-Dichlorobenzene	ND		ug/l	25	1.9	10
2-Butanone	ND		ug/l	50	19.	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
dibromofluoromethane	105		70-130

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/17/20 05:05
Analyst: MM
TCLP/SPLP Extraction Date: 04/15/20 09:06

Extraction Date: 04/15/20 09:06

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Volatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1362035-5					
Chloroform	ND		ug/l	7.5	2.2
Carbon tetrachloride	ND		ug/l	5.0	1.3
Tetrachloroethene	ND		ug/l	5.0	1.8
Chlorobenzene	ND		ug/l	5.0	1.8
1,2-Dichloroethane	ND		ug/l	5.0	1.3
Benzene	ND		ug/l	5.0	1.6
Vinyl chloride	ND		ug/l	10	0.71
1,1-Dichloroethene	ND		ug/l	5.0	1.7
Trichloroethene	ND		ug/l	5.0	1.8
1,4-Dichlorobenzene	ND		ug/l	25	1.9
2-Butanone	ND		ug/l	50	19.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	104		70-130
dibromofluoromethane	102		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Volatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1362035-3 WG1362035-4								
Chloroform	100		96		70-130	4		20
Carbon tetrachloride	99		95		63-132	4		20
Tetrachloroethene	84		82		70-130	2		20
Chlorobenzene	88		86		75-130	2		25
1,2-Dichloroethane	99		96		70-130	3		20
Benzene	100		96		70-130	4		25
Vinyl chloride	83		79		55-140	5		20
1,1-Dichloroethene	100		99		61-145	1		25
Trichloroethene	100		95		70-130	5		25
1,4-Dichlorobenzene	88		83		70-130	6		20
2-Butanone	88		86		63-138	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		113		70-130
Toluene-d8	98		99		70-130
4-Bromofluorobenzene	91		92		70-130
dibromofluoromethane	102		102		70-130

SEMIVOLATILES

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015643
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015643-01
Client ID: WC-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:50
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 04/18/20 13:40
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 04:28

TCLP/SPLP Ext. Date: 04/15/20 05:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
TCLP Semivolatiles by EPA 1311 - Westborough Lab						
Hexachlorobenzene	ND		ug/l	10	2.9	1
2,4-Dinitrotoluene	ND		ug/l	25	4.2	1
Hexachlorobutadiene	ND		ug/l	10	3.6	1
Hexachloroethane	ND		ug/l	10	3.4	1
Nitrobenzene	ND		ug/l	10	3.8	1
2,4,6-Trichlorophenol	ND		ug/l	25	3.4	1
Pentachlorophenol	ND		ug/l	50	17.	1
2-Methylphenol	ND		ug/l	25	5.1	1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	5.6	1
2,4,5-Trichlorophenol	ND		ug/l	25	3.6	1
Pyridine	ND		ug/l	18	9.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		21-120
Phenol-d6	73		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	76		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	82		33-120

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/18/20 10:59
Analyst: EK
TCLP/SPLP Extraction Date: 04/15/20 05:39

Extraction Method: EPA 3510C
Extraction Date: 04/17/20 04:28

Parameter	Result	Qualifier	Units	RL	MDL
TCLP Semivolatiles by EPA 1311 - Westborough Lab for sample(s): 01 Batch: WG1361963-1					
Hexachlorobenzene	ND		ug/l	10	2.9
2,4-Dinitrotoluene	ND		ug/l	25	4.2
Hexachlorobutadiene	ND		ug/l	10	3.6
Hexachloroethane	ND		ug/l	10	3.4
Nitrobenzene	ND		ug/l	10	3.8
2,4,6-Trichlorophenol	ND		ug/l	25	3.4
Pentachlorophenol	ND		ug/l	50	17.
2-Methylphenol	ND		ug/l	25	5.1
3-Methylphenol/4-Methylphenol	ND		ug/l	25	5.6
2,4,5-Trichlorophenol	ND		ug/l	25	3.6
Pyridine	ND		ug/l	18	9.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		21-120
Phenol-d6	79		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	86		33-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Semivolatiles by EPA 1311 - Westborough Lab Associated sample(s): 01 Batch: WG1361963-2 WG1361963-3								
Hexachlorobenzene	71		71		40-140	0		30
2,4-Dinitrotoluene	60		55		40-132	9		30
Hexachlorobutadiene	71		68		28-111	4		30
Hexachloroethane	59		55		21-105	7		30
Nitrobenzene	77		75		40-140	3		30
2,4,6-Trichlorophenol	89		85		30-130	5		30
Pentachlorophenol	77		74		9-103	4		30
2-Methylphenol	77		75		30-130	3		30
3-Methylphenol/4-Methylphenol	83		80		30-130	4		30
2,4,5-Trichlorophenol	91		88		30-130	3		30
Pyridine	31		14		10-66	**76**	Q	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	74		71		21-120
Phenol-d6	74		70		10-120
Nitrobenzene-d5	78		74		23-120
2-Fluorobiphenyl	77		71		15-120
2,4,6-Tribromophenol	71		68		10-120
4-Terphenyl-d14	79		75		33-120

METALS

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP
Lab Number: L2015643
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015643-01
Client ID: WC-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY
Sample Depth:
Matrix: Soil

Date Collected: 04/14/20 12:50
Date Received: 04/14/20
Field Prep: Not Specified
TCLP/SPLP Ext. Date: 04/15/20 05:39

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab											
Arsenic, TCLP	0.036	J	mg/l	1.00	0.019	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC
Barium, TCLP	0.147	J	mg/l	0.500	0.021	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC
Lead, TCLP	0.033	J	mg/l	0.500	0.027	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	04/17/20 13:47	04/17/20 17:23	EPA 7470A	1,7470A	AL
Selenium, TCLP	ND		mg/l	0.500	0.035	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC
Silver, TCLP	ND		mg/l	0.100	0.028	1	04/21/20 07:58	04/21/20 10:01	EPA 3015	1,6010D	LC

Project Name: LONG BEACH WWTP **Lab Number:** L2015643

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1362135-1										
Mercury, TCLP	ND		mg/l	0.0010	0.0005	1	04/17/20 13:47	04/17/20 17:18	1,7470A	AL

Prep Information

Digestion Method: EPA 7470A

TCLP/SPLP Extraction Date: 04/14/20 03:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
TCLP Metals by EPA 1311 - Mansfield Lab for sample(s): 01 Batch: WG1362916-1										
Arsenic, TCLP	0.028	J	mg/l	1.00	0.019	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC
Barium, TCLP	ND		mg/l	0.500	0.021	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC
Cadmium, TCLP	ND		mg/l	0.100	0.010	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC
Chromium, TCLP	ND		mg/l	0.200	0.021	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC
Lead, TCLP	ND		mg/l	0.500	0.027	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC
Selenium, TCLP	ND		mg/l	0.500	0.035	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC
Silver, TCLP	ND		mg/l	0.100	0.028	1	04/21/20 07:58	04/21/20 09:44	1,6010D	LC

Prep Information

Digestion Method: EPA 3015

TCLP/SPLP Extraction Date: 04/14/20 03:56

Lab Control Sample Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1362135-2								
Mercury, TCLP	102		-		80-120	-		
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 Batch: WG1362916-2								
Arsenic, TCLP	108		-		75-125	-		20
Barium, TCLP	94		-		75-125	-		20
Cadmium, TCLP	96		-		75-125	-		20
Chromium, TCLP	96		-		75-125	-		20
Lead, TCLP	97		-		75-125	-		20
Selenium, TCLP	101		-		75-125	-		20
Silver, TCLP	96		-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1362135-3 QC Sample: L2015643-01 Client ID: WC-1												
Mercury, TCLP	ND	0.025	0.0240	96		-	-		80-120	-		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1362916-3 QC Sample: L2015643-01 Client ID: WC-1												
Arsenic, TCLP	0.036J	1.2	1.36	113		-	-		75-125	-		20
Barium, TCLP	0.147J	20	19.1	96		-	-		75-125	-		20
Cadmium, TCLP	ND	0.51	0.494	97		-	-		75-125	-		20
Chromium, TCLP	ND	2	1.94	97		-	-		75-125	-		20
Lead, TCLP	0.033J	5.1	5.03	99		-	-		75-125	-		20
Selenium, TCLP	ND	1.2	1.23	102		-	-		75-125	-		20
Silver, TCLP	ND	0.5	0.484	97		-	-		75-125	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015643

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1362135-4 QC Sample: L2015643-01 Client ID: WC-1						
Mercury, TCLP	ND	ND	mg/l	NC		20
TCLP Metals by EPA 1311 - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1362916-4 QC Sample: L2015643-01 Client ID: WC-1						
Arsenic, TCLP	0.036J	0.031J	mg/l	NC		20
Barium, TCLP	0.147J	0.148J	mg/l	NC		20
Cadmium, TCLP	ND	ND	mg/l	NC		20
Chromium, TCLP	ND	ND	mg/l	NC		20
Lead, TCLP	0.033J	0.058J	mg/l	NC		20
Selenium, TCLP	ND	ND	mg/l	NC		20
Silver, TCLP	ND	ND	mg/l	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015643
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

SAMPLE RESULTS

Lab ID:	L2015643-01	Date Collected:	04/14/20 12:50
Client ID:	WC-1	Date Received:	04/14/20
Sample Location:	2 WEST PINE STREET, LONG BEACH, NY	Field Prep:	Not Specified
Sample Depth:			
Matrix:	Soil		

Test Material Information

Source of Material:	Unknown
Description of Material:	Non-Metallic - Damp Soil
Particle Size:	Medium
Preliminary Burning Time (sec):	120

Parameter	Result	Date Analyzed	Analytical Method	Analyst
Ignitability of Solids - Westborough Lab				
Ignitability	NI	04/16/20 05:10	1,1030	MV

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

SAMPLE RESULTS

Lab ID: L2015643-01
Client ID: WC-1
Sample Location: 2 WEST PINE STREET, LONG BEACH, NY

Date Collected: 04/14/20 12:50
Date Received: 04/14/20
Field Prep: Not Specified

Sample Depth:
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
pH (H)	8.2		SU	-	NA	1	-	04/15/20 09:10	1,9045D	JA
Cyanide, Reactive	ND		mg/kg	10	10.	1	04/15/20 02:40	04/15/20 03:48	125,7.3	KF
Sulfide, Reactive	ND		mg/kg	10	10.	1	04/15/20 02:40	04/15/20 03:42	125,7.3	KF

Project Name: LONG BEACH WWTP **Lab Number:** L2015643

Project Number: LONG BEACH WWTP **Report Date:** 04/21/20

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1361169-1										
Sulfide, Reactive	ND		mg/kg	10	10.	1	04/15/20 02:40	04/15/20 03:40	125,7.3	KF
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG1361170-1										
Cyanide, Reactive	ND		mg/kg	10	10.	1	04/15/20 02:40	04/15/20 03:47	125,7.3	KF

Lab Control Sample Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015643

Report Date: 04/21/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1361169-2								
Sulfide, Reactive	93		-		60-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1361170-2								
Cyanide, Reactive	88		-		30-125	-		40
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG1361262-1								
pH	100		-		99-101	-		

Lab Duplicate Analysis

Batch Quality Control

Project Name: LONG BEACH WWTP

Project Number: LONG BEACH WWTP

Lab Number: L2015643

Report Date: 04/21/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1361169-3 QC Sample: L2015709-01 Client ID: DUP Sample						
Sulfide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1361170-3 QC Sample: L2015709-01 Client ID: DUP Sample						
Cyanide, Reactive	ND	ND	mg/kg	NC		40
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1361262-2 QC Sample: L2015643-01 Client ID: WC-1						
pH (H)	8.2	8.6	SU	5		5

Project Name: LONG BEACH WWTP
Project Number: LONG BEACH WWTP

Lab Number: L2015643
Report Date: 04/21/20

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2015643-01A	Vial Large Septa unpreserved (4oz)	B	NA		3.7	Y	Absent		TCLP-EXT-ZHE(14)
L2015643-01B	Glass 500ml/16oz unpreserved	B	NA		3.7	Y	Absent		IGNIT-1030(14),REACTS(14),PH-9045(1),REACTCN(14)
L2015643-01W	Amber 1000ml unpreserved Extracts	B	NA		3.7	Y	Absent		TCLP-8270(14)
L2015643-01X	Plastic 120ml HNO3 preserved Extracts	B	NA		3.7	Y	Absent		CD-CI(180),BA-CI(180),AS-CI(180),HG-C(28),PB-CI(180),SE-CI(180),CR-CI(180),AG-CI(180)
L2015643-01X9	Tumble Vessel	B	NA		3.7	Y	Absent		-
L2015643-01Y	Vial unpreserved Extracts	B	NA		3.7	Y	Absent		TCLP-VOA(14)
L2015643-01Z	Vial unpreserved Extracts	B	NA		3.7	Y	Absent		TCLP-VOA(14)

*Values in parentheses indicate holding time in days

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015643
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015643
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Project Name:	LONG BEACH WWTP	**Lab Number:**	L2015643
Project Number:	LONG BEACH WWTP	**Report Date:**	04/21/20

Data Qualifiers

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

125 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates IIIA, April 1998.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of

Date Rec'd in Lab: 04/14/20

ALPHA Job #: L2015643

Project Information
Project Name: Long Beach WWTP
Project Location: 2 West Pine St, Long Beach, NY
Project #
(Use Project name as Project #) ☒
Project Manager: M. Carroll
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Client Information
Client: Tenen Environmental
Address: 121 West 27th Street
Suite 702, NY, NY 10001
Phone: 646-606-2332
Fax:
Email: mcarroll@tenen-env.com

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☒ NY Part 375
☐ AWQ Standards ☒ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☒ NJ ☒ NY
☒ Other: PA

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	RCRA Characteristics	TCLP VOCs	TCLP SVOCs	TCLP RCRA Metals					Sample Specific Comments	Total Bottles
15643-01	WC-1	4/14/2020	12:50	Soil	AP	X	X	X	X						2

Preservative Code:	Container Code
A = None	P = Plastic
B = HCl	A = Amber Glass
C = HNO_3	V = Vial
D = H_2SO_4	G = Glass
E = NaOH	B = Bacteria Cup
F = MeOH	C = Cube
G = $NaHSO_4$	O = Other
H = $Na_2S_2O_3$	E = Encore
K/E = Zn Ac/NaOH	D = BOD Bottle
O = Other	

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	A	A	A	A				
Preservative	A	A	A	A				

Relinquished By:	Date/Time	Received By:	Date/Time
A. Platt / Tenen	4/14/2020 13:40	MG&AL	4/14/2020 13:40
MG&AL	4-14-20 1710	[illegible]	4/14/20 1710
[illegible]	4/14/20 2052	[illegible]	4/14/20 2052

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

Attachment 2
Boring and Monitoring Well Construction Logs

TEN EN ENVIRONMENTAL

		Boring No.	**SB-1/MW-1**
		Sheet:	**1 OF 1**
Site:	**Long Beach Wastewater Treatment Plant**	**Drilling Method:**	Geoprobe
Date:	**4/14/2020**	**Soil Sampling Method:**	5' Macro-core
Weather:	**50s, Sunny**	**DTW:**	4'
Observer:	**A. Platt**	**Driller :**	AARCO

Depth (feet)	PID Reading (ppm)	% Soil Recovery	Soil Samples	GW Monitoring Well Intervals	Soil Description
5	30.7 3.7 0.0 14.5 0.0	100%	SB-1 (0-2)	1" PVC Screen (0-10')	**0-0.17'** - Asphalt **0.5-5'** - Brown to tan, fine to medium poorly graded SAND, trace gravel, wet @ 4', medium dense
10	0.0 0.0 0.0 0.0 0.0	70%			**5-10'** - Tan to gray, fine to medium poorly graded SAND, wet, medium dense
15					**EOB @ 10 ft-bg** **DTW = 4 ft-bg**

Notes:

N/A - Not Applicable
SAA - Same as above
SP - poorly graded sand
EOB - End of Boring
ft-bg - Feet Below Grade
GP - Poorly graded gravel
PID - Photoionization Detector
SM - silty sand
SW- Well-graded sands,
DTW - Depth to Water
GW - Groundwater

TENEN ENVIRONMENTAL

		Boring No.	**SB-2/MW-2**
		Sheet:	**1 OF 1**
Site:	**Long Beach Wastewater Treatment Plant**	**Drilling Method:**	Geoprobe
Date:	**4/14/2020**	**Soil Sampling Method:**	5' Macro-core
Weather:	**50s, Sunny**	**DTW:**	4'
Observer:	**A. Platt**	**Driller :**	AARCO

Depth (feet)	PID Reading (ppm)	% Soil Recovery	Soil Samples	GW Monitoring Well Intervals	Soil Description
5	0.0 0.0 0.0 0.0 0.0	100%	SB-2 (2-4)	1" PVC Screen (0-10')	**0-5'** - Brown to tan, fine to medium poorly graded SAND, trace gravel, wet @ 4', medium dense
10	0.0 0.0 0.0 0.0 0.0	63%			**5-10'** - Tan to gray, fine to coarse poorly graded SAND, trace gravel, wood from 7'8" to 7'10", wet, medium dense
15					**EOB @ 10 ft-bg** **DTW = 4 ft-bg**

Notes:

N/A - Not Applicable
SAA - Same as above
SP - poorly graded sand
EOB - End of Boring
ft-bg - Feet Below Grade
GP - Poorly graded gravel
PID - Photoionization Detector
SM - silty sand
SW- Well-graded sands,
DTW - Depth to Water
GW - Groundwater

TEN EN ENVIRONMENTAL		Boring No.	SB-3
		Sheet:	1 OF 1
Site:	Long Beach Wastewater Treatment Plant	Drilling Method:	Geoprobe
Date:	4/14/2020	Soil Sampling Method:	5' Macro-core
Weather:	50s, Sunny	DTW:	3'
Observer:	A. Platt	Driller :	AARCO

Depth (feet)	PID Reading (ppm)	% Soil Recovery	Soil Samples	Soil Description
	0.0 0.0 0.0 12.4 0.0	100%		**0-5'** - Tan, fine to medium poorly graded SAND, trace gravel, wet @ 3', medium dense
5				
	0.0 6.5 288.1 10.9	77%	SB-3 (7-9)	**5-9'** - Tan to gray, fine to coarse poorly graded SAND, trace gravel, wet, loose **9-9.75'** - Gray, lean CLAY, wet, soft
10	9.1			**9.75-10'** - Gray, fine poorly graded SAND, wet, medium dense
				EOB @ 10 ft-bg **DTW = 3 ft-bg**
15				

Notes:

N/A - Not Applicable	**EOB - End of Boring**	**PID - Photoionization Detector**	**DTW - Depth to Water**
SAA - Same as above	**ft-bg - Feet Below Grade**	**SM - silty sand**	**GW - Groundwater**
SP - poorly graded sand	**GP - Poorly graded gravel**	**SW- Well-graded sands,**	

TEN EN ENVIRONMENTAL		Boring No.	SB-4
		Sheet:	1 OF 1
Site:	Long Beach Wastewater Treatment Plant	Drilling Method:	Geoprobe
Date:	4/14/2020	Soil Sampling Method:	5' Macro-core
Weather:	50s, Sunny	DTW:	3'
Observer:	A. Platt	Driller :	AARCO

Depth (feet)	PID Reading (ppm)	% Soil Recovery	Soil Samples	Soil Description
5	0.0 0.0 0.0 0.0 0.0	100%	SB-4 (1-3)	**0-5'** - Brown to tan, fine to medium poorly graded SAND, trace gravel, wet @ 3', medium dense
10	0.0 0.0 0.0 0.0 0.0	63%		**5-10'** - Brown to black, fine to coarse poorly graded SAND, trace gravel, wet, medium dense
15				**EOB @ 10 ft-bg** **DTW = 3 ft-bg**

Notes:

N/A - Not Applicable	**EOB - End of Boring**	**PID - Photoionization Detector**	**DTW - Depth to Water**
SAA - Same as above	**ft-bg - Feet Below Grade**	**SM - silty sand**	**GW - Groundwater**
SP - poorly graded sand	**GP - Poorly graded gravel**	**SW- Well-graded sands,**	

Attachment 3
Groundwater Purge Logs

GROUNDWATER SAMPLING LOG

Site Name	Long Beach Wastewater Treatment Plant	Date	4/14/2020
Well No.	MW-1	Sample ID	MW-1

Well Diameter	1 inch	Depth to Water	3.98 ft-bg
Well Screen Interval	0-10 ft-bg	Depth to Bottom	10.02 ft-bg
Headspace PID	0.0 ppm		
Weather	Sunny, 50s		

Pump	Peristaltic
Water Quality Meter	Horiba U-52
Total Volume Purged	4 gallons

Time	Temperature deg-C	pH SU	ORP mV	Conductivity mS/cm	Turbidity NTU	Dissolved Oxygen mg/L	Total Dissolved Solids ppm
11:10	14.07	8.20	42	0.685	242	1.01	0.439
11:20	13.11	7.10	4	0.692	83.3	0.00	0.444
11:30	12.93	6.97	1	0.699	48.2	0.00	0.448

Notes: Began purging at 11:00. Hooked up Horiba at 11:07. Sampled MW-1 at 11:40 for VOCs+15 TICs, SVOCs+15 TICs, total and

GROUNDWATER SAMPLING LOG

Site Name	Long Beach Wastewater Treatment Plant	Date	4/14/2020
Well No.	MW-2	Sample ID	MW-2

Well Diameter	1 inch	Depth to Water	5.44 ft-bg
Well Screen Interval	0-10 ft-bg	Depth to Bottom	8.45 ft-bg
Headspace PID	0.0 ppm		
Weather	Sunny, 50s		

Pump	Peristaltic
Water Quality Meter	Horiba U-52
Total Volume Purged	5 gallons

Time	Temperature deg-C	pH SU	ORP mV	Conductivity mS/cm	Turbidity NTU	Dissolved Oxygen mg/L	Total Dissolved Solids ppm
12:00	14.07	7.66	63	0.529	1000	4.78	0.266
12:10	11.98	6.70	4	0.337	397	0.00	0.219
12:20	11.88	6.65	5	0.337	102	0.00	0.219
12:30	11.96	6.73	2	0.338	61.5	0.00	0.220
12:40	11.85	6.73	0	0.338	42.3	0.00	0.220

Notes: Began purging at 11:55. Hooked up Horiba at 12:00. Sampled MW-2 at 13:00 for VOCs+15 TICs, SVOCs+15 TICs, total and

SUBSURFACE ENVIRONMENTAL INVESTIGATION REPORT

LONG BEACH WPCP CONSOLIDATION PROJECT- SUBSURFACE ENVIRONMENTAL INVESTIGATION REPORT

Nassau County Department of Public Works

May 22, 2020

Nicholas Comrie
Project Geologist

Long Beach WPCP Consolidation Project

Prepared for:

Nassau County Department of Public Works
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Date:

May 22, 2020

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Table 2 Semi-Volatile Organic Compound (SVOC) Soil Analytical Results
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FIGURES

Figure 1 Boring Location Map

APPENDICES

Appendix A Laboratory Analytical Reports
Appendix B Soil Sampling Logs

1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis) and Hazen & Sawyer Engineering were retained by the Nassau County Department of Public Works in a Joint Venture partnership to provide program management services (PM-JV) and to conduct a geotechnical and environmental investigation for a proposed sewage pipeline (force main) from the Long Beach Water Pollution Control Plant (WPCP) to the Bay Park Sewage Treatment Plant (STP) (the Consolidation Project). The Consolidation Project includes: (1) the conversion of the Long Beach WPCP's headworks and influent pump station to a flow diversion pump station; (2) design and construction of a 24-inch diameter force main using horizontal directional drilling (HDD) construction method; and, (3) tie-in of the force main to one of the Bay Park STP's main influent interceptors. A geotechnical investigation was completed to provide data and analysis of subsurface conditions critical to advancing the design of the force main and confirming the HDD construction method.

As part of the geotechnical investigation, Arcadis conducted a subsurface environmental sampling program that consisted of collecting ninety-four (94) soil samples for laboratory analysis from 6 soil borings (two in-water, two marsh, and two landward) along the proposed force main alignment. The locations of the completed soil borings are shown in **Figure 1**. All soil samples were collected and analyzed for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Target Analyte List Metals (TAL Metals), Mercury, Polychlorinated Biphenyls (PCBs), Pesticides, and Reactive Cyanide.

All soil sample analytical results were compared to the New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives (NY 375-6.8(a)), New York State Department of Environmental Conservation (NYSDEC) Restricted-Residential Use Soil Cleanup Objectives (NY 375-6.8(b)), New York State Department of Environmental Conservation (NYSDEC) Restricted-Commercial Use Soil Cleanup Objectives (NY 3756.8(b)), and New York State Department of Environmental Conservation (NYSDEC) Restricted Use Soil Cleanup Objectives for the Protection of Groundwater (NY 375-6.8(b)).

2 SITE DESCRIPTION

The proposed sewage pipeline force main will connect the flow diversion pump station to be constructed at the existing Long Beach WPCP site to an existing 66-inch interceptor pipe that is connected to the Bay Park STP. A large portion of the force main would be installed parallel to the existing Bay Park STP outfall under Pearsalls and North and South Black Banks Hassocks and Bay Park within an existing 50-foot wide easement previously conveyed to the County by the Town of Hempstead for the existing Bay Park outfall. There will be three (3) aboveground air vents located along the force main at high points: one in Bay Park, a second on Pearsalls Hassock, and a third on South Black Banks Hassock.

Construction along the force main alignment will be performed predominantly with Horizontal Directional Drilling (HDD) technology in three (3) segments, with open cut technology being used to connect segments to the tie-in at the Bay Park STP and to the pump station at the existing Long Beach WPCP site, as well as for tie-in connections of pipe segments at two (2) points on the Hassocks – one on Pearsalls Hassock, and one on South Black Banks Hassock.

2.1 Regional Geology

Long Island lies at the extreme north end of the Atlantic Coastal Plain physiographic province. The island is underlain by unconsolidated deposits of sand, gravel, and clay of Quaternary and late Cretaceous ages, which in turn overlie bedrock of schist, gneiss, and granitic rocks of pre-Cambrian age. Bedrock crops out in northwestern Queens County, along the East River, and dips in a generally southeastward direction to a depth of more than 1,500 feet below sea level beneath Long Beach, on the south shore of Nassau County.

2.2 Site History and Existing Site Conditions

To the north of the Long Beach WPCP is Reynolds Channel, located within the Western Bays, and the treated effluent from the WPCP discharges into this receiving waterbody. Reynolds Channel is on the Impaired Waters (Clean Water Act Section 303(d)) list. Reynolds Channel also receives the treated discharge from the County's Bay Park STP. The Western Bays of Long Island contain the largest concentration of salt marshes in the interconnected South Shore Estuary Reserve. These marshes were once highly productive fishing and shellfishing grounds (Citizen's Campaign for the Environment 2017). Over time, water quality and productivity of the South Shore Estuary has declined as a product of changing density and land use, aging infrastructure, and an increased service population. Both point source and non-point source pollution have contributed to the Estuary's existing conditions. The Hassock Islands are a set of low-lying salt-marsh islands in the Western Bays. South Black Banks Hassock, North Black Banks Hassock, and Pearsalls Hassock islands were impacted by the construction of the existing Bay Park STP outfall along the same route where the County has a Right of Way (ROW) via an easement from the Town of Hempstead, the owner of the Hassocks and adjacent underwater lands.

3 ENVIRONMENTAL INVESTIGATION

The PM-JV conducted a subsurface environmental investigation which consisted of collecting ninety-four (94) soil samples for laboratory analysis from two in-water (TB-102 and TB-111), two marsh (TB-106 and TB-112), and two landward borings (TB-117 and TB-101) along the proposed force main alignments. Split-spoon environmental samples from the borings were collected every two feet from the surface to approximately 10 feet (ft) below ground surface (BGS), then at 10-foot intervals within the remainder of the borehole until refusal. Both discrete and composite soil samples were collected via split-spoons.

Samples for laboratory analysis were collected within clean laboratory provided glassware. Each sample was sealed and labeled by location, date, and time. The samples were placed under chain-of-custody control in a cooler with ice and transported to a New York State Department of Health (NYSDOH) certified laboratory.

Cuttings from in-water boreholes were collected and drummed upon completion of drilling operations. Cuttings were sampled, analyzed, and will be disposed of in accordance with applicable Federal, State, and local regulatory and disposal facility requirements. Cuttings from land and wetland boreholes were used to backfill boreholes.

4 LABORATORY ANALYTICAL RESULTS

All samples collected during the environmental investigation were analyzed by Hampton-Clarke Laboratory located in Fairfield, New Jersey, which holds NYSDOH laboratory certification #11408. The technical review of the laboratory analytical data confirmed that all samples were received at the laboratory in conformance with the requirements and all samples were analyzed within their respective hold times. All analyses conform to the requirements of each of the methods used.

All soil samples were collected and analyzed for Volatile Organic Compounds (VOCs), Semi-Volatile Compounds (SVOCs), Target Analyte List Metals (TAL Metals), Mercury, Polychlorinated Biphenyls (PCBs), Pesticides, and Reactive Cyanide. The following details the results of the environmental subsurface investigation.

Results of laboratory analysis of soil samples were compared to the New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives (NY 375-6.8(a)) and New York State Department of Environmental Conservation (NYSDEC) Restricted Use Soil Cleanup Objectives (SCOs) (NY 375-6.8(b)).

4.1 Volatile Organic Compounds

Laboratory analytical results for Volatile Organic Compounds (VOCs) are shown in **Table 1**. **Acetone** was detected at concentrations above NYSDEC Restricted-Residential and Restricted Soil Cleanup Objectives for the Protection of Groundwater in borings TB-101, TB-106, TB-110, TB-111, TB-112, TB-116, and TB-117. Additional VOCs were detected in samples collected at concentrations that do not exceed either Unrestricted or Restricted Soil Cleanup Objectives.

4.2 Semi-Volatile Organic Compounds

Laboratory analytical results for Semi-Volatile Organic Compounds (SVOCs) are shown in **Table 2**. According to laboratory analytical results, several SVOCs were detected at concentrations that do not exceed either NYSDEC Unrestricted or Restricted Soil Cleanup Objectives.

4.3 Metals

Laboratory analytical results for Target Analyte List (TAL) Metals and Mercury are shown in **Table 3**. **Arsenic** was found in concentrations that exceed NYSDEC Unrestricted and Restricted Use Soil Cleanup Objectives (Residential, Commercial, and Protection of Groundwater) at TB-101 from 0 ft-10 ft BGS and TB-117 from 0 ft-3 ft BGS. **Chromium** was found in concentrations that exceed NYSDEC Unrestricted Use Soil Cleanup Objectives at TB-101, TB-106, TB-110, TB-112, and TB-117, and Restricted-Residential Use Soil Cleanup Objectives at TB-102. **Mercury** was found in concentrations that exceed Unrestricted and Restricted-Residential Use Soil Cleanup Objectives only at TB-101 and TB-117 from 0 ft-10 ft BGS. **Copper**, **Lead**, **Zinc,** and **Silver** were found in concentrations that exceed Restricted-Residential Use Soil Cleanup Objectives at TB-101 from 0 ft-10 ft BGS.

4.4 Polychlorinated Biphenyls

Laboratory analytical results for Polychlorinated Biphenyls (PCBs) are shown in **Table 4**. According to laboratory analytical results, the PCB compound **Aroclor-1254** was found in concentrations that exceed Restricted-Residential Use Soil Cleanup Objectives. Aroclor-1254 was found in samples TB-101-1 COMP (Composite) at concentration 0.31mg/Kg, in sample TB-101-2 COMP at concentration 0.13mg/Hg, and in sample TB-101-3 COMP at concentration 0.20mg/Kg. All other PCB compounds were not detected in soil samples collected from the soil borings installed at the Site.

4.5 Pesticides

Laboratory analytical results for Pesticides are shown in **Table 5.** According to laboratory analytical results, Pesticides compounds (**p,p'-DDE**) and (**p,p'-DDT**) were found in concentrations that exceed Restricted-Residential Use Soil Cleanup Objectives. (p,p'-DDE) was found in samples TB-101-1 COMP, TB-101-2 COMP, and TB-117-1 COMP at concentrations of 0.031mg/Kg, 0.025mg/Kg, and 0.023mg/Kg respectively. (p,p-DDT) was found in sample and TB-117-1 COMP at concentration 0.015mg/Kg. All other Pesticides compound detections were found in sample TB-117-1 COMP at concentrations below all Use Soil Cleanup criteria.

4.6 Reactive Cyanide

Laboratory analytical results for Cyanide Reactivity are shown in **Table 3.** According to laboratory analytical results, Cyanide was detected below all Use Soil Cleanup criteria in all soil samples collected from soil borings at the Site.

5 CONCLUSION

The Subsurface Environmental Investigation performed for the Nassau County Department of Public Works for the proposed sewage pipeline force main from the Long Beach WPCP to the Bay Park STP is complete. PM-JV visually inspected the Site and found no other surficial indications of environmental contamination.

According to 2010 NYSDEC Policy CP-51: Soil Cleanup Guidance Part IV Subpart F, when Use Soil Cleanup Objectives (SCOs) is used as a screening tool at sites or areas of concern where contaminant concentrations are equal to or below Unrestricted Soil Cleanup Objective (SCO), "no action or study is warranted because of soil contamination. Additionally, exceedances of one or more applicable SCOs alone do not trigger the need for remedial action unless they are determined to pose health or environmental concerns based on the magnitude of the exceedance, accuracy of exposure, other exposures to contamination, and strength and quality of the available toxicological information.

Due to the relatively low-level concentrations of VOC, Metals, PCBs, and Pesticide contaminants in soil samples collected and analyzed as part of the investigation, the potential of encountering contamination at an environmentally significant concentration during the proposed Horizontal Directional Drilling (HDD) force main installation below the Western Bays is low. Furthermore, due to the nature of HDD pipeline installation and relatively remote proposed construction locations within the existing 50-foot wide easement, the potential for community health impacted related to future construction activities is also low.

Analytical results showing low-level detections of VOCs, Metals, PCBs, and Pesticides, derived waste materials from construction are expected to be classified as non-hazardous. To properly determine the toxicity level of the waste materials that will be generated, waste samples from the HDD drill cuttings would need to analyzed using Toxicity Characteristic Leaching Procedure or TLCP. This testing procedure is designed to determine the mobility of chemical analytes from waste materials by simulating landfill conditions where liquid (rainwater) would percolate through and react with contaminants in the waste material. The TCLP analysis determines which contaminants identified by USEPA are present in the leachate and their concentrations. In conjunction with TCLP, waste samples should be analyzed for Ignitability (Flashpoint), Reactivity, and Corrosivity. The quantity and type (solid, liquid or both) of waste materials generated during construction will dictate the number of samples required to be collected to accurately characterize materials for disposal. Waste generated from construction should be characterized using TCLP to determine the potential toxicity of any generated waste for appropriate offsite disposal.

During construction, measures should be taken to minimize the migration of waste material offsite (i.e. runoff from stockpiles, dust plumes, etc.). Such measures would include the capture of all drill cuttings from the HDD work in containers prior to off-site disposal, periodic water sprinkling to minimize airborne dust, and haybale perimeters to prevent inadvertent runoff. Additionally, according to NYSDEC Exemptions for on-site reuse of material (6 CRR-NY 360.13(c)), the material used as backfill for the excavation from which the fill material was taken, or as fill in areas of similar physical characteristics on the project property is exempt from regulation. If material proposed to be reused for backfill of excavated areas exhibits historical or visual evidence of contamination (including odors) and will be used in an area with public access, the material must be covered with a minimum of 12 inches of soil or fill material that meets the criteria for general fill. This means that in areas where open-cut technology will be used to connect segments to tie-in at Bay Park STP and to the pump station at the Long Beach WPCP, as well as for tie-in connections of pipe segments at sites on the Hassocks, excavated material can be reused as backfill provided that the abovementioned regulation is followed.

6 REFERENCES

NYSDEC. 2006. Division of Environmental Remediation, 6 NYCRR Part 375 Environmental Remediation Programs Subparts 375-1 to 375-4 & 375-6. Available online at https://www.dec.ny.gov/docs/remediation_hudson_pdf/part375.pdf

NYSDEC. 2010. DER-10 – Technical Guidance for Site Investigation and Remediation. Available online at: http://www.dec.ny.gov/docs/remediation_hudson_pdf/der10.pdf

Citizen's Campaign for the Environment 2017. Water Resources: Long Island Sound South Shore Reserve. Available online at: https://www.citizenscampaign.org/water-protection.

NYSDEC. 2010. CP-51 - Soil Cleanup Guidance. Available online at: http://www.dec.ny.gov/docs/remediation_hudson_pdf/cpsoil.pdf

Title 6. NYSDEC Chapter IV. Quality Services, Subchapter B Solid Wastes, Part 360 Sold Waste Management Facilities General Requirements, 6 CRR-NY IV B 360 Notes. Available online at: https://www.dec.ny.gov/regs/2491.html

Hazen-Arcadis. Long Beach Water Pollution Control Plan - Subsurface Condition Desktop Study Report. April 2020

TABLES

TABLE 1
Volatile Organic Compoounds
Soil Analytical Results
Long Beach WPCP Consolidation Project

	NY 375-6.8(a) (mg/Kg)	NY 375-6.8(b) Residential (mg/Kg)	NY 375-6.8(b) Commercial (mg/Kg)	NY 375-6.8(b) Protection of Ground-Water (mg/Kg)	TB-101-1 GRAB (1.0-1.5) 2/13/2020 Soil mg/Kg	TB-101-2 GRAB (5.0-5.5) 2/13/2020 Soil mg/Kg	TB-101-3 GRAB (8.0-8.5) 2/13/2020 Soil mg/Kg	TB-101-4 GRAB (15.0-15.5) 2/13/2020 Soil mg/Kg	TB-101-5 GRAB (25.0-25.5) 2/13/2020 Soil mg/Kg	TB-101-6 GRAB (35.0-35.5) 2/13/2020 Soil mg/Kg	TB-101-7 GRAB (45.0-45.5) 2/14/2020 Soil mg/Kg	TB-101-8 GRAB (55.0-55.5) 2/14/2020 Soil mg/Kg	TB-101-9 GRAB (65.0-65.5) 2/14/2020 Soil mg/Kg	TB-101-10 GRAB (75.0-75.5) 2/14/2020 Soil mg/Kg
Volatiles														
:TotalVolatileTic	NA	NA	NA	NA	0.090J	0.16J	0.35J	ND	ND	ND	0.013J	ND	ND	ND
1,1,1-Trichloroethane	100	0.68	500	0.68	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	NA	NA	NA	0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Trichloro-1,2,2-trifluoroetha	NA	NA	NA	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	26	0.27	240	0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	100	0.33	500	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NA	NA	NA	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	100	1.1	500	1.1	ND	ND	0.020	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	3.1	0.02	30	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	49	2.4	280	2.4	ND	ND	0.0040	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	13	1.8	130	1.8	ND	ND	0.036	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	13	0.1	130	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	100	0.12	500	0.12	0.019	0.014	0.059	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NA	NA	NA	1	ND	ND	ND	ND	ND	ND	0.0045	ND	ND	ND
Acetone	100	0.05	500	0.05	0.20	0.18	0.66	ND	ND	ND	ND	ND	ND	ND
Benzene	4.8	0.06	44	0.06	0.0015	0.0054	0.0032	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	NA	NA	NA	2.7	0.0031	0.0056	0.015	ND	0.0033	0.0029	0.0093	ND	ND	ND
Carbon tetrachloride	2.4	0.76	22	0.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	100	1.1	500	1.1	ND	0.0027	0.0038	ND	ND	ND	ND	ND	ND	ND
Chloroethane	NA	NA	NA	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	49	0.37	350	0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	100	0.25	500	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	41	1	390	1	ND	0.0011	0.0024	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	NA	2.3	NA	2.3	ND	0.0020	0.0048	ND	ND	ND	ND	ND	ND	ND
m&p-Xylenes	100	0.26	500	1.6	0.0011	0.0031	0.014	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	0.021	ND	ND	ND
Methylcyclohexane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	100	0.05	500	0.05	ND	0.0046	0.0098	ND	ND	0.0022	ND	ND	ND	ND
Methyl-t-butyl ether	100	0.93	500	0.93	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	100	0.26	500	1.6	0.0014	0.0042	0.011	ND	ND	ND	ND	ND	ND	ND
Styrene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	19	1.3	150	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100	0.7	500	0.7	0.0024	0.0066	0.0071	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	100	0.19	500	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	21	0.47	200	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.9	0.02	13	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	100	0.26	500	1.6	0.0025	0.0073	0.025	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 1
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Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-101-11 GRAB (85.0-85.5) 2/14/2020 Soil mg/Kg	TB-101-12 GRAB (95.0-95.5) 2/14/2020 Soil mg/Kg	TB-101-13 GRAB (105.0-105.5) 2/14/2020 Soil mg/Kg	TB-102-1 GRAB (99.0-100.0) 3/3/2020 Soil mg/Kg	TB-106-01 GRAB (1.5-2.0) 43909 Soil mg/Kg	TB-106-02 GRAB (14-15) 43909 Soil mg/Kg	TB-106-03 GRAB (20-20.5) 43909 Soil mg/Kg	TB-106-04 GRAB (31.5-32.0) 43909 Soil mg/Kg	TB-106-05 GRAB (41.0-41.5) 43909 Soil mg/Kg	TB-106-06 GRAB (51.5-52.0) 43909 Soil mg/Kg	TB-106-07 GRAB (61.0-61.5) 43909 Soil mg/Kg	TB-106-08 GRAB (71.0-71.5) 43909 Soil mg/Kg	TB-106-09 GRAB (81.5-82.0) 43909 Soil mg/Kg
Volatiles													
:TotalVolatileTic	ND	ND	0.0060J	0.026J	ND	0.047J	ND	0.0045J	ND	0.054J	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Trichloro-1,2,2-trifluoroetha	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	0.019	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	0.28	0.07	0.055	0.11	0.089	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	0.0030	0.0021	ND	ND	0.0042	0.023	ND	0.0096	0.0042	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	ND	ND	ND	ND	ND	0.057	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	0.0020	0.0028	0.017	0.0042	0.0027	ND	0.0082	0.0027	0.0041	0.0022
Methyl-t-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	0.0015	0.0081	0.005	0.0036	ND	0.01	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
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Long Beach WPCP Consolidation Project

	TB-106-10 GRAB (91.5-92.0) 43909 Soil mg/Kg	TB-106-11 GRAB (101.0-101.5) 43909 Soil mg/Kg	TB-110-1 GRAB (36.0-37.0) 2/26/2020 Soil mg/Kg	TB-111-1 GRAB (36.0-37.0) 3/4/2020 Soil mg/Kg	TB-112-01 GRAB (5.0-5.5) 3/25/2020 Soil mg/Kg	TB-112-02 GRAB (9.0-9.5) 3/25/2020 Soil mg/Kg	TB-112-03 GRAB (16.0-16.5) 3/25/2020 Soil mg/Kg	TB-112-04 GRAB (21.0-21.5) 3/25/2020 Soil mg/Kg	TB-112-05 GRAB (31.0-31.5) 3/25/2020 Soil mg/Kg	TB-112-06 GRAB (41.0-41.5) 3/25/2020 Soil mg/Kg	TB-112-07 GRAB (51.0-51.5) 3/25/2020 Soil mg/Kg	TB-112-08 GRAB (61.0-61.5) 3/25/2020 Soil mg/Kg	TB-112-09 GRAB (71.0-71.5) 3/25/2020 Soil mg/Kg
Volatiles													
:TotalVolatileTic	0.024J	ND	ND	0.017J	ND	ND	0.020J	0.057J	0.0044J	0.085J	0.015J	0.023J	0.12J
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Trichloro-1,2,2-trifluoroetha	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	0.012	0.0036	0.018	0.0083	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.2	ND	0.078	0.052	0.14	0.039	0.13	0.13	ND	ND	0.066	ND	ND
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	0.0048	0.12	0.033	0.036	0.0083	0.0041	0.0029	ND	ND	0.0041
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	0.0025	0.0044	ND	ND	0.0076	ND	0.0079	0.0084	0.0024	ND	0.0045	ND	0.0015
Methyl-t-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	0.0032	ND	0.0063	0.0088	0.0018	ND	0.0029	ND	0.00095
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
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TABLE 1
Volatile Organic Compoounds
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-116-1 GRAB (44.0-45.0) 2/25/2020 Soil mg/Kg	TB-117-1 GRAB (1.0-1.5) 43873 Soil mg/Kg	TB-117-2 GRAB (5.5-6.0) 43873 Soil mg/Kg	TB-117-3 GRAB (8.0-8.5) 43873 Soil mg/Kg	TB-117-4 GRAB (15.0-15.5) 43873 Soil mg/Kg	TB-117-5 GRAB (25.0-25.5) 43873 Soil mg/Kg	TB-117-6 GRAB (35.0-35.5) 43873 Soil mg/Kg	TB-117-7 GRAB (45.0-45.5) 43873 Soil mg/Kg	TB-117-8 GRAB (55.0-55.5) 43873 Soil mg/Kg	TB-117-9 GRAB (65.0-65.5) 43873 Soil mg/Kg	TB-117-10 GRAB (75.0-75.5) 43873 Soil mg/Kg
Volatiles											
:TotalVolatileTic	0.0092J	ND	ND	0.0041J	ND	0.011J	ND	ND	ND	0.0027J	0.0049J
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Trichloro-1,2,2-trifluoroetha	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	0.0077	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	0.0019	ND	ND	ND	ND	0.0028
Acetone	0.16	ND	ND	0.1	ND	ND	ND	ND	ND	ND	0.029
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	0.0054	0.0041	0.0022	0.007	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl Acetate	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	0.012
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	0.016	0.0047	0.0052	0.0026	ND	0.0022	0.0021	0.0038	0.003	ND
Methyl-t-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0032
Toluene	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

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J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
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TABLE 2
Semi-Volatile Organic Compoounds
Soil Analytical Results
Long Beach WPCP Consolidation Project

	NY 375-6.8(a) (mg/Kg)	NY 375-6.8(b) Residential (mg/Kg)	NY 375-6.8(b) Commercial (mg/Kg)	NY 375-6.8(b) Protection of Ground-Water (mg/Kg)	TB-101-1 COMP (0.0-3.0) 2/13/2020 Soil mg/Kg	TB-101-2 COMP (4.0-6.0) 2/13/2020 Soil mg/Kg	TB-101-3 COMP (8.0-10.0) 2/13/2020 Soil mg/Kg	TB-101-4 COMP (14-16), (16-18) 2/13/2020 Soil mg/Kg	TB-101-5 COMP (20-22), (25-27) 2/13/2020 Soil mg/Kg	TB-101-6 COMP (35.0-37.0) 2/13/2020 Soil mg/Kg	TB-101-7 COMP (40-42), (45-47) 2/14/2020 Soil mg/Kg	TB-101-8 COMP (50-52), (55-57) 2/14/2020 Soil mg/Kg	TB-101-9 COMP (65.0-67.0) 2/14/2020 Soil mg/Kg	TB-101-10 COMP (75.0-77.0) 2/14/2020 Soil mg/Kg	TB-101-11 COMP (85.0-87.0) 2/14/2020 Soil mg/Kg	TB-101-12 COMP (95.0-97.0) 2/14/2020 Soil mg/Kg	TB-101-13 COMP (105.0-107.0) 2/14/2020 Soil mg/Kg	TB-102-1 COMP (98-100), (100-102) 3/3/2020 Soil mg/Kg	TB-106-01 COMP (0.0-2.0), (2.0-4.0) 3/19/2020 Soil mg/Kg	TB-106-02 COMP (13.0-15.0) 3/19/2020 Soil mg/Kg
SemiVolatiles																				
:TotalSemiVolatileTic	NA	NA	NA	NA	47J	42J	28J	3.9J	4.3J	3.8J	8.4J	5.1J	4.1J	4.7J	3.2J	5.1J	3.9J	5.5J	5.0J	3.8J
1,1'-Biphenyl	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NA	NA	NA	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	NA	NA	NA	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	NA	NA	NA	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NA	NA	NA	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NA	NA	NA	36.4	ND	ND	0.093	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	0.33	100	500	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	NA	NA	NA	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NA	NA	NA	0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	0.33	100	500	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	NA	NA	NA	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	NA	NA	NA	0.22	0.12	0.093	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NA	NA	NA	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20	100	500	98	ND	ND	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	100	500	107	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	100	500	1,000	ND	ND	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	1	1	5.6	1	0.19	0.54	0.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	1	1	1	22	0.22	0.50	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	1	1	5.6	1.7	0.32	0.69	0.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	100	100	500	1,000	0.12	0.26	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	0.8	3.9	56	1.7	ND	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	NA	NA	NA	435	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.048	ND
Butylbenzylphthalate	NA	NA	NA	122	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NA	NA	NA	NA	ND	ND	0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1	3.9	56	1	0.19	0.51	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	0.33	0.33	0.56	1,000	ND	ND	0.047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	7	59	350	6.2	ND	ND	0.049	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	NA	NA	NA	7.1	ND	ND	0.050	0.039	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	NA	NA	NA	27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	NA	NA	NA	8.1	ND	ND	ND	ND	ND	ND	ND	0.017	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	NA	NA	NA	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	500	1,000	0.32	0.88	0.66	ND	0.053	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	30	100	500	386	ND	ND	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.33	1.2	6	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.5	0.5	5.6	8.2	0.12	0.24	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	NA	NA	NA	4.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12	100	500	12	0.033	0.058	0.087	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	NA	15	69	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	0.8	6.7	6.7	0.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	100	500	1,000	0.18	0.57	0.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	0.33	100	500	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	100	500	1,000	0.33	0.87	0.62	ND	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-106-03 COMP (20-22), (25-27) 3/19/2020 Soil mg/Kg	TB-106-04 COMP (30-32), (35-37) 3/19/2020 Soil mg/Kg	TB-106-05 COMP (40.0-42.0) 3/19/2020 Soil mg/Kg	TB-106-06 COMP (50-52), (55-57) 3/19/2020 Soil mg/Kg	TB-106-07 COMP (60-62), (65-67) 3/19/2020 Soil mg/Kg	TB-106-08 COMP (70.0-72.0) 3/19/2020 Soil mg/Kg	TB-106-09 COMP (80-82), (85-87) 3/19/2020 Soil mg/Kg	TB-106-10 COMP (90.0-92.0) 3/19/2020 Soil mg/Kg	TB-106-11 COMP (100.0-102.0) 3/19/2020 Soil mg/Kg	TB-110-1 COMP (33-35), (35-37) 2/26/2020 Soil mg/Kg	TB-111-1 Comp (36-38), (38-40) 3/4/2020 Soil mg/Kg	TB-112-01 COMP (4.0-6.0) 3/25/2020 Soil mg/Kg	TB-112-02 COMP (8.0-10.0) 3/25/2020 Soil mg/Kg	TB-112-03 COMP (15.0-17.0) 3/25/2020 Soil mg/Kg	TB-112-04 COMP (20.0-22.0) 3/25/2020 Soil mg/Kg	TB-112-05 COMP (30-32), (35-37) 3/25/2020 Soil mg/Kg	TB-112-06 COMP (40-42), (45-47) 3/25/2020 Soil mg/Kg	TB-112-07 COMP (50-52), (55-57) 3/25/2020 Soil mg/Kg	TB-112-08 COMP (60-62), (65-67) 3/25/2020 Soil mg/Kg	TB-112-09 COMP (70.0-72.0) 3/25/2020 Soil mg/Kg
SemiVolatiles																				
:TotalSemiVolatileTic	4.0J	4.9J	5.3J	3.6J	4.2J	3.5J	6.3J	4.2J	4.4J	4.4J	3.8J	16J	13J	7.0J	7.8J	5.5J	4.4J	4.7J	6.1J	6.9J
1,1'-Biphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	0.076	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	0.022	ND	ND	0.021	ND	ND	ND	ND	ND	ND	ND	ND	0.013	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 2
Semi-Volatile Organic Compoounds
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-116-1 COMP (41-43), (44-45) 2/25/2020 Soil mg/Kg	TB-117-1 COMP (0.0-3.0) 2/12/2020 Soil mg/Kg	TB-117-2 COMP (4.0-6.0) 2/12/2020 Soil mg/Kg	TB-117-3 COMP (8.0-10.0) 2/12/2020 Soil mg/Kg	TB-117-4 COMP (14.0-16.0) 2/12/2020 Soil mg/Kg	TB-117-5 COMP (25.0-27.0) 2/12/2020 Soil mg/Kg	TB-117-6 COMP (30-32), (20-22) 2/12/2020 Soil mg/Kg	TB-117-7 COMP (35-37), (40-42) 2/12/2020 Soil mg/Kg	TB-117-8 COMP (45-47), (50-52) 2/12/2020 Soil mg/Kg	TB-117-9 COMP (55-57), (60-62) 2/12/2020 Soil mg/Kg	TB-117-10 COMP (70.0-72.0) 2/12/2020 Soil mg/Kg
SemiVolatiles											
:TotalSemiVolatileTic	4.2J	7.9J	3.3J	7.2J	3.5J	4.4J	11.0J	4.6J	3.9J	3.9J	3.9J
1,1'-Biphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,3,4,6-Tetrachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3&4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	0.049	0.016	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Atrazine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	ND	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	0.17	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)methane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)ether	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Caprolactam	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	0.014	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.041
Dimethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	0.36	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	0.37	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 3
Target Analyte List Metals and Reactive Cyanide
Soil Analytical Results
Long Beach WPCP Consolidation Project

	NY 375-6.8(a) (mg/Kg)	NY 375-6.8(b) Residential (mg/Kg)	NY 375-6.8(b) Commercial (mg/Kg)	NY 375-6.8(b) Protection of Ground-Water (mg/Kg)	TB-101-1 COMP (0.0-3.0) 2/13/2020 Soil mg/Kg	TB-101-2 COMP (4.0-6.0) 2/13/2020 Soil mg/Kg	TB-101-3 COMP (8.0-10.0) 2/13/2020 Soil mg/Kg	TB-101-4 COMP (14-16), (16-18) 2/13/2020 Soil mg/Kg	TB-101-5 COMP (20-22), (25-27) 2/13/2020 Soil mg/Kg	TB-101-6 COMP (35.0-37.0) 2/13/2020 Soil mg/Kg	TB-101-7 COMP (40-42), (45-47) 2/14/2020 Soil mg/Kg	TB-101-8 COMP (50-52), (55-57) 2/14/2020 Soil mg/Kg
Metals												
Mercury	0.81	0.18	2.8	0.73	0.89	0.45	0.20	ND	ND	ND	ND	ND
Aluminum	NA	NA	NA	NA	1,800	2,300	1,000	780	650	480	10,000	650
Barium	400	350	400	820	68	53	320	ND	ND	ND	21	ND
Calcium	NA	NA	NA	NA	6,000	24,000	2,400	ND	1,900	ND	ND	ND
Chromium	110	1	400	19	9.0	9.3	9.7	ND	7.3	ND	26	ND
Cobalt	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	7.7	ND
Copper	270	50	270	1,720	59	43	180	ND	6.2	ND	8.5	ND
Iron	NA	NA	NA	NA	5,500	6,400	3,900	1,500	1,700	1,300	27,000	1,700
Lead	400	63	1,000	450	130	67	140	ND	9.0	ND	9.1	ND
Magnesium	NA	NA	NA	NA	1,800	8,000	ND	ND	960	ND	5,100	ND
Manganese	2,000	1,600	10,000	2,000	39	66	19	14	14	14	260	ND
Nickel	310	30	310	130	6.8	7.7	ND	ND	ND	ND	21	ND
Potassium	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	2,400	ND
Sodium	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	770	ND
Vanadium	NA	NA	NA	NA	11	13	ND	ND	ND	ND	32	ND
Zinc	10,000	109	10,000	2,480	180	120	240	ND	ND	ND	60	ND
Antimony	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	16	13	16	16	2.5	2.4	1.4	1.2	0.92	0.56	9.9	2.7
Beryllium	72	7.2	590	47	ND	ND	ND	ND	ND	ND	0.61	ND
Cadmium	4.3	2.5	9.3	7.5	0.52	ND	ND	ND	ND	ND	ND	ND
Selenium	180	3.9	1,500	4	ND	ND	ND	ND	ND	ND	ND	ND
Silver	180	2	1,500	8.3	1.1	0.93	2.8	ND	ND	ND	ND	ND
Thallium	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	27	27	27	40	0.29	ND	0.86	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 3
Target Analyte List Metals and Reactive Cyanide
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-101-9 COMP (65.0-67.0) 2/14/2020 Soil mg/Kg	TB-101-10 COMP (75.0-77.0) 2/14/2020 Soil mg/Kg	TB-101-11 COMP (85.0-87.0) 2/14/2020 Soil mg/Kg	TB-101-12 COMP (95.0-97.0) 2/14/2020 Soil mg/Kg	TB-101-13 COMP (105.0-107.0) 2/14/2020 Soil mg/Kg	TB-102-1 COMP (98-100), (100-102) 3/3/2020 Soil mg/Kg	TB-106-01 COMP (0.0-2.0), (2.0-4.0) 3/19/2020 Soil mg/Kg	TB-106-02 COMP (13.0-15.0) 3/19/2020 Soil mg/Kg	TB-106-03 COMP (20-22), (25-27) 3/19/2020 Soil mg/Kg	TB-106-04 COMP (30-32), (35-37) 3/19/2020 Soil mg/Kg	TB-106-05 COMP (40.0-42.0) 3/19/2020 Soil mg/Kg
Metals											
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	960	440	4,200	680	1,300	3,000	1,400	790	1,100	7,200	13,000
Barium	ND	ND	18	ND	ND	17	ND	ND	ND	ND	25
Calcium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	5.8	16	ND	7.3	14	ND	11	ND	23	34
Cobalt	ND	ND	ND	ND	ND	4.2	ND	ND	ND	5.4	9
Copper	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Iron	1,300	1,600	10,000	7,400	3,000	11,000	3600	2,000	2,800	15,000	35,000
Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11
Magnesium	ND	ND	1,600	ND	ND	1,400	840	ND	880	3,300	6,600
Manganese	ND	ND	35	24	18	84	28	39	43	130	330
Nickel	ND	ND	ND	ND	ND	9.8	ND	ND	ND	13	24
Potassium	ND	ND	1,700	ND	ND	1,600	ND	ND	ND	1,400	4,000
Sodium	ND	ND	2,300	530	ND	2,700	2,900	1,800	3,200	5,300	7,000
Vanadium	ND	ND	17	ND	ND	16	ND	ND	ND	26	35
Zinc	ND	ND	39	ND	ND	50	ND	ND	ND	39	69
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	0.55	0.42	1.8	0.50	1.3	0.32	0.7	0.96	1.3	5.5	10
Beryllium	ND	ND	0.47	ND	ND	ND	ND	ND	ND	0.39	0.73
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 3
Target Analyte List Metals and Reactive Cyanide
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-106-06 COMP (50-52), (55-57) 3/19/2020 Soil mg/Kg	TB-106-07 COMP (60-62), (65-67) 3/19/2020 Soil mg/Kg	TB-106-08 COMP (70.0-72.0) 3/19/2020 Soil mg/Kg	TB-106-09 COMP (80-82), (85-87) 3/19/2020 Soil mg/Kg	TB-106-10 COMP (90.0-92.0) 3/19/2020 Soil mg/Kg	TB-106-11 COMP (100.0-102.0) 3/19/2020 Soil mg/Kg	TB-110-1 COMP (33-35), (35-37) 2/26/2020 Soil mg/Kg	TB-111-1 COMP (36-38), (38-40) 3/4/2020 Soil mg/Kg	TB-112-01 COMP (4.0-6.0) 3/25/2020 Soil mg/Kg	TB-112-02 COMP (8.0-10.0) 3/25/2020 Soil mg/Kg	TB-112-03 COMP (15.0-17.0) 3/25/2020 Soil mg/Kg
Metals											
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aluminum	990	1,700	16,000	2,200	9,400	2,100	16,000	8,700	13,000	8,800	7,600
Barium	ND	ND	46	ND	34	ND	35	19	28	ND	18
Calcium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,000
Chromium	ND	8.4	34	16	31	33	38	24	37	27	23
Cobalt	ND	ND	6.9	ND	14	ND	15	7.5	8.7	6.6	5.6
Copper	ND	ND	8.4	ND	10	ND	11	6.6	ND	ND	ND
Iron	4,400	4,000	37,000	5,200	33,000	5,700	40,000	24,000	30,000	20,000	19,000
Lead	ND	ND	10	ND	13	ND	12	8.6	ND	ND	ND
Magnesium	ND	ND	4,600	760	3,700	ND	7,400	4,400	6,700	4,700	4,000
Manganese	24	45	220	90	380	26	270	190	210	150	150
Nickel	ND	ND	16	ND	26	13	25	20	21	14	12
Potassium	ND	ND	2500	ND	3,000	1,200	3,100	1,900	4,100	2,900	2,400
Sodium	490	550	470	430	ND	ND	1,700	1,400	12,000	8,000	5,900
Vanadium	ND	ND	31	ND	28	14	42	29	41	34	25
Zinc	ND	ND	49	16	67	15	70	53	58	40	35
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	0.73	0.61	1	1.4	53	0.83	41	6.7	9.8	10	8.8
Beryllium	ND	ND	0.51	ND	0.64	ND	0.62	0.39	0.58	0.53	0.38
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	ND	ND	ND	ND	ND	0.87	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 3
Target Analyte List Metals and Reactive Cyanide
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-112-04 COMP (20.0-22.0) 3/25/2020 Soil mg/Kg	TB-112-05 COMP (30-32), (35-37) 3/25/2020 Soil mg/Kg	TB-112-06 COMP (40-42), (45-47) 3/25/2020 Soil mg/Kg	TB-112-07 COMP (50-52), (55-57) 3/25/2020 Soil mg/Kg	TB-112-08 COMP (60-62), (65-67) 3/25/2020 Soil mg/Kg	TB-112-09 COMP (70.0-72.0) 3/25/2020 Soil mg/Kg	TB-116-1 COMP (41-43), (44-45) 2/25/2020 Soil mg/Kg	TB-117-1 COMP (0.0-3.0) 2/12/2020 Soil mg/Kg	TB-117-2 COMP (4.0-6.0) 2/12/2020 Soil mg/Kg	TB-117-3 COMP (8.0-10.0) 2/12/2020 Soil mg/Kg	TB-117-4 COMP (14.0-16.0) 2/12/2020 Soil mg/Kg
Metals											
Mercury	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	ND
Aluminum	4,400	5,400	5,700	1,000	2,100	760	1,300	4,200	5,000	1,400	1,600
Barium	ND	ND	13	ND	ND	ND	ND	34	16	14	ND
Calcium	ND	ND	ND	ND	ND	ND	ND	9,700	3,700	ND	ND
Chromium	8.3	11	11	7.4	6.7	ND	ND	16	19	ND	9.7
Cobalt	ND	ND	4.1	ND	ND	ND	ND	ND	3.6	ND	ND
Copper	ND	ND	ND	ND	ND	ND	ND	24	11	ND	8.2
Iron	5,600	8,300	16,000	2,000	2,900	1,500	1,500	6600	14000	2400	3000
Lead	ND	ND	ND	ND	ND	ND	ND	30	6.6	ND	ND
Magnesium	1,200	1,300	ND	ND	ND	ND	ND	2,800	3,100	ND	ND
Manganese	47	47	33	25	26	24	33	95	73	18	27
Nickel	ND	ND	6.5	ND	ND	ND	ND	6.2	7.6	ND	ND
Potassium	710	790	ND	ND	ND	ND	ND	ND	810	ND	ND
Sodium	2,800	2,600	ND	1,100	1,700	1,400	970	ND	ND	ND	ND
Vanadium	ND	15	17	ND	ND	ND	16	12	20	ND	ND
Zinc	ND	15	23	ND	ND	ND	ND	45	29	ND	19
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	3.0	3.0	2.1	0.35	0.55	0.38	0.52	4.6	4.2	0.76	0.82
Beryllium	ND	ND	0.38	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	1.5	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyanide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

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TABLE 3
Target Analyte List Metals and Reactive Cyanide
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-117-5 COMP (25.0-27.0) 2/12/2020 Soil mg/Kg	TB-117-6 COMP (30-32), (20-22) 2/12/2020 Soil mg/Kg	TB-117-7 COMP (35-37), (40-42) 2/12/2020 Soil mg/Kg	TB-117-8 COMP (45-47), (50-52) 2/12/2020 Soil mg/Kg	TB-117-9 COMP (55-57), (60-62) 2/12/2020 Soil mg/Kg	TB-117-10 COMP (70.0-72.0) 2/12/2020 Soil mg/Kg
Metals						
Mercury	ND	ND	ND	ND	ND	ND
Aluminum	480	5,300	2,100	2,200	790	1,700
Barium	ND	23	ND	ND	ND	ND
Calcium	ND	ND	ND	ND	ND	ND
Chromium	ND	14	ND	ND	ND	9.6
Cobalt	ND	ND	ND	ND	ND	ND
Copper	ND	ND	ND	ND	ND	ND
Iron	1100	10000	2500	3100	2100	5100
Lead	ND	ND	ND	ND	ND	ND
Magnesium	ND	2,300	ND	ND	ND	ND
Manganese	ND	81	15	18	ND	13
Nickel	ND	8.5	ND	ND	ND	ND
Potassium	ND	1,400	ND	ND	ND	ND
Sodium	ND	550	800	430	420	870
Vanadium	ND	20	ND	ND	ND	ND
Zinc	ND	25	ND	ND	ND	ND
Antimony	ND	ND	ND	ND	ND	ND
Arsenic	0.29	3.5	0.57	0.35	0.36	0.5
Beryllium	ND	ND	ND	ND	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND
Thallium	ND	ND	ND	ND	ND	ND
Cyanide	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

Hazen ARCADIS A JOINT VENTURE

TABLE 4
Polychlorinated Biphenyls
Soil Analytical Results
Long Beach WPCP Consolidation Project

	NY 375-6.8(a) (mg/Kg)	NY 375-6.8(b) Residential (mg/Kg)	NY 375-6.8(b) Commercial (mg/Kg)	NY 375-6.8(b) Protection of Ground-Water (mg/Kg)	TB-101-1 COMP (0.0-3.0) 2/13/2020 Soil mg/Kg	TB-101-2 COMP (4.0-6.0) 2/13/2020 Soil mg/Kg	TB-101-3 COMP (8.0-10.0) 2/13/2020 Soil mg/Kg	TB-101-4 COMP (14-16), (16-18) 2/13/2020 Soil mg/Kg	TB-101-5 COMP (20-22), (25-27) 2/13/2020 Soil mg/Kg	TB-101-6 COMP (35.0-37.0) 2/13/2020 Soil mg/Kg	TB-101-7 COMP (40-42), (45-47) 2/14/2020 Soil mg/Kg	TB-101-8 COMP (50-52), (55-57) 2/14/2020 Soil mg/Kg	TB-101-9 COMP (65.0-67.0) 2/14/2020 Soil mg/Kg	TB-101-10 COMP (75.0-77.0) 2/14/2020 Soil mg/Kg
PCBs														
Aroclor-1016	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	1	0.1	1	3.2	0.31	0.13	0.20	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	1	0.1	1	3.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

	TB-101-11 COMP (85.0-87.0) 2/14/2020 Soil mg/Kg	TB-101-12 COMP (95.0-97.0) 2/14/2020 Soil mg/Kg	TB-101-13 COMP (105.0-107.0) 2/14/2020 Soil mg/Kg	TB-102-1 COMP (98-100), (100-102) 3/3/2020 Soil mg/Kg	TB-106-01 COMP (0.0-2.0), (2.0-4.0) 3/19/2020 Soil mg/Kg	TB-106-02 COMP (13.0-15.0) 3/19/2020 Soil mg/Kg	TB-106-03 COMP (20-22), (25-27) 3/19/2020 Soil mg/Kg	TB-106-04 COMP (30-32), (35-37) 3/19/2020 Soil mg/Kg	TB-106-05 COMP (40.0-42.0) 3/19/2020 Soil mg/Kg	TB-106-06 COMP (50-52), (55-57) 3/19/2020 Soil mg/Kg	TB-106-07 COMP (60-62), (65-67) 3/19/2020 Soil mg/Kg	TB-106-05 COMP (40.0-42.0) 3/19/2020 Soil mg/Kg	TB-106-06 COMP (50-52), (55-57) 3/19/2020 Soil mg/Kg	TB-106-07 COMP (60-62), (65-67) 3/19/2020 Soil mg/Kg
PCBs														
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

	TB-106-08 COMP (70.0-72.0) 3/19/2020 Soil mg/Kg	TB-106-09 COMP (80-82), (85-87) 3/19/2020 Soil mg/Kg	TB-106-10 COMP (90.0-92.0) 3/19/2020 Soil mg/Kg	TB-106-11 COMP (100.0-102.0) 3/19/2020 Soil mg/Kg	TB-110-1 COMP (33-35), (35-37) 2/26/2020 Soil mg/Kg	TB-111-1 Comp (36-38), (38-40) 3/4/2020 Soil mg/Kg	TB-112-01 COMP (4.0-6.0) 3/25/2020 Soil mg/Kg	TB-112-02 COMP (8.0-10.0) 3/25/2020 Soil mg/Kg	TB-112-03 COMP (15.0-17.0) 3/25/2020 Soil mg/Kg	TB-112-04 COMP (20.0-22.0) 3/25/2020 Soil mg/Kg	TB-112-05 COMP (30-32), (35-37) 3/25/2020 Soil mg/Kg	TB-112-06 COMP (40-42), (45-47) 3/25/2020 Soil mg/Kg	TB-112-07 COMP (50-52), (55-57) 3/25/2020 Soil mg/Kg	TB-112-08 COMP (60-62), (65-67) 3/25/2020 Soil mg/Kg
PCBs														
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
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TABLE 4
Polychlorinated Biphenyls
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-112-09 COMP (70.0-72.0) 3/25/2020 Soil mg/Kg	TB-116-1 COMP (41-43), (44-45) 2/25/2020 Soil mg/Kg	TB-117-1 COMP (0.0-3.0) 2/12/2020 Soil mg/Kg	TB-117-2 COMP (4.0-6.0) 2/12/2020 Soil mg/Kg	TB-117-3 COMP (8.0-10.0) 2/12/2020 Soil mg/Kg	TB-117-4 COMP (14.0-16.0) 2/12/2020 Soil mg/Kg	TB-117-5 COMP (25.0-27.0) 2/12/2020 Soil mg/Kg	TB-117-6 COMP (30-32), (20-22) 2/12/2020 Soil mg/Kg	TB-117-7 COMP (35-37), (40-42) 2/12/2020 Soil mg/Kg	TB-117-8 COMP (45-47), (50-52) 2/12/2020 Soil mg/Kg	TB-117-9 COMP (55-57), (60-62) 2/12/2020 Soil mg/Kg	TB-117-10 COMP (70.0-72.0) 2/12/2020 Soil mg/Kg
PCBs												
Aroclor-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1254	ND	ND	ND	ND	0.15	ND	ND	ND	ND	ND	ND	ND
Aroclor-1260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1262	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor-1268	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

Hazen ARCADIS A JOINT VENTURE

TABLE 5
Pesticides
Soil Analytical Results
Long Beach WPCP Consolidation Project

	NY 375-6.8(a) (mg/Kg)	NY 375-6.8(b) Residential (mg/Kg)	NY 375-6.8(b) Commercial (mg/Kg)	NY 375-6.8(b) Protection of Ground-Water (mg/Kg)	TB-101-1 COMP (0.0-3.0) 2/13/2020 Soil mg/Kg	TB-101-2 COMP (4.0-6.0) 2/13/2020 Soil mg/Kg	TB-101-3 COMP (8.0-10.0) 2/13/2020 Soil mg/Kg	TB-101-4 COMP (14-16), (16-18) 2/13/2020 Soil mg/Kg	TB-101-5 COMP (20-22), (25-27) 2/13/2020 Soil mg/Kg	TB-101-6 COMP (35.0-37.0) 2/13/2020 Soil mg/Kg	TB-101-7 COMP (40-42), (45-47) 2/14/2020 Soil mg/Kg
Pesticides											
a-Chlordane	4.2	0.094	24	2.9	ND	ND	ND	ND	ND	ND	ND
Aldrin	0.097	0.005	0.68	0.19	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	0.48	0.02	3.4	0.02	ND	ND	ND	ND	ND	ND	ND
beta-BHC	0.36	0.036	3	0.09	ND	ND	ND	ND	ND	ND	ND
Chlordane (Total)	4.2	0.094	24	16.9	ND	ND	ND	ND	ND	ND	ND
delta-BHC	100	0.04	500	0.25	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.2	0.005	1.4	0.1	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	24	2.4	200	102	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	24	2.4	200	102	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	24	2.4	200	1,000	ND	ND	ND	ND	ND	ND	ND
Endrin	11	0.014	89	0.06	ND	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	1.3	0.1	9.2	0.1	ND	ND	ND	ND	ND	ND	ND
Heptachlor	2.1	0.042	15	0.38	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	NA	NA	NA	0.02	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	NA	NA	NA	900	ND	ND	ND	ND	ND	ND	ND
p,p'-DDD	13	0.0033	92	14	ND	ND	ND	ND	ND	ND	ND
p,p'-DDE	8.9	0.0033	62	17	0.031d	0.025	ND	ND	ND	ND	ND
p,p'-DDT	7.9	0.0033	47	136	ND	ND	ND	ND	ND	ND	ND
Toxaphene	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
y-Chlordane	4.2	0.094	24	14	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

Hazen ARCADIS A JOINT VENTURE

TABLE 5
Pesticides
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-101-8 COMP (50-52), (55-57) 2/14/2020 Soil mg/Kg	TB-101-9 COMP (65.0-67.0) 2/14/2020 Soil mg/Kg	TB-101-10 COMP (75.0-77.0) 2/14/2020 Soil mg/Kg	TB-101-11 COMP (85.0-87.0) 2/14/2020 Soil mg/Kg	TB-101-12 COMP (95.0-97.0) 2/14/2020 Soil mg/Kg	TB-101-13 COMP (105.0-107.0) 2/14/2020 Soil mg/Kg	TB-102-1 COMP (98-100), (100-102) 3/3/2020 Soil mg/Kg	TB-106-01 COMP (0.0-2.0), (2.0-4.0) 3/19/2020 Soil mg/Kg	TB-106-02 COMP (13.0-15.0) 3/19/2020 Soil mg/Kg	TB-106-03 COMP (20-22), (25-27) 3/19/2020 Soil mg/Kg
Pesticides										
a-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane (Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
y-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
Red results are compounds detections that exceed 1 or more regulatory criteria

Hazen ARCADIS A JOINT VENTURE

TABLE 5
Pesticides
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-106-04 COMP (30-32), (35-37) 3/19/2020 Soil mg/Kg	TB-106-05 COMP (40.0-42.0) 3/19/2020 Soil mg/Kg	TB-106-06 COMP (50-52), (55-57) 3/19/2020 Soil mg/Kg	TB-106-07 COMP (60-62), (65-67) 3/19/2020 Soil mg/Kg	TB-106-08 COMP (70.0-72.0) 3/19/2020 Soil mg/Kg	TB-106-09 COMP (80-82), (85-87) 3/19/2020 Soil mg/Kg	TB-106-10 COMP (90.0-92.0) 3/19/2020 Soil mg/Kg	TB-106-11 COMP (100.0-102.0) 3/19/2020 Soil mg/Kg	TB-110-1 COMP (33-35), (35-37) 2/26/2020 Soil mg/Kg	TB-111-1 Comp (36-38), (38-40) 3/4/2020 Soil mg/Kg
Pesticides										
a-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane (Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
y-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
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Hazen ARCADIS A JOINT VENTURE

TABLE 5
Pesticides
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-112-01 COMP (4.0-6.0) 3/25/2020 Soil mg/Kg	TB-112-02 COMP (8.0-10.0) 3/25/2020 Soil mg/Kg	TB-112-03 COMP (15.0-17.0) 3/25/2020 Soil mg/Kg	TB-112-04 COMP (20.0-22.0) 3/25/2020 Soil mg/Kg	TB-112-05 COMP (30-32), (35-37) 3/25/2020 Soil mg/Kg	TB-112-06 COMP (40-42), (45-47) 3/25/2020 Soil mg/Kg	TB-112-07 COMP (50-52), (55-57) 3/25/2020 Soil mg/Kg	TB-112-08 COMP (60-62), (65-67) 3/25/2020 Soil mg/Kg	TB-112-09 COMP (70.0-72.0) 3/25/2020 Soil mg/Kg	TB-116-1 COMP (41-43), (44-45) 2/25/2020 Soil mg/Kg
Pesticides										
a-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane (Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDD	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
y-Chlordane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
ND - not detected.
mg/kg - milligrams per kilogram.
Shaded results are compound detections below all criteria
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Hazen ARCADIS A JOINT VENTURE

TABLE 5
Pesticides
Soil Analytical Results
Long Beach WPCP Consolidation Project

	TB-117-1 COMP (0.0-3.0) 2/12/2020 Soil mg/Kg	TB-117-2 COMP (4.0-6.0) 2/12/2020 Soil mg/Kg	TB-117-3 COMP (8.0-10.0) 2/12/2020 Soil mg/Kg	TB-117-4 COMP (14.0-16.0) 2/12/2020 Soil mg/Kg	TB-117-5 COMP (25.0-27.0) 2/12/2020 Soil mg/Kg	TB-117-6 COMP (30-32), (20-22) 2/12/2020 Soil mg/Kg	TB-117-7 COMP (35-37), (40-42) 2/12/2020 Soil mg/Kg	TB-117-8 COMP (45-47), (50-52) 2/12/2020 Soil mg/Kg	TB-117-9 COMP (55-57), (60-62) 2/12/2020 Soil mg/Kg	TB-117-10 COMP (70.0-72.0) 2/12/2020 Soil mg/Kg
Pesticides										
a-Chlordane	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aldrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlordane (Total)	0.042	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	0.0018d	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan I	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan II	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endosulfan Sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Aldehyde	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin Ketone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDD	0.0032d	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDE	0.023	ND	ND	ND	ND	ND	ND	ND	ND	ND
p,p'-DDT	0.015d	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toxaphene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
y-Chlordane	0.012	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

*NY 375-6.8(a) - New York State Department of Evironmental Protection Unrestricted Use Soil Cleanup Objectives
*NY 375-6.8(b) - New York State Department of Evironmental Protection Restricted-Residential Use Soil Cleanup Objectives
*NY 375-6.8(b) Commercial - New York State Department of Evironmental Protection Restricted-Commercial Use Soil Cleanup Objectives
*NY 375-6.8(b) Protection of Groundwater - New York State Department of Evironmental Protection Restricted Use Soil Cleanup Objectives for the Protection of Groundwater
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Hazen ARCADIS A JOINT VENTURE

FIGURES

City:syr Div/Group: im/dv Created By: j.rapp Last Saved By: jrapp
Z:\GISProjects_ENV\Nassau County DPW\MXDs\AsbulitSamplePlant.mxd 5/13/2020 12:44:47 PM

LEGEND:

- BORING LOCATION
- FORCE MAIN ALIGNMENT

0 1,000 2,000 Feet
GRAPHIC SCALE

NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS
LONG BEACH WPCP CONSOLIDATION PROJECT
SUBSURFACE ENVIRONMENTAL INVESTIGATION
CITY OF LONG BEACH AND TOWN OF HEMPSTEAD

BORING LOCATION MAP

Hazen ARCADIS A JOINT VENTURE

FIGURE
1

APPENDIX A

Laboratory Analytical Reports

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Long Beach

Client PO: 3001615.00040

Report To: ARCADIS
17-17 Route 208 North
2nd Floor
Fairlawn, NJ 07410
Attn: Richard Gilmour/Chris Goldsmith

Received Date: 2/14/2020

Report Date: 3/4/2020

Deliverables: NYDOH-R

Lab ID: AD15713

Lab Project No: 0021406

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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- Form 2 Surrogate Recovery
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- Form 8 Internal Standard Area Summary

Base Neutral/Acid Extractable Data **116**

- Form 1 Sample and Blank Results
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- Form 8 Internal Standard Area Summary

PCB Data **225**

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Form 1 Sample and Blank Results

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Form 1 Sample Results

Inorganic Spreadsheet / QC Summary

Sample Summary

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AD15713-001	TB-101-1 COMP	Soil	2/13/2020	2/14/2020
AD15713-002	TB-101-1 GRAB	Soil/Encore	2/13/2020	2/14/2020
AD15713-003	TB-101-2 COMP	Soil	2/13/2020	2/14/2020
AD15713-004	TB-101-2 GRAB	Soil/Encore	2/13/2020	2/14/2020
AD15713-005	TB-101-3 COMP	Soil	2/13/2020	2/14/2020
AD15713-006	TB-101-3 GRAB	Soil/Encore	2/13/2020	2/14/2020
AD15713-007	TB-101-4 COMP	Soil	2/13/2020	2/14/2020
AD15713-008	TB-101-4 GRAB	Soil/Encore	2/13/2020	2/14/2020
AD15713-009	TB-101-5 COMP	Soil	2/13/2020	2/14/2020
AD15713-010	TB-101-5 GRAB	Soil/Encore	2/13/2020	2/14/2020
AD15713-011	TB-101-6 COMP	Soil	2/13/2020	2/14/2020
AD15713-012	TB-101-6 GRAB	Soil/Encore	2/13/2020	2/14/2020

HC Case Narrative

Client: ARCADIS
Project: Long Beach

HC Project: 0021406

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

Methylene chloride was recovered in samples AD15713-004, -006, -012 due to possible laboratory contamination.

The Method Blank Spike for batch 84430 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batches 84430, 84442 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Sample AD15713-006 had one or more internal standard areas outside +100% / -50% window from most recent calibration verification standard. Please refer to the applicable Form 8 for the areas.

Base Neutral/Acid Extractable Analysis:

The Method Blank Spike for batch 82174 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 82174 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Sample AD15713-009 has a surrogate recovery outside QC limits, but the recovery is greater than 10%, therefore, no corrective action was necessary. Please refer to the applicable Form 2 for the recoveries.

PCB Analysis:

Data conforms to method requirements.

Pesticide Analysis:

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 82150 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Metals Analysis:

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batch 82632 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 82631. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 82631 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for Cyanide, batch 2342, had recoveries outside QC limits. Please refer to the QC section for the recoveries.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	3/10/20 Date

HC Executive Summary

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Lab#: AD15713-001 **Sample ID: TB-101-1 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	220	1800	EPA 6010D
Barium	mg/kg	11	68	EPA 6010D
Calcium	mg/kg	1100	6000	EPA 6010D
Chromium	mg/kg	5.4	9.0	EPA 6010D
Copper	mg/kg	5.4	59	EPA 6010D
Iron	mg/kg	220	5500	EPA 6010D
Lead	mg/kg	5.4	130	EPA 6010D
Magnesium	mg/kg	540	1800	EPA 6010D
Manganese	mg/kg	11	39	EPA 6010D
Nickel	mg/kg	5.4	6.8	EPA 6010D
Vanadium	mg/kg	11	11	EPA 6010D
Zinc	mg/kg	11	180	EPA 6010D
Arsenic	mg/kg	0.22	2.5	EPA 6020B
Cadmium	mg/kg	0.43	0.52	EPA 6020B
Silver	mg/kg	0.22	1.1	EPA 6020B
Mercury	mg/kg	0.091	0.89	EPA 7471B
p,p'-DDE	mg/kg	0.0027	0.031d	EPA 8081B
Aroclor (Total)	mg/kg	0.027	0.31	EPA 8082A
Aroclor-1254	mg/kg	0.027	0.31	EPA 8082A
4-Chloroaniline	mg/kg	0.027	0.12	EPA 8270D
Benzo[a]anthracene	mg/kg	0.11	0.19	EPA 8270D
Benzo[a]pyrene	mg/kg	0.11	0.22	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.11	0.32	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.11	0.12	EPA 8270D
Chrysene	mg/kg	0.11	0.19	EPA 8270D
Fluoranthene	mg/kg	0.11	0.32	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.11	0.12	EPA 8270D
Naphthalene	mg/kg	0.027	0.033	EPA 8270D
Phenanthrene	mg/kg	0.11	0.18	EPA 8270D
Pyrene	mg/kg	0.11	0.33	EPA 8270D
TotalSemiVolatileTic	mg/kg	NA	47J	EPA 8270D
Cyanide	mg/kg	0.26	0.29	EPA 9012B

Lab#: AD15713-002 **Sample ID: TB-101-1 GRAB**

Analyte	Units	RL	Result	Analytical Method
2-Butanone	mg/kg	0.0015	0.019	EPA 8260C
Acetone	mg/kg	0.0077	0.20	EPA 8260C
Benzene	mg/kg	0.00077	0.0015	EPA 8260C
Carbon disulfide	mg/kg	0.0015	0.0031	EPA 8260C
m&p-Xylenes	mg/kg	0.00077	0.0011	EPA 8260C
o-Xylene	mg/kg	0.00077	0.0014	EPA 8260C
Toluene	mg/kg	0.00077	0.0024	EPA 8260C
Xylenes (Total)	mg/kg	0.00077	0.0025	EPA 8260C
TotalVolatileTic	mg/kg	NA	0.09J	EPA 8260C

HC Executive Summary

Client: ARCADIS **HC Project #:** 0021406

Project: Long Beach

Lab#: AD15713-003 **Sample ID: TB-101-2 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	220	2300	EPA 6010D
Barium	mg/kg	11	53	EPA 6010D
Calcium	mg/kg	1100	24000	EPA 6010D
Chromium	mg/kg	5.4	9.3	EPA 6010D
Copper	mg/kg	5.4	43	EPA 6010D
Iron	mg/kg	220	6400	EPA 6010D
Lead	mg/kg	5.4	67	EPA 6010D
Magnesium	mg/kg	540	8000	EPA 6010D
Manganese	mg/kg	11	66	EPA 6010D
Nickel	mg/kg	5.4	7.7	EPA 6010D
Vanadium	mg/kg	11	13	EPA 6010D
Zinc	mg/kg	11	120	EPA 6010D
Arsenic	mg/kg	0.22	2.4	EPA 6020B
Silver	mg/kg	0.22	0.93	EPA 6020B
Mercury	mg/kg	0.090	0.45	EPA 7471B
p,p'-DDE	mg/kg	0.0027	0.025	EPA 8081B
Aroclor (Total)	mg/kg	0.027	0.13	EPA 8082A
Aroclor-1254	mg/kg	0.027	0.13	EPA 8082A
4-Chloroaniline	mg/kg	0.054	0.093	EPA 8270D
Benzo[a]anthracene	mg/kg	0.22	0.54	EPA 8270D
Benzo[a]pyrene	mg/kg	0.22	0.50	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.22	0.69	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.22	0.26	EPA 8270D
Chrysene	mg/kg	0.22	0.51	EPA 8270D
Fluoranthene	mg/kg	0.22	0.88	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.22	0.24	EPA 8270D
Naphthalene	mg/kg	0.054	0.058	EPA 8270D
Phenanthrene	mg/kg	0.22	0.57	EPA 8270D
Pyrene	mg/kg	0.22	0.87	EPA 8270D
TotalSemiVolatileTic	mg/kg	NA	42J	EPA 8270D

Lab#: AD15713-004 **Sample ID: TB-101-2 GRAB**

Analyte	Units	RL	Result	Analytical Method
2-Butanone	mg/kg	0.0017	0.014	EPA 8260C
Acetone	mg/kg	0.0086	0.18	EPA 8260C
Benzene	mg/kg	0.00086	0.0054	EPA 8260C
Carbon disulfide	mg/kg	0.0017	0.0056	EPA 8260C
Chlorobenzene	mg/kg	0.0017	0.0027	EPA 8260C
Ethylbenzene	mg/kg	0.00086	0.0011	EPA 8260C
Isopropylbenzene	mg/kg	0.00086	0.0020	EPA 8260C
m&p-Xylenes	mg/kg	0.00086	0.0031	EPA 8260C
Methylene chloride	mg/kg	0.0017	0.0046	EPA 8260C
o-Xylene	mg/kg	0.00086	0.0042	EPA 8260C
Toluene	mg/kg	0.00086	0.0066	EPA 8260C
Xylenes (Total)	mg/kg	0.00086	0.0073	EPA 8260C
TotalVolatileTic	mg/kg	NA	0.16J	EPA 8260C

HC Executive Summary

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Lab#: AD15713-005 **Sample ID: TB-101-3 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	230	1000	EPA 6010D
Barium	mg/kg	11	320	EPA 6010D
Calcium	mg/kg	1100	2400	EPA 6010D
Chromium	mg/kg	5.7	9.7	EPA 6010D
Copper	mg/kg	5.7	180	EPA 6010D
Iron	mg/kg	230	3900	EPA 6010D
Lead	mg/kg	5.7	140	EPA 6010D
Manganese	mg/kg	11	19	EPA 6010D
Zinc	mg/kg	11	240	EPA 6010D
Arsenic	mg/kg	0.23	1.4	EPA 6020B
Silver	mg/kg	0.23	2.8	EPA 6020B
Mercury	mg/kg	0.096	0.20	EPA 7471B
Aroclor (Total)	mg/kg	0.029	0.20	EPA 8082A
Aroclor-1254	mg/kg	0.029	0.20	EPA 8082A
2-Methylnaphthalene	mg/kg	0.038	0.093	EPA 8270D
4-Chloroaniline	mg/kg	0.0096	0.20	EPA 8270D
Acenaphthene	mg/kg	0.038	0.11	EPA 8270D
Anthracene	mg/kg	0.038	0.12	EPA 8270D
Benzo[a]anthracene	mg/kg	0.038	0.42	EPA 8270D
Benzo[a]pyrene	mg/kg	0.038	0.38	EPA 8270D
Benzo[b]fluoranthene	mg/kg	0.038	0.53	EPA 8270D
Benzo[g,h,i]perylene	mg/kg	0.038	0.16	EPA 8270D
Benzo[k]fluoranthene	mg/kg	0.038	0.18	EPA 8270D
bis(2-Ethylhexyl)phthalate	mg/kg	0.038	0.15	EPA 8270D
Carbazole	mg/kg	0.038	0.055	EPA 8270D
Chrysene	mg/kg	0.038	0.38	EPA 8270D
Dibenzo[a,h]anthracene	mg/kg	0.038	0.047	EPA 8270D
Dibenzofuran	mg/kg	0.0096	0.049	EPA 8270D
Diethylphthalate	mg/kg	0.038	0.050	EPA 8270D
Fluoranthene	mg/kg	0.038	0.66	EPA 8270D
Fluorene	mg/kg	0.038	0.12	EPA 8270D
Indeno[1,2,3-cd]pyrene	mg/kg	0.038	0.14	EPA 8270D
Naphthalene	mg/kg	0.0096	0.087	EPA 8270D
Phenanthrene	mg/kg	0.038	0.53	EPA 8270D
Pyrene	mg/kg	0.038	0.62	EPA 8270D
TotalSemiVolatileTic	mg/kg	NA	28J	EPA 8270D
Cyanide	mg/kg	0.28	0.86	EPA 9012B

HC Executive Summary

Client: ARCADIS **HC Project #:** 0021406

Project: Long Beach

Lab#: AD15713-006 **Sample ID: TB-101-3 GRAB**

Analyte	Units	RL	Result	Analytical Method
1,2-Dichlorobenzene	mg/kg	0.0017	0.020	EPA 8260C
1,3-Dichlorobenzene	mg/kg	0.0017	0.0040	EPA 8260C
1,4-Dichlorobenzene	mg/kg	0.0017	0.036	EPA 8260C
2-Butanone	mg/kg	0.0017	0.059	EPA 8260C
Acetone	mg/kg	0.0084	0.66	EPA 8260C
Benzene	mg/kg	0.00084	0.0032	EPA 8260C
Carbon disulfide	mg/kg	0.0017	0.015	EPA 8260C
Chlorobenzene	mg/kg	0.0017	0.0038	EPA 8260C
Ethylbenzene	mg/kg	0.00084	0.0024	EPA 8260C
Isopropylbenzene	mg/kg	0.00084	0.0048	EPA 8260C
m&p-Xylenes	mg/kg	0.00084	0.014	EPA 8260C
Methylene chloride	mg/kg	0.0017	0.0098	EPA 8260C
o-Xylene	mg/kg	0.00084	0.011	EPA 8260C
Toluene	mg/kg	0.00084	0.0071	EPA 8260C
Xylenes (Total)	mg/kg	0.00084	0.025	EPA 8260C
TotalVolatileTic	mg/kg	NA	0.35J	EPA 8260C

Lab#: AD15713-007 **Sample ID: TB-101-4 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	230	780	EPA 6010D
Iron	mg/kg	230	1500	EPA 6010D
Manganese	mg/kg	12	14	EPA 6010D
Arsenic	mg/kg	0.23	1.2	EPA 6020B
Diethylphthalate	mg/kg	0.039	0.039	EPA 8270D
TotalSemiVolatileTic	mg/kg	NA	3.9J	EPA 8270D

Lab#: AD15713-009 **Sample ID: TB-101-5 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	240	650	EPA 6010D
Calcium	mg/kg	1200	1900	EPA 6010D
Chromium	mg/kg	5.9	7.3	EPA 6010D
Copper	mg/kg	5.9	6.2	EPA 6010D
Iron	mg/kg	240	1700	EPA 6010D
Lead	mg/kg	5.9	9.0	EPA 6010D
Magnesium	mg/kg	590	960	EPA 6010D
Manganese	mg/kg	12	14	EPA 6010D
Arsenic	mg/kg	0.24	0.92	EPA 6020B
Fluoranthene	mg/kg	0.039	0.053	EPA 8270D
Pyrene	mg/kg	0.039	0.045	EPA 8270D
TotalSemiVolatileTic	mg/kg	NA	4.3J	EPA 8270D

Lab#: AD15713-010 **Sample ID: TB-101-5 GRAB**

Analyte	Units	RL	Result	Analytical Method
Carbon disulfide	mg/kg	0.0017	0.0033	EPA 8260C

HC Executive Summary

Client: ARCADIS

Project: Long Beach

HC Project #: 0021406

Lab#: AD15713-011 **Sample ID: TB-101-6 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	240	480	EPA 6010D
Iron	mg/kg	240	1300	EPA 6010D
Manganese	mg/kg	12	14	EPA 6010D
Arsenic	mg/kg	0.24	0.56	EPA 6020B
TotalSemiVolatileTic	mg/kg	NA	3.8J	EPA 8270D

Lab#: AD15713-012 **Sample ID: TB-101-6 GRAB**

Analyte	Units	RL	Result	Analytical Method
Carbon disulfide	mg/kg	0.0018	0.0029	EPA 8260C
Methylene chloride	mg/kg	0.0018	0.0022	EPA 8260C

HC Report of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Sample ID: TB-101-1 COMP
Lab#: AD15713-001
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		92

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	0.29

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.091	0.89

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0054	ND
Aldrin	1	mg/kg	0.0054	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane (Total)	1	mg/kg	0.0054	ND
delta-BHC	1	mg/kg	0.0054	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0054	ND
Endosulfan II	1	mg/kg	0.0054	ND
Endosulfan Sulfate	1	mg/kg	0.0054	ND
Endrin	1	mg/kg	0.0054	ND
Endrin Aldehyde	1	mg/kg	0.0054	ND
Endrin Ketone	1	mg/kg	0.0054	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0054	ND
Heptachlor Epoxide	1	mg/kg	0.0054	ND
Methoxychlor	1	mg/kg	0.0054	ND
p,p'-DDD	1	mg/kg	0.0027	ND
p,p'-DDE	1	mg/kg	0.0027	0.031d
p,p'-DDT	1	mg/kg	0.0027	ND
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0054	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.027	0.31
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	1	mg/kg	0.027	0.31
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

Sample ID: TB-101-1 COMP
Lab#: AD15713-001
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	3	mg/kg	0.11	ND
1,2,4,5-Tetrachlorobenzene	3	mg/kg	0.11	ND
2,3,4,6-Tetrachlorophenol	3	mg/kg	0.11	ND
2,4,5-Trichlorophenol	3	mg/kg	0.11	ND
2,4,6-Trichlorophenol	3	mg/kg	0.11	ND
2,4-Dichlorophenol	3	mg/kg	0.027	ND
2,4-Dimethylphenol	3	mg/kg	0.027	ND
2,4-Dinitrophenol	3	mg/kg	0.54	ND
2,4-Dinitrotoluene	3	mg/kg	0.11	ND
2,6-Dinitrotoluene	3	mg/kg	0.11	ND
2-Chloronaphthalene	3	mg/kg	0.11	ND
2-Chlorophenol	3	mg/kg	0.11	ND
2-Methylnaphthalene	3	mg/kg	0.11	ND
2-Methylphenol	3	mg/kg	0.027	ND
2-Nitroaniline	3	mg/kg	0.11	ND
2-Nitrophenol	3	mg/kg	0.11	ND
3&4-Methylphenol	3	mg/kg	0.027	ND
3,3'-Dichlorobenzidine	3	mg/kg	0.11	ND
3-Nitroaniline	3	mg/kg	0.11	ND
4,6-Dinitro-2-methylphenol	3	mg/kg	0.54	ND
4-Bromophenyl-phenylether	3	mg/kg	0.11	ND
4-Chloro-3-methylphenol	3	mg/kg	0.11	ND
4-Chloroaniline	**3**	**mg/kg**	**0.027**	**0.12**
4-Chlorophenyl-phenylether	3	mg/kg	0.11	ND
4-Nitroaniline	3	mg/kg	0.11	ND
4-Nitrophenol	3	mg/kg	0.11	ND
Acenaphthene	3	mg/kg	0.11	ND
Acenaphthylene	3	mg/kg	0.11	ND
Acetophenone	3	mg/kg	0.11	ND
Anthracene	3	mg/kg	0.11	ND
Atrazine	3	mg/kg	0.11	ND
Benzaldehyde	3	mg/kg	0.11	ND
Benzo[a]anthracene	**3**	**mg/kg**	**0.11**	**0.19**
Benzo[a]pyrene	**3**	**mg/kg**	**0.11**	**0.22**
Benzo[b]fluoranthene	**3**	**mg/kg**	**0.11**	**0.32**
Benzo[g,h,i]perylene	**3**	**mg/kg**	**0.11**	**0.12**
Benzo[k]fluoranthene	3	mg/kg	0.11	ND
bis(2-Chloroethoxy)methane	3	mg/kg	0.11	ND
bis(2-Chloroethyl)ether	3	mg/kg	0.027	ND
bis(2-Chloroisopropyl)ether	3	mg/kg	0.11	ND
bis(2-Ethylhexyl)phthalate	3	mg/kg	0.11	ND
Butylbenzylphthalate	3	mg/kg	0.11	ND
Caprolactam	3	mg/kg	0.11	ND
Carbazole	3	mg/kg	0.11	ND
Chrysene	**3**	**mg/kg**	**0.11**	**0.19**
Dibenzo[a,h]anthracene	3	mg/kg	0.11	ND
Dibenzofuran	3	mg/kg	0.027	ND
Diethylphthalate	3	mg/kg	0.11	ND
Dimethylphthalate	3	mg/kg	0.11	ND
Di-n-butylphthalate	3	mg/kg	0.027	ND
Di-n-octylphthalate	3	mg/kg	0.11	ND
Fluoranthene	**3**	**mg/kg**	**0.11**	**0.32**
Fluorene	3	mg/kg	0.11	ND
Hexachlorobenzene	3	mg/kg	0.11	ND

Sample ID: TB-101-1 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-001 **Receipt Date: 2/14/2020**
Matrix: Soil

Hexachlorobutadiene	3	mg/kg	0.11	ND
Hexachlorocyclopentadiene	3	mg/kg	0.11	ND
Hexachloroethane	3	mg/kg	0.11	ND
Indeno[1,2,3-cd]pyrene	**3**	**mg/kg**	**0.11**	**0.12**
Isophorone	3	mg/kg	0.11	ND
Naphthalene	**3**	**mg/kg**	**0.027**	**0.033**
Nitrobenzene	3	mg/kg	0.11	ND
N-Nitroso-di-n-propylamine	3	mg/kg	0.027	ND
N-Nitrosodiphenylamine	3	mg/kg	0.11	ND
Pentachlorophenol	3	mg/kg	0.54	ND
Phenanthrene	**3**	**mg/kg**	**0.11**	**0.18**
Phenol	3	mg/kg	0.11	ND
Pyrene	**3**	**mg/kg**	**0.11**	**0.33**

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Tetracosane	**3**	**mg/kg**	**14.13**	**0.89J**
Hentriacontane	**3**	**mg/kg**	**14.89**	**0.84J**
Dihydrocholesterol	**3**	**mg/kg**	**15.07**	**21J**
Cholestan-3-one	**3**	**mg/kg**	**15.24**	**9.3J**
Dihydrocholesterol	**3**	**mg/kg**	**15.28**	**0.92J**
5.alpha.-Cholestan-3-one	**3**	**mg/kg**	**15.45**	**0.93J**
Dihydrocholesterol	**3**	**mg/kg**	**15.56**	**0.79J**
unknown	**3**	**mg/kg**	**15.75**	**1.1J**
Cholest-4-en-3-one	**3**	**mg/kg**	**15.84**	**0.65J**
unknown	**3**	**mg/kg**	**16.01**	**3.5J**
Cholestan-3-one, 4,4-dimethyl-, (5.alph	**3**	**mg/kg**	**16.24**	**1.7J**
2-Pentanone, 4-hydroxy-4-methyl-	**3**	**mg/kg**	**4.29**	**2.9JAB**
Tetradecane	**3**	**mg/kg**	**7.72**	**0.71J**
Hexadecane	**3**	**mg/kg**	**7.99**	**0.69J**
Pentadecane, 2,6,10,14-tetramethyl-	**3**	**mg/kg**	**9.12**	**0.93J**
TotalSemiVolatileTic	**3**	**mg/kg**	**NA**	**47J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**220**	**1800**
Barium	**1**	**mg/kg**	**11**	**68**
Calcium	**1**	**mg/kg**	**1100**	**6000**
Chromium	**1**	**mg/kg**	**5.4**	**9.0**
Cobalt	1	mg/kg	2.7	ND
Copper	**1**	**mg/kg**	**5.4**	**59**
Iron	**1**	**mg/kg**	**220**	**5500**
Lead	**1**	**mg/kg**	**5.4**	**130**
Magnesium	**1**	**mg/kg**	**540**	**1800**
Manganese	**1**	**mg/kg**	**11**	**39**
Nickel	**1**	**mg/kg**	**5.4**	**6.8**
Potassium	1	mg/kg	540	ND
Sodium	1	mg/kg	270	ND
Vanadium	**1**	**mg/kg**	**11**	**11**
Zinc	**1**	**mg/kg**	**11**	**180**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.87	ND
Arsenic	**1**	**mg/kg**	**0.22**	**2.5**
Beryllium	1	mg/kg	0.22	ND
Cadmium	**1**	**mg/kg**	**0.43**	**0.52**
Selenium	1	mg/kg	2.2	ND

Sample ID: TB-101-1 COMP
Lab#: AD15713-001
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

Silver	1	mg/kg	0.22	1.1
Thallium	1	mg/kg	0.43	ND

Sample ID: TB-101-1 GRAB
Lab#: AD15713-002
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.72	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.72	mg/kg	0.0015	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.72	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.72	mg/kg	0.0015	ND
1,1-Dichloroethane	0.72	mg/kg	0.0015	ND
1,1-Dichloroethene	0.72	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.72	mg/kg	0.0015	ND
1,2,4-Trichlorobenzene	0.72	mg/kg	0.0015	ND
1,2-Dibromo-3-chloropropane	0.72	mg/kg	0.0015	ND
1,2-Dibromoethane	0.72	mg/kg	0.00060	ND
1,2-Dichlorobenzene	0.72	mg/kg	0.0015	ND
1,2-Dichloroethane	0.72	mg/kg	0.0015	ND
1,2-Dichloropropane	0.72	mg/kg	0.0015	ND
1,3-Dichlorobenzene	0.72	mg/kg	0.0015	ND
1,4-Dichlorobenzene	0.72	mg/kg	0.0015	ND
1,4-Dioxane	0.72	mg/kg	0.077	ND
2-Butanone	**0.72**	**mg/kg**	**0.0015**	**0.019**
2-Hexanone	0.72	mg/kg	0.0015	ND
4-Methyl-2-pentanone	0.72	mg/kg	0.0015	ND
Acetone	**0.72**	**mg/kg**	**0.0077**	**0.20**
Benzene	**0.72**	**mg/kg**	**0.00077**	**0.0015**
Bromochloromethane	0.72	mg/kg	0.0015	ND
Bromodichloromethane	0.72	mg/kg	0.0015	ND
Bromoform	0.72	mg/kg	0.0015	ND
Bromomethane	0.72	mg/kg	0.0015	ND
Carbon disulfide	**0.72**	**mg/kg**	**0.0015**	**0.0031**
Carbon tetrachloride	0.72	mg/kg	0.0015	ND
Chlorobenzene	0.72	mg/kg	0.0015	ND
Chloroethane	0.72	mg/kg	0.0015	ND
Chloroform	0.72	mg/kg	0.0015	ND
Chloromethane	0.72	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.72	mg/kg	0.0015	ND
cis-1,3-Dichloropropene	0.72	mg/kg	0.0015	ND
Cyclohexane	0.72	mg/kg	0.0015	ND
Dibromochloromethane	0.72	mg/kg	0.0015	ND
Dichlorodifluoromethane	0.72	mg/kg	0.0015	ND
Ethylbenzene	0.72	mg/kg	0.00077	ND
Isopropylbenzene	0.72	mg/kg	0.00077	ND
m&p-Xylenes	**0.72**	**mg/kg**	**0.00077**	**0.0011**
Methyl Acetate	0.72	mg/kg	0.0015	ND
Methylcyclohexane	0.72	mg/kg	0.0015	ND
Methylene chloride	0.72	mg/kg	0.0015	ND
Methyl-t-butyl ether	0.72	mg/kg	0.00077	ND
o-Xylene	**0.72**	**mg/kg**	**0.00077**	**0.0014**
Styrene	0.72	mg/kg	0.0015	ND
Tetrachloroethene	0.72	mg/kg	0.0015	ND
Toluene	**0.72**	**mg/kg**	**0.00077**	**0.0024**
trans-1,2-Dichloroethene	0.72	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.72	mg/kg	0.0015	ND
Trichloroethene	0.72	mg/kg	0.0015	ND

Sample ID: TB-101-1 GRAB
Lab#: AD15713-002
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

Trichlorofluoromethane	0.72	mg/kg	0.0015	ND
Vinyl chloride	0.72	mg/kg	0.0015	ND
Xylenes (Total)	**0.72**	**mg/kg**	**0.00077**	**0.0025**

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
Naphthalene, 1-methyl-	**0.72**	**mg/kg**	**10.26**	**0.0051J**
Decane	**0.72**	**mg/kg**	**7.78**	**0.010J**
Benzene, 1,3,5-trimethyl-	**0.72**	**mg/kg**	**7.81**	**0.0068J**
Decane, 4-methyl-	**0.72**	**mg/kg**	**7.95**	**0.0054J**
unknown	**0.72**	**mg/kg**	**8.18**	**0.0086J**
Benzene, 1-methyl-4-(1-methylethyl)-	**0.72**	**mg/kg**	**8.2**	**0.0062J**
Undecane	**0.72**	**mg/kg**	**8.45**	**0.0080J**
Naphthalene, decahydro-	**0.72**	**mg/kg**	**8.49**	**0.0063J**
Benzene, 1-methyl-2-(1-methylethyl)-	**0.72**	**mg/kg**	**8.64**	**0.0059J**
unknown	**0.72**	**mg/kg**	**8.72**	**0.0056J**
unknown	**0.72**	**mg/kg**	**8.85**	**0.0064J**
Benzene, 1,2,3,4-tetramethyl-	**0.72**	**mg/kg**	**9.17**	**0.010J**
Tridecane	**0.72**	**mg/kg**	**9.68**	**0.0056J**
TotalVolatileTic	**0.72**	**mg/kg**	**NA**	**0.09J**

Sample ID: TB-101-2 COMP | **Collection Date: 2/13/2020**
Lab#: AD15713-003 | **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**93**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.26	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	**1**	**mg/kg**	**0.090**	**0.45**

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0054	ND
Aldrin	1	mg/kg	0.0054	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane (Total)	1	mg/kg	0.0054	ND
delta-BHC	1	mg/kg	0.0054	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0054	ND
Endosulfan II	1	mg/kg	0.0054	ND
Endosulfan Sulfate	1	mg/kg	0.0054	ND
Endrin	1	mg/kg	0.0054	ND
Endrin Aldehyde	1	mg/kg	0.0054	ND
Endrin Ketone	1	mg/kg	0.0054	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0054	ND
Heptachlor Epoxide	1	mg/kg	0.0054	ND
Methoxychlor	1	mg/kg	0.0054	ND
p,p'-DDD	1	mg/kg	0.0027	ND
p,p'-DDE	**1**	**mg/kg**	**0.0027**	**0.025**
p,p'-DDT	1	mg/kg	0.0027	ND
Toxaphene	1	mg/kg	0.027	ND
y-Chlordane	1	mg/kg	0.0054	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	**1**	**mg/kg**	**0.027**	**0.13**
Aroclor-1016	1	mg/kg	0.027	ND
Aroclor-1221	1	mg/kg	0.027	ND
Aroclor-1232	1	mg/kg	0.027	ND
Aroclor-1242	1	mg/kg	0.027	ND
Aroclor-1248	1	mg/kg	0.027	ND
Aroclor-1254	**1**	**mg/kg**	**0.027**	**0.13**
Aroclor-1260	1	mg/kg	0.027	ND
Aroclor-1262	1	mg/kg	0.027	ND
Aroclor-1268	1	mg/kg	0.027	ND

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	3	mg/kg	0.22	ND
1,2,4,5-Tetrachlorobenzene	3	mg/kg	0.22	ND
2,3,4,6-Tetrachlorophenol	3	mg/kg	0.22	ND
2,4,5-Trichlorophenol	3	mg/kg	0.22	ND
2,4,6-Trichlorophenol	3	mg/kg	0.22	ND

Sample ID: TB-101-2 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-003 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4-Dichlorophenol	3	mg/kg	0.054	ND
2,4-Dimethylphenol	3	mg/kg	0.054	ND
2,4-Dinitrophenol	3	mg/kg	1.1	ND
2,4-Dinitrotoluene	3	mg/kg	0.22	ND
2,6-Dinitrotoluene	3	mg/kg	0.22	ND
2-Chloronaphthalene	3	mg/kg	0.22	ND
2-Chlorophenol	3	mg/kg	0.22	ND
2-Methylnaphthalene	3	mg/kg	0.22	ND
2-Methylphenol	3	mg/kg	0.054	ND
2-Nitroaniline	3	mg/kg	0.22	ND
2-Nitrophenol	3	mg/kg	0.22	ND
3&4-Methylphenol	3	mg/kg	0.054	ND
3,3'-Dichlorobenzidine	3	mg/kg	0.22	ND
3-Nitroaniline	3	mg/kg	0.22	ND
4,6-Dinitro-2-methylphenol	3	mg/kg	1.1	ND
4-Bromophenyl-phenylether	3	mg/kg	0.22	ND
4-Chloro-3-methylphenol	3	mg/kg	0.22	ND
4-Chloroaniline	**3**	**mg/kg**	**0.054**	**0.093**
4-Chlorophenyl-phenylether	3	mg/kg	0.22	ND
4-Nitroaniline	3	mg/kg	0.22	ND
4-Nitrophenol	3	mg/kg	0.22	ND
Acenaphthene	3	mg/kg	0.22	ND
Acenaphthylene	3	mg/kg	0.22	ND
Acetophenone	3	mg/kg	0.22	ND
Anthracene	3	mg/kg	0.22	ND
Atrazine	3	mg/kg	0.22	ND
Benzaldehyde	3	mg/kg	0.22	ND
Benzo[a]anthracene	**3**	**mg/kg**	**0.22**	**0.54**
Benzo[a]pyrene	**3**	**mg/kg**	**0.22**	**0.50**
Benzo[b]fluoranthene	**3**	**mg/kg**	**0.22**	**0.69**
Benzo[g,h,i]perylene	**3**	**mg/kg**	**0.22**	**0.26**
Benzo[k]fluoranthene	3	mg/kg	0.22	ND
bis(2-Chloroethoxy)methane	3	mg/kg	0.22	ND
bis(2-Chloroethyl)ether	3	mg/kg	0.054	ND
bis(2-Chloroisopropyl)ether	3	mg/kg	0.22	ND
bis(2-Ethylhexyl)phthalate	3	mg/kg	0.22	ND
Butylbenzylphthalate	3	mg/kg	0.22	ND
Caprolactam	3	mg/kg	0.22	ND
Carbazole	3	mg/kg	0.22	ND
Chrysene	**3**	**mg/kg**	**0.22**	**0.51**
Dibenzo[a,h]anthracene	3	mg/kg	0.22	ND
Dibenzofuran	3	mg/kg	0.054	ND
Diethylphthalate	3	mg/kg	0.22	ND
Dimethylphthalate	3	mg/kg	0.22	ND
Di-n-butylphthalate	3	mg/kg	0.054	ND
Di-n-octylphthalate	3	mg/kg	0.22	ND
Fluoranthene	**3**	**mg/kg**	**0.22**	**0.88**
Fluorene	3	mg/kg	0.22	ND
Hexachlorobenzene	3	mg/kg	0.22	ND
Hexachlorobutadiene	3	mg/kg	0.22	ND
Hexachlorocyclopentadiene	3	mg/kg	0.22	ND
Hexachloroethane	3	mg/kg	0.22	ND
Indeno[1,2,3-cd]pyrene	**3**	**mg/kg**	**0.22**	**0.24**
Isophorone	3	mg/kg	0.22	ND
Naphthalene	**3**	**mg/kg**	**0.054**	**0.058**
Nitrobenzene	3	mg/kg	0.22	ND
N-Nitroso-di-n-propylamine	3	mg/kg	0.054	ND

Sample ID: TB-101-2 COMP
Lab#: AD15713-003
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

N-Nitrosodiphenylamine	3	mg/kg	0.22	ND
Pentachlorophenol	3	mg/kg	1.1	ND
Phenanthrene	**3**	**mg/kg**	**0.22**	**0.57**
Phenol	3	mg/kg	0.22	ND
Pyrene	**3**	**mg/kg**	**0.22**	**0.87**

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Phosphoric acid, 2-ethylhexyl diphenyl	**3**	**mg/kg**	**12.39**	**1.1J**
Octacosane	**3**	**mg/kg**	**13.41**	**0.74J**
Octacosane	**3**	**mg/kg**	**14.13**	**1.3J**
Tetracosane	**3**	**mg/kg**	**14.89**	**1.1J**
Dihydrocholesterol	**3**	**mg/kg**	**15.06**	**18J**
Methyl communate	**3**	**mg/kg**	**15.23**	**7.3J**
(12R,13R,14R)-8,12-13,14-Diepoxy-15-lab	**3**	**mg/kg**	**15.43**	**0.97J**
unknown	**3**	**mg/kg**	**15.55**	**0.78J**
unknown	**3**	**mg/kg**	**15.75**	**0.98J**
unknown	**3**	**mg/kg**	**16.01**	**3.7J**
unknown	**3**	**mg/kg**	**16.24**	**1.4J**
2-Pentanone, 4-hydroxy-4-methyl-	**3**	**mg/kg**	**4.29**	**3.1JAB**
Tetradecane	**3**	**mg/kg**	**7.72**	**0.82J**
Heptadecane	**3**	**mg/kg**	**9.1**	**0.86J**
TotalSemiVolatileTic	**3**	**mg/kg**	**NA**	**42J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**220**	**2300**
Barium	**1**	**mg/kg**	**11**	**53**
Calcium	**1**	**mg/kg**	**1100**	**24000**
Chromium	**1**	**mg/kg**	**5.4**	**9.3**
Cobalt	1	mg/kg	2.7	ND
Copper	**1**	**mg/kg**	**5.4**	**43**
Iron	**1**	**mg/kg**	**220**	**6400**
Lead	**1**	**mg/kg**	**5.4**	**67**
Magnesium	**1**	**mg/kg**	**540**	**8000**
Manganese	**1**	**mg/kg**	**11**	**66**
Nickel	**1**	**mg/kg**	**5.4**	**7.7**
Potassium	1	mg/kg	540	ND
Sodium	1	mg/kg	270	ND
Vanadium	**1**	**mg/kg**	**11**	**13**
Zinc	**1**	**mg/kg**	**11**	**120**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.86	ND
Arsenic	**1**	**mg/kg**	**0.22**	**2.4**
Beryllium	1	mg/kg	0.22	ND
Cadmium	1	mg/kg	0.43	ND
Selenium	1	mg/kg	2.2	ND
Silver	**1**	**mg/kg**	**0.22**	**0.93**
Thallium	1	mg/kg	0.43	ND

Sample ID: TB-101-2 GRAB
Lab#: AD15713-004
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		93

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.801	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.801	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.801	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.801	mg/kg	0.0017	ND
1,1-Dichloroethane	0.801	mg/kg	0.0017	ND
1,1-Dichloroethene	0.801	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.801	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.801	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.801	mg/kg	0.0017	ND
1,2-Dibromoethane	0.801	mg/kg	0.00067	ND
1,2-Dichlorobenzene	0.801	mg/kg	0.0017	ND
1,2-Dichloroethane	0.801	mg/kg	0.0017	ND
1,2-Dichloropropane	0.801	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.801	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.801	mg/kg	0.0017	ND
1,4-Dioxane	0.801	mg/kg	0.086	ND
2-Butanone	**0.801**	**mg/kg**	**0.0017**	**0.014**
2-Hexanone	0.801	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.801	mg/kg	0.0017	ND
Acetone	**0.801**	**mg/kg**	**0.0086**	**0.18**
Benzene	**0.801**	**mg/kg**	**0.00086**	**0.0054**
Bromochloromethane	0.801	mg/kg	0.0017	ND
Bromodichloromethane	0.801	mg/kg	0.0017	ND
Bromoform	0.801	mg/kg	0.0017	ND
Bromomethane	0.801	mg/kg	0.0017	ND
Carbon disulfide	**0.801**	**mg/kg**	**0.0017**	**0.0056**
Carbon tetrachloride	0.801	mg/kg	0.0017	ND
Chlorobenzene	**0.801**	**mg/kg**	**0.0017**	**0.0027**
Chloroethane	0.801	mg/kg	0.0017	ND
Chloroform	0.801	mg/kg	0.0017	ND
Chloromethane	0.801	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.801	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.801	mg/kg	0.0017	ND
Cyclohexane	0.801	mg/kg	0.0017	ND
Dibromochloromethane	0.801	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.801	mg/kg	0.0017	ND
Ethylbenzene	**0.801**	**mg/kg**	**0.00086**	**0.0011**
Isopropylbenzene	**0.801**	**mg/kg**	**0.00086**	**0.0020**
m&p-Xylenes	**0.801**	**mg/kg**	**0.00086**	**0.0031**
Methyl Acetate	0.801	mg/kg	0.0017	ND
Methylcyclohexane	0.801	mg/kg	0.0017	ND
Methylene chloride	**0.801**	**mg/kg**	**0.0017**	**0.0046**
Methyl-t-butyl ether	0.801	mg/kg	0.00086	ND
o-Xylene	**0.801**	**mg/kg**	**0.00086**	**0.0042**
Styrene	0.801	mg/kg	0.0017	ND
Tetrachloroethene	0.801	mg/kg	0.0017	ND
Toluene	**0.801**	**mg/kg**	**0.00086**	**0.0066**
trans-1,2-Dichloroethene	0.801	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.801	mg/kg	0.0017	ND
Trichloroethene	0.801	mg/kg	0.0017	ND

Sample ID: TB-101-2 GRAB | **Collection Date: 2/13/2020**
Lab#: AD15713-004 | **Receipt Date: 2/14/2020**
Matrix: Soil/Encore

Trichlorofluoromethane	0.801	mg/kg	0.0017	ND
Vinyl chloride	0.801	mg/kg	0.0017	ND
Xylenes (Total)	**0.801**	**mg/kg**	**0.00086**	**0.0073**

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
Naphthalene, 1-methyl-	**0.801**	**mg/kg**	**10.26**	**0.015J**
Naphthalene, 1-methyl-	**0.801**	**mg/kg**	**10.39**	**0.0098J**
Decane	**0.801**	**mg/kg**	**7.78**	**0.015J**
unknown	**0.801**	**mg/kg**	**7.81**	**0.013J**
Decane, 4-methyl-	**0.801**	**mg/kg**	**7.95**	**0.0099J**
unknown	**0.801**	**mg/kg**	**8.18**	**0.011J**
Benzene, 1-methyl-3-(1-methylethyl)-	**0.801**	**mg/kg**	**8.2**	**0.0075J**
Undecane	**0.801**	**mg/kg**	**8.45**	**0.011J**
Naphthalene, decahydro-, cis-	**0.801**	**mg/kg**	**8.49**	**0.0079J**
Benzene, 1-methyl-2-(1-methylethyl)-	**0.801**	**mg/kg**	**8.65**	**0.0082J**
unknown	**0.801**	**mg/kg**	**8.73**	**0.0081J**
unknown	**0.801**	**mg/kg**	**8.85**	**0.0077J**
Benzene, 1-ethyl-3,5-dimethyl-	**0.801**	**mg/kg**	**9.17**	**0.013J**
Naphthalene	**0.801**	**mg/kg**	**9.59**	**0.017J**
Tritetracontane	**0.801**	**mg/kg**	**9.68**	**0.0084J**
TotalVolatileTic	**0.801**	**mg/kg**	**NA**	**0.16J**

Sample ID: TB-101-3 COMP
Lab#: AD15713-005
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**87**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	**1**	**mg/kg**	**0.28**	**0.86**

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	**1**	**mg/kg**	**0.096**	**0.20**

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0057	ND
Aldrin	1	mg/kg	0.0057	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane (Total)	1	mg/kg	0.0057	ND
delta-BHC	1	mg/kg	0.0057	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0057	ND
Endosulfan II	1	mg/kg	0.0057	ND
Endosulfan Sulfate	1	mg/kg	0.0057	ND
Endrin	1	mg/kg	0.0057	ND
Endrin Aldehyde	1	mg/kg	0.0057	ND
Endrin Ketone	1	mg/kg	0.0057	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0057	ND
Heptachlor Epoxide	1	mg/kg	0.0057	ND
Methoxychlor	1	mg/kg	0.0057	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0057	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	**1**	**mg/kg**	**0.029**	**0.20**
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	**1**	**mg/kg**	**0.029**	**0.20**
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.038	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.038	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.038	ND
2,4,5-Trichlorophenol	1	mg/kg	0.038	ND
2,4,6-Trichlorophenol	1	mg/kg	0.038	ND

Sample ID: TB-101-3 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-005 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4-Dichlorophenol	1	mg/kg	0.0096	ND
2,4-Dimethylphenol	1	mg/kg	0.0096	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.038	ND
2,6-Dinitrotoluene	1	mg/kg	0.038	ND
2-Chloronaphthalene	1	mg/kg	0.038	ND
2-Chlorophenol	1	mg/kg	0.038	ND
2-Methylnaphthalene	**1**	**mg/kg**	**0.038**	**0.093**
2-Methylphenol	1	mg/kg	0.0096	ND
2-Nitroaniline	1	mg/kg	0.038	ND
2-Nitrophenol	1	mg/kg	0.038	ND
3&4-Methylphenol	1	mg/kg	0.0096	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.038	ND
3-Nitroaniline	1	mg/kg	0.038	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.038	ND
4-Chloro-3-methylphenol	1	mg/kg	0.038	ND
4-Chloroaniline	**1**	**mg/kg**	**0.0096**	**0.20**
4-Chlorophenyl-phenylether	1	mg/kg	0.038	ND
4-Nitroaniline	1	mg/kg	0.038	ND
4-Nitrophenol	1	mg/kg	0.038	ND
Acenaphthene	**1**	**mg/kg**	**0.038**	**0.11**
Acenaphthylene	1	mg/kg	0.038	ND
Acetophenone	1	mg/kg	0.038	ND
Anthracene	**1**	**mg/kg**	**0.038**	**0.12**
Atrazine	1	mg/kg	0.038	ND
Benzaldehyde	1	mg/kg	0.038	ND
Benzo[a]anthracene	**1**	**mg/kg**	**0.038**	**0.42**
Benzo[a]pyrene	**1**	**mg/kg**	**0.038**	**0.38**
Benzo[b]fluoranthene	**1**	**mg/kg**	**0.038**	**0.53**
Benzo[g,h,i]perylene	**1**	**mg/kg**	**0.038**	**0.16**
Benzo[k]fluoranthene	**1**	**mg/kg**	**0.038**	**0.18**
bis(2-Chloroethoxy)methane	1	mg/kg	0.038	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0096	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.038	ND
bis(2-Ethylhexyl)phthalate	**1**	**mg/kg**	**0.038**	**0.15**
Butylbenzylphthalate	1	mg/kg	0.038	ND
Caprolactam	1	mg/kg	0.038	ND
Carbazole	**1**	**mg/kg**	**0.038**	**0.055**
Chrysene	**1**	**mg/kg**	**0.038**	**0.38**
Dibenzo[a,h]anthracene	**1**	**mg/kg**	**0.038**	**0.047**
Dibenzofuran	**1**	**mg/kg**	**0.0096**	**0.049**
Diethylphthalate	**1**	**mg/kg**	**0.038**	**0.050**
Dimethylphthalate	1	mg/kg	0.038	ND
Di-n-butylphthalate	1	mg/kg	0.0096	ND
Di-n-octylphthalate	1	mg/kg	0.038	ND
Fluoranthene	**1**	**mg/kg**	**0.038**	**0.66**
Fluorene	**1**	**mg/kg**	**0.038**	**0.12**
Hexachlorobenzene	1	mg/kg	0.038	ND
Hexachlorobutadiene	1	mg/kg	0.038	ND
Hexachlorocyclopentadiene	1	mg/kg	0.038	ND
Hexachloroethane	1	mg/kg	0.038	ND
Indeno[1,2,3-cd]pyrene	**1**	**mg/kg**	**0.038**	**0.14**
Isophorone	1	mg/kg	0.038	ND
Naphthalene	**1**	**mg/kg**	**0.0096**	**0.087**
Nitrobenzene	1	mg/kg	0.038	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0096	ND

Sample ID: TB-101-3 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-005 **Receipt Date: 2/14/2020**
Matrix: Soil

N-Nitrosodiphenylamine	1	mg/kg	0.038	ND
Pentachlorophenol	1	mg/kg	0.19	ND
Phenanthrene	**1**	**mg/kg**	**0.038**	**0.53**
Phenol	1	mg/kg	0.038	ND
Pyrene	**1**	**mg/kg**	**0.038**	**0.62**

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecanoic acid	**1**	**mg/kg**	**10.31**	**0.91J**
10-Methoxybenz[a]azulen-1,4-dione	**1**	**mg/kg**	**11.13**	**1.4J**
Dihydrocholesterol	**1**	**mg/kg**	**15.07**	**4.4J**
Cholestan-3-one	**1**	**mg/kg**	**15.25**	**6.1J**
Dihydrocholesterol	**1**	**mg/kg**	**15.28**	**0.77J**
5.alpha.-Cholestan-3-one	**1**	**mg/kg**	**15.46**	**0.94J**
unknown	**1**	**mg/kg**	**15.77**	**0.96J**
Cholestane, 3-ethoxy-, (3.beta.,5.alpha	**1**	**mg/kg**	**16.02**	**1.8J**
unknown	**1**	**mg/kg**	**16.27**	**2.5J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.3**	**2.8JAB**
Naphthalene, 1,4-dimethyl-	**1**	**mg/kg**	**7.95**	**0.81J**
Heptadecane, 2,6,10,15-tetramethyl-	**1**	**mg/kg**	**7.99**	**0.94J**
1-Dodecanamine, N,N-dimethyl-	**1**	**mg/kg**	**8.2**	**0.80J**
Pentadecane, 2,6,10,14-tetramethyl-	**1**	**mg/kg**	**9.12**	**1.6J**
Hexadecane, 2,6,10,14-tetramethyl-	**1**	**mg/kg**	**9.61**	**0.78J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**28J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**230**	**1000**
Barium	**1**	**mg/kg**	**11**	**320**
Calcium	**1**	**mg/kg**	**1100**	**2400**
Chromium	**1**	**mg/kg**	**5.7**	**9.7**
Cobalt	1	mg/kg	2.9	ND
Copper	**1**	**mg/kg**	**5.7**	**180**
Iron	**1**	**mg/kg**	**230**	**3900**
Lead	**1**	**mg/kg**	**5.7**	**140**
Magnesium	1	mg/kg	570	ND
Manganese	**1**	**mg/kg**	**11**	**19**
Nickel	1	mg/kg	5.7	ND
Potassium	1	mg/kg	570	ND
Sodium	1	mg/kg	290	ND
Vanadium	1	mg/kg	11	ND
Zinc	**1**	**mg/kg**	**11**	**240**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.92	ND
Arsenic	**1**	**mg/kg**	**0.23**	**1.4**
Beryllium	1	mg/kg	0.23	ND
Cadmium	1	mg/kg	0.46	ND
Selenium	1	mg/kg	2.3	ND
Silver	**1**	**mg/kg**	**0.23**	**2.8**
Thallium	1	mg/kg	0.46	ND

Sample ID: TB-101-3 GRAB
Lab#: AD15713-006
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.751	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.751	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.751	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.751	mg/kg	0.0017	ND
1,1-Dichloroethane	0.751	mg/kg	0.0017	ND
1,1-Dichloroethene	0.751	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.751	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.751	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.751	mg/kg	0.0017	ND
1,2-Dibromoethane	0.751	mg/kg	0.00066	ND
1,2-Dichlorobenzene	**0.751**	**mg/kg**	**0.0017**	**0.020**
1,2-Dichloroethane	0.751	mg/kg	0.0017	ND
1,2-Dichloropropane	0.751	mg/kg	0.0017	ND
1,3-Dichlorobenzene	**0.751**	**mg/kg**	**0.0017**	**0.0040**
1,4-Dichlorobenzene	**0.751**	**mg/kg**	**0.0017**	**0.036**
1,4-Dioxane	0.751	mg/kg	0.084	ND
2-Butanone	**0.751**	**mg/kg**	**0.0017**	**0.059**
2-Hexanone	0.751	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.751	mg/kg	0.0017	ND
Acetone	**0.751**	**mg/kg**	**0.0084**	**0.66**
Benzene	**0.751**	**mg/kg**	**0.00084**	**0.0032**
Bromochloromethane	0.751	mg/kg	0.0017	ND
Bromodichloromethane	0.751	mg/kg	0.0017	ND
Bromoform	0.751	mg/kg	0.0017	ND
Bromomethane	0.751	mg/kg	0.0017	ND
Carbon disulfide	**0.751**	**mg/kg**	**0.0017**	**0.015**
Carbon tetrachloride	0.751	mg/kg	0.0017	ND
Chlorobenzene	**0.751**	**mg/kg**	**0.0017**	**0.0038**
Chloroethane	0.751	mg/kg	0.0017	ND
Chloroform	0.751	mg/kg	0.0017	ND
Chloromethane	0.751	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.751	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.751	mg/kg	0.0017	ND
Cyclohexane	0.751	mg/kg	0.0017	ND
Dibromochloromethane	0.751	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.751	mg/kg	0.0017	ND
Ethylbenzene	**0.751**	**mg/kg**	**0.00084**	**0.0024**
Isopropylbenzene	**0.751**	**mg/kg**	**0.00084**	**0.0048**
m&p-Xylenes	**0.751**	**mg/kg**	**0.00084**	**0.014**
Methyl Acetate	0.751	mg/kg	0.0017	ND
Methylcyclohexane	0.751	mg/kg	0.0017	ND
Methylene chloride	**0.751**	**mg/kg**	**0.0017**	**0.0098**
Methyl-t-butyl ether	0.751	mg/kg	0.00084	ND
o-Xylene	**0.751**	**mg/kg**	**0.00084**	**0.011**
Styrene	0.751	mg/kg	0.0017	ND
Tetrachloroethene	0.751	mg/kg	0.0017	ND
Toluene	**0.751**	**mg/kg**	**0.00084**	**0.0071**
trans-1,2-Dichloroethene	0.751	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.751	mg/kg	0.0017	ND
Trichloroethene	0.751	mg/kg	0.0017	ND

Sample ID: TB-101-3 GRAB | **Collection Date: 2/13/2020**
Lab#: AD15713-006 | **Receipt Date: 2/14/2020**
Matrix: Soil/Encore

Trichlorofluoromethane	0.751	mg/kg	0.0017	ND
Vinyl chloride	0.751	mg/kg	0.0017	ND
Xylenes (Total)	**0.751**	**mg/kg**	**0.00084**	**0.025**

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	0.751	mg/kg	10.1	0.014J
Hexadecane, 2,6,10,14-tetramethyl-	0.751	mg/kg	10.14	0.025J
Naphthalene, 1-methyl-	0.751	mg/kg	10.27	0.014J
Naphthalene, 1-methyl-	0.751	mg/kg	10.39	0.019J
Cyclohexane, 1-ethyl-4-methyl-, trans-	0.751	mg/kg	7.28	0.013J
Octane, 2,6-dimethyl-	0.751	mg/kg	7.34	0.014J
Cyclohexene, 1-methyl-4-(1-methylethyl)	0.751	mg/kg	7.54	0.053J
Benzene, 1,3,5-trimethyl-	0.751	mg/kg	7.81	0.017J
dl-Limonene	0.751	mg/kg	8.19	0.058J
Benzene, 4-ethyl-1,2-dimethyl-	0.751	mg/kg	8.65	0.013J
unknown	0.751	mg/kg	8.85	0.017J
Undecane, 2,5-dimethyl-	0.751	mg/kg	9.17	0.034J
Undecane, 6,6-dimethyl-	0.751	mg/kg	9.53	0.026J
Naphthalene	0.751	mg/kg	9.59	0.014J
unknown	0.751	mg/kg	9.97	0.015J
TotalVolatileTic	0.751	mg/kg	NA	0.35J

Sample ID: TB-101-4 COMP
Lab#: AD15713-007
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0058	ND
Aldrin	1	mg/kg	0.0058	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0058	ND
delta-BHC	1	mg/kg	0.0058	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0058	ND
Endosulfan II	1	mg/kg	0.0058	ND
Endosulfan Sulfate	1	mg/kg	0.0058	ND
Endrin	1	mg/kg	0.0058	ND
Endrin Aldehyde	1	mg/kg	0.0058	ND
Endrin Ketone	1	mg/kg	0.0058	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0058	ND
Heptachlor Epoxide	1	mg/kg	0.0058	ND
Methoxychlor	1	mg/kg	0.0058	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0058	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.039	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.039	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.039	ND
2,4,5-Trichlorophenol	1	mg/kg	0.039	ND
2,4,6-Trichlorophenol	1	mg/kg	0.039	ND

Sample ID: TB-101-4 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-007 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4-Dichlorophenol	1	mg/kg	0.0097	ND
2,4-Dimethylphenol	1	mg/kg	0.0097	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.039	ND
2,6-Dinitrotoluene	1	mg/kg	0.039	ND
2-Chloronaphthalene	1	mg/kg	0.039	ND
2-Chlorophenol	1	mg/kg	0.039	ND
2-Methylnaphthalene	1	mg/kg	0.039	ND
2-Methylphenol	1	mg/kg	0.0097	ND
2-Nitroaniline	1	mg/kg	0.039	ND
2-Nitrophenol	1	mg/kg	0.039	ND
3&4-Methylphenol	1	mg/kg	0.0097	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.039	ND
3-Nitroaniline	1	mg/kg	0.039	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.039	ND
4-Chloro-3-methylphenol	1	mg/kg	0.039	ND
4-Chloroaniline	1	mg/kg	0.0097	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.039	ND
4-Nitroaniline	1	mg/kg	0.039	ND
4-Nitrophenol	1	mg/kg	0.039	ND
Acenaphthene	1	mg/kg	0.039	ND
Acenaphthylene	1	mg/kg	0.039	ND
Acetophenone	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	ND
Atrazine	1	mg/kg	0.039	ND
Benzaldehyde	1	mg/kg	0.039	ND
Benzo[a]anthracene	1	mg/kg	0.039	ND
Benzo[a]pyrene	1	mg/kg	0.039	ND
Benzo[b]fluoranthene	1	mg/kg	0.039	ND
Benzo[g,h,i]perylene	1	mg/kg	0.039	ND
Benzo[k]fluoranthene	1	mg/kg	0.039	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.039	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0097	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.039	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.039	ND
Butylbenzylphthalate	1	mg/kg	0.039	ND
Caprolactam	1	mg/kg	0.039	ND
Carbazole	1	mg/kg	0.039	ND
Chrysene	1	mg/kg	0.039	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.039	ND
Dibenzofuran	1	mg/kg	0.0097	ND
Diethylphthalate	**1**	**mg/kg**	**0.039**	**0.039**
Dimethylphthalate	1	mg/kg	0.039	ND
Di-n-butylphthalate	1	mg/kg	0.0097	ND
Di-n-octylphthalate	1	mg/kg	0.039	ND
Fluoranthene	1	mg/kg	0.039	ND
Fluorene	1	mg/kg	0.039	ND
Hexachlorobenzene	1	mg/kg	0.039	ND
Hexachlorobutadiene	1	mg/kg	0.039	ND
Hexachlorocyclopentadiene	1	mg/kg	0.039	ND
Hexachloroethane	1	mg/kg	0.039	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.039	ND
Isophorone	1	mg/kg	0.039	ND
Naphthalene	1	mg/kg	0.0097	ND
Nitrobenzene	1	mg/kg	0.039	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0097	ND

Sample ID: TB-101-4 COMP
Lab#: AD15713-007
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

N-Nitrosodiphenylamine	1	mg/kg	0.039	ND
Pentachlorophenol	1	mg/kg	0.19	ND
Phenanthrene	1	mg/kg	0.039	ND
Phenol	1	mg/kg	0.039	ND
Pyrene	1	mg/kg	0.039	ND

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
10-Methoxybenz[a]azulen-1,4-dione	**1**	**mg/kg**	**11.05**	**0.20J**
unknown	**1**	**mg/kg**	**14.96**	**0.11J**
CHOLESTAN-4-ONE	**1**	**mg/kg**	**15.14**	**0.20J**
unknown	**1**	**mg/kg**	**16.13**	**0.089J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.22**	**2.7JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.17**	**0.18JB**
unknown	**1**	**mg/kg**	**5.61**	**0.079J**
unknown	**1**	**mg/kg**	**8.46**	**0.32J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**230**	**780**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	5.8	ND
Cobalt	1	mg/kg	2.9	ND
Copper	1	mg/kg	5.8	ND
Iron	**1**	**mg/kg**	**230**	**1500**
Lead	1	mg/kg	5.8	ND
Magnesium	1	mg/kg	580	ND
Manganese	**1**	**mg/kg**	**12**	**14**
Nickel	1	mg/kg	5.8	ND
Potassium	1	mg/kg	580	ND
Sodium	1	mg/kg	290	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.93	ND
Arsenic	**1**	**mg/kg**	**0.23**	**1.2**
Beryllium	1	mg/kg	0.23	ND
Cadmium	1	mg/kg	0.47	ND
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND
Thallium	1	mg/kg	0.47	ND

Sample ID: TB-101-4 GRAB
Lab#: AD15713-008
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.799	mg/kg	0.0019	ND
1,1,2,2-Tetrachloroethane	0.799	mg/kg	0.0019	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.799	mg/kg	0.0019	ND
1,1,2-Trichloroethane	0.799	mg/kg	0.0019	ND
1,1-Dichloroethane	0.799	mg/kg	0.0019	ND
1,1-Dichloroethene	0.799	mg/kg	0.0019	ND
1,2,3-Trichlorobenzene	0.799	mg/kg	0.0019	ND
1,2,4-Trichlorobenzene	0.799	mg/kg	0.0019	ND
1,2-Dibromo-3-chloropropane	0.799	mg/kg	0.0019	ND
1,2-Dibromoethane	0.799	mg/kg	0.00076	ND
1,2-Dichlorobenzene	0.799	mg/kg	0.0019	ND
1,2-Dichloroethane	0.799	mg/kg	0.0019	ND
1,2-Dichloropropane	0.799	mg/kg	0.0019	ND
1,3-Dichlorobenzene	0.799	mg/kg	0.0019	ND
1,4-Dichlorobenzene	0.799	mg/kg	0.0019	ND
1,4-Dioxane	0.799	mg/kg	0.097	ND
2-Butanone	0.799	mg/kg	0.0019	ND
2-Hexanone	0.799	mg/kg	0.0019	ND
4-Methyl-2-pentanone	0.799	mg/kg	0.0019	ND
Acetone	0.799	mg/kg	0.0097	ND
Benzene	0.799	mg/kg	0.00097	ND
Bromochloromethane	0.799	mg/kg	0.0019	ND
Bromodichloromethane	0.799	mg/kg	0.0019	ND
Bromoform	0.799	mg/kg	0.0019	ND
Bromomethane	0.799	mg/kg	0.0019	ND
Carbon disulfide	0.799	mg/kg	0.0019	ND
Carbon tetrachloride	0.799	mg/kg	0.0019	ND
Chlorobenzene	0.799	mg/kg	0.0019	ND
Chloroethane	0.799	mg/kg	0.0019	ND
Chloroform	0.799	mg/kg	0.0019	ND
Chloromethane	0.799	mg/kg	0.0019	ND
cis-1,2-Dichloroethene	0.799	mg/kg	0.0019	ND
cis-1,3-Dichloropropene	0.799	mg/kg	0.0019	ND
Cyclohexane	0.799	mg/kg	0.0019	ND
Dibromochloromethane	0.799	mg/kg	0.0019	ND
Dichlorodifluoromethane	0.799	mg/kg	0.0019	ND
Ethylbenzene	0.799	mg/kg	0.00097	ND
Isopropylbenzene	0.799	mg/kg	0.00097	ND
m&p-Xylenes	0.799	mg/kg	0.00097	ND
Methyl Acetate	0.799	mg/kg	0.0019	ND
Methylcyclohexane	0.799	mg/kg	0.0019	ND
Methylene chloride	0.799	mg/kg	0.0019	ND
Methyl-t-butyl ether	0.799	mg/kg	0.00097	ND
o-Xylene	0.799	mg/kg	0.00097	ND
Styrene	0.799	mg/kg	0.0019	ND
Tetrachloroethene	0.799	mg/kg	0.0019	ND
Toluene	0.799	mg/kg	0.00097	ND
trans-1,2-Dichloroethene	0.799	mg/kg	0.0019	ND
trans-1,3-Dichloropropene	0.799	mg/kg	0.0019	ND
Trichloroethene	0.799	mg/kg	0.0019	ND

Sample ID: TB-101-4 GRAB
Lab#: AD15713-008
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

Trichlorofluoromethane	0.799	mg/kg	0.0019	ND
Vinyl chloride	0.799	mg/kg	0.0019	ND
Xylenes (Total)	0.799	mg/kg	0.00097	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	0.799	mg/kg	NA	ND
TotalVolatileTic	0.799	mg/kg	NA	ND

Sample ID: TB-101-5 COMP
Lab#: AD15713-009
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		85

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.098	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0059	ND
Aldrin	1	mg/kg	0.0059	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0059	ND
delta-BHC	1	mg/kg	0.0059	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0059	ND
Endosulfan II	1	mg/kg	0.0059	ND
Endosulfan Sulfate	1	mg/kg	0.0059	ND
Endrin	1	mg/kg	0.0059	ND
Endrin Aldehyde	1	mg/kg	0.0059	ND
Endrin Ketone	1	mg/kg	0.0059	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0059	ND
Heptachlor Epoxide	1	mg/kg	0.0059	ND
Methoxychlor	1	mg/kg	0.0059	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0059	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.039	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.039	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.039	ND
2,4,5-Trichlorophenol	1	mg/kg	0.039	ND
2,4,6-Trichlorophenol	1	mg/kg	0.039	ND

Sample ID: TB-101-5 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-009 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4-Dichlorophenol	1	mg/kg	0.0098	ND
2,4-Dimethylphenol	1	mg/kg	0.0098	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.039	ND
2,6-Dinitrotoluene	1	mg/kg	0.039	ND
2-Chloronaphthalene	1	mg/kg	0.039	ND
2-Chlorophenol	1	mg/kg	0.039	ND
2-Methylnaphthalene	1	mg/kg	0.039	ND
2-Methylphenol	1	mg/kg	0.0098	ND
2-Nitroaniline	1	mg/kg	0.039	ND
2-Nitrophenol	1	mg/kg	0.039	ND
3&4-Methylphenol	1	mg/kg	0.0098	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.039	ND
3-Nitroaniline	1	mg/kg	0.039	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.039	ND
4-Chloro-3-methylphenol	1	mg/kg	0.039	ND
4-Chloroaniline	1	mg/kg	0.0098	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.039	ND
4-Nitroaniline	1	mg/kg	0.039	ND
4-Nitrophenol	1	mg/kg	0.039	ND
Acenaphthene	1	mg/kg	0.039	ND
Acenaphthylene	1	mg/kg	0.039	ND
Acetophenone	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	ND
Atrazine	1	mg/kg	0.039	ND
Benzaldehyde	1	mg/kg	0.039	ND
Benzo[a]anthracene	1	mg/kg	0.039	ND
Benzo[a]pyrene	1	mg/kg	0.039	ND
Benzo[b]fluoranthene	1	mg/kg	0.039	ND
Benzo[g,h,i]perylene	1	mg/kg	0.039	ND
Benzo[k]fluoranthene	1	mg/kg	0.039	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.039	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0098	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.039	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.039	ND
Butylbenzylphthalate	1	mg/kg	0.039	ND
Caprolactam	1	mg/kg	0.039	ND
Carbazole	1	mg/kg	0.039	ND
Chrysene	1	mg/kg	0.039	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.039	ND
Dibenzofuran	1	mg/kg	0.0098	ND
Diethylphthalate	1	mg/kg	0.039	ND
Dimethylphthalate	1	mg/kg	0.039	ND
Di-n-butylphthalate	1	mg/kg	0.0098	ND
Di-n-octylphthalate	1	mg/kg	0.039	ND
Fluoranthene	**1**	**mg/kg**	**0.039**	**0.053**
Fluorene	1	mg/kg	0.039	ND
Hexachlorobenzene	1	mg/kg	0.039	ND
Hexachlorobutadiene	1	mg/kg	0.039	ND
Hexachlorocyclopentadiene	1	mg/kg	0.039	ND
Hexachloroethane	1	mg/kg	0.039	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.039	ND
Isophorone	1	mg/kg	0.039	ND
Naphthalene	1	mg/kg	0.0098	ND
Nitrobenzene	1	mg/kg	0.039	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0098	ND

Sample ID: TB-101-5 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-009 **Receipt Date: 2/14/2020**
Matrix: Soil

N-Nitrosodiphenylamine	1	mg/kg	0.039	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.039	ND
Phenol	1	mg/kg	0.039	ND
Pyrene	**1**	**mg/kg**	**0.039**	**0.045**

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
unknown	**1**	**mg/kg**	**11.05**	**0.18J**
Dihydrocholesterol	**1**	**mg/kg**	**14.96**	**0.35J**
5.alpha.-Cholestan-3-one	**1**	**mg/kg**	**15.14**	**0.54J**
unknown	**1**	**mg/kg**	**15.9**	**0.16J**
5.ALPHA.-STIGMAST-3-ONE	**1**	**mg/kg**	**16.13**	**0.23J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.22**	**2.5JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.17**	**0.16JB**
Cyclohexasiloxane, dodecamethyl-	**1**	**mg/kg**	**7.16**	**0.084J**
unknown	**1**	**mg/kg**	**8.47**	**0.085J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.3J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**650**
Barium	1	mg/kg	12	ND
Calcium	**1**	**mg/kg**	**1200**	**1900**
Chromium	**1**	**mg/kg**	**5.9**	**7.3**
Cobalt	1	mg/kg	2.9	ND
Copper	**1**	**mg/kg**	**5.9**	**6.2**
Iron	**1**	**mg/kg**	**240**	**1700**
Lead	**1**	**mg/kg**	**5.9**	**9.0**
Magnesium	**1**	**mg/kg**	**590**	**960**
Manganese	**1**	**mg/kg**	**12**	**14**
Nickel	1	mg/kg	5.9	ND
Potassium	1	mg/kg	590	ND
Sodium	1	mg/kg	290	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.94	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.92**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.47	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.47	ND

Sample ID: TB-101-5 GRAB
Lab#: AD15713-010
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.696	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.696	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.696	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.696	mg/kg	0.0017	ND
1,1-Dichloroethane	0.696	mg/kg	0.0017	ND
1,1-Dichloroethene	0.696	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.696	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.696	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.696	mg/kg	0.0017	ND
1,2-Dibromoethane	0.696	mg/kg	0.00066	ND
1,2-Dichlorobenzene	0.696	mg/kg	0.0017	ND
1,2-Dichloroethane	0.696	mg/kg	0.0017	ND
1,2-Dichloropropane	0.696	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.696	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.696	mg/kg	0.0017	ND
1,4-Dioxane	0.696	mg/kg	0.085	ND
2-Butanone	0.696	mg/kg	0.0017	ND
2-Hexanone	0.696	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.696	mg/kg	0.0017	ND
Acetone	0.696	mg/kg	0.0085	ND
Benzene	0.696	mg/kg	0.00085	ND
Bromochloromethane	0.696	mg/kg	0.0017	ND
Bromodichloromethane	0.696	mg/kg	0.0017	ND
Bromoform	0.696	mg/kg	0.0017	ND
Bromomethane	0.696	mg/kg	0.0017	ND
Carbon disulfide	**0.696**	**mg/kg**	**0.0017**	**0.0033**
Carbon tetrachloride	0.696	mg/kg	0.0017	ND
Chlorobenzene	0.696	mg/kg	0.0017	ND
Chloroethane	0.696	mg/kg	0.0017	ND
Chloroform	0.696	mg/kg	0.0017	ND
Chloromethane	0.696	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.696	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.696	mg/kg	0.0017	ND
Cyclohexane	0.696	mg/kg	0.0017	ND
Dibromochloromethane	0.696	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.696	mg/kg	0.0017	ND
Ethylbenzene	0.696	mg/kg	0.00085	ND
Isopropylbenzene	0.696	mg/kg	0.00085	ND
m&p-Xylenes	0.696	mg/kg	0.00085	ND
Methyl Acetate	0.696	mg/kg	0.0017	ND
Methylcyclohexane	0.696	mg/kg	0.0017	ND
Methylene chloride	0.696	mg/kg	0.0017	ND
Methyl-t-butyl ether	0.696	mg/kg	0.00085	ND
o-Xylene	0.696	mg/kg	0.00085	ND
Styrene	0.696	mg/kg	0.0017	ND
Tetrachloroethene	0.696	mg/kg	0.0017	ND
Toluene	0.696	mg/kg	0.00085	ND
trans-1,2-Dichloroethene	0.696	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.696	mg/kg	0.0017	ND
Trichloroethene	0.696	mg/kg	0.0017	ND

Sample ID: TB-101-5 GRAB
Lab#: AD15713-010
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

Trichlorofluoromethane	0.696	mg/kg	0.0017	ND
Vinyl chloride	0.696	mg/kg	0.0017	ND
Xylenes (Total)	0.696	mg/kg	0.00085	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	0.696	mg/kg	NA	ND
TotalVolatileTic	0.696	mg/kg	NA	ND

Sample ID: TB-101-6 COMP
Lab#: AD15713-011
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0061	ND
Aldrin	1	mg/kg	0.0061	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0061	ND
delta-BHC	1	mg/kg	0.0061	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0061	ND
Endosulfan II	1	mg/kg	0.0061	ND
Endosulfan Sulfate	1	mg/kg	0.0061	ND
Endrin	1	mg/kg	0.0061	ND
Endrin Aldehyde	1	mg/kg	0.0061	ND
Endrin Ketone	1	mg/kg	0.0061	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0061	ND
Heptachlor Epoxide	1	mg/kg	0.0061	ND
Methoxychlor	1	mg/kg	0.0061	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0061	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND
2,4,6-Trichlorophenol	1	mg/kg	0.041	ND

Sample ID: TB-101-6 COMP **Collection Date: 2/13/2020**
Lab#: AD15713-011 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.041	ND
2-Chlorophenol	1	mg/kg	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.041	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.041	ND
2-Nitrophenol	1	mg/kg	0.041	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.041	ND
3-Nitroaniline	1	mg/kg	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.041	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.041	ND
4-Nitroaniline	1	mg/kg	0.041	ND
4-Nitrophenol	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Acetophenone	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Atrazine	1	mg/kg	0.041	ND
Benzaldehyde	1	mg/kg	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.041	ND
Butylbenzylphthalate	1	mg/kg	0.041	ND
Caprolactam	1	mg/kg	0.041	ND
Carbazole	1	mg/kg	0.041	ND
Chrysene	1	mg/kg	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.041	ND
Dimethylphthalate	1	mg/kg	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.041	ND
Fluoranthene	1	mg/kg	0.041	ND
Fluorene	1	mg/kg	0.041	ND
Hexachlorobenzene	1	mg/kg	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.041	ND
Hexachloroethane	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND
Isophorone	1	mg/kg	0.041	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND

Sample ID: TB-101-6 COMP
Lab#: AD15713-011
Matrix: Soil

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

N-Nitrosodiphenylamine	1	mg/kg	0.041	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.041	ND
Phenol	1	mg/kg	0.041	ND
Pyrene	1	mg/kg	0.041	ND

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.34**	**3.5JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.15JB**
Benzene, 1,2,3-trimethyl-	**1**	**mg/kg**	**5.72**	**0.11J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.8J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**480**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.1	ND
Cobalt	1	mg/kg	3.0	ND
Copper	1	mg/kg	6.1	ND
Iron	**1**	**mg/kg**	**240**	**1300**
Lead	1	mg/kg	6.1	ND
Magnesium	1	mg/kg	610	ND
Manganese	**1**	**mg/kg**	**12**	**14**
Nickel	1	mg/kg	6.1	ND
Potassium	1	mg/kg	610	ND
Sodium	1	mg/kg	300	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.98	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.56**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.49	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: TB-101-6 GRAB
Lab#: AD15713-012
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.758	mg/kg	0.0018	ND
1,1,2,2-Tetrachloroethane	0.758	mg/kg	0.0018	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.758	mg/kg	0.0018	ND
1,1,2-Trichloroethane	0.758	mg/kg	0.0018	ND
1,1-Dichloroethane	0.758	mg/kg	0.0018	ND
1,1-Dichloroethene	0.758	mg/kg	0.0018	ND
1,2,3-Trichlorobenzene	0.758	mg/kg	0.0018	ND
1,2,4-Trichlorobenzene	0.758	mg/kg	0.0018	ND
1,2-Dibromo-3-chloropropane	0.758	mg/kg	0.0018	ND
1,2-Dibromoethane	0.758	mg/kg	0.00072	ND
1,2-Dichlorobenzene	0.758	mg/kg	0.0018	ND
1,2-Dichloroethane	0.758	mg/kg	0.0018	ND
1,2-Dichloropropane	0.758	mg/kg	0.0018	ND
1,3-Dichlorobenzene	0.758	mg/kg	0.0018	ND
1,4-Dichlorobenzene	0.758	mg/kg	0.0018	ND
1,4-Dioxane	0.758	mg/kg	0.092	ND
2-Butanone	0.758	mg/kg	0.0018	ND
2-Hexanone	0.758	mg/kg	0.0018	ND
4-Methyl-2-pentanone	0.758	mg/kg	0.0018	ND
Acetone	0.758	mg/kg	0.0092	ND
Benzene	0.758	mg/kg	0.00092	ND
Bromochloromethane	0.758	mg/kg	0.0018	ND
Bromodichloromethane	0.758	mg/kg	0.0018	ND
Bromoform	0.758	mg/kg	0.0018	ND
Bromomethane	0.758	mg/kg	0.0018	ND
Carbon disulfide	**0.758**	**mg/kg**	**0.0018**	**0.0029**
Carbon tetrachloride	0.758	mg/kg	0.0018	ND
Chlorobenzene	0.758	mg/kg	0.0018	ND
Chloroethane	0.758	mg/kg	0.0018	ND
Chloroform	0.758	mg/kg	0.0018	ND
Chloromethane	0.758	mg/kg	0.0018	ND
cis-1,2-Dichloroethene	0.758	mg/kg	0.0018	ND
cis-1,3-Dichloropropene	0.758	mg/kg	0.0018	ND
Cyclohexane	0.758	mg/kg	0.0018	ND
Dibromochloromethane	0.758	mg/kg	0.0018	ND
Dichlorodifluoromethane	0.758	mg/kg	0.0018	ND
Ethylbenzene	0.758	mg/kg	0.00092	ND
Isopropylbenzene	0.758	mg/kg	0.00092	ND
m&p-Xylenes	0.758	mg/kg	0.00092	ND
Methyl Acetate	0.758	mg/kg	0.0018	ND
Methylcyclohexane	0.758	mg/kg	0.0018	ND
Methylene chloride	**0.758**	**mg/kg**	**0.0018**	**0.0022**
Methyl-t-butyl ether	0.758	mg/kg	0.00092	ND
o-Xylene	0.758	mg/kg	0.00092	ND
Styrene	0.758	mg/kg	0.0018	ND
Tetrachloroethene	0.758	mg/kg	0.0018	ND
Toluene	0.758	mg/kg	0.00092	ND
trans-1,2-Dichloroethene	0.758	mg/kg	0.0018	ND
trans-1,3-Dichloropropene	0.758	mg/kg	0.0018	ND
Trichloroethene	0.758	mg/kg	0.0018	ND

Sample ID: TB-101-6 GRAB
Lab#: AD15713-012
Matrix: Soil/Encore

Collection Date: 2/13/2020
Receipt Date: 2/14/2020

Trichlorofluoromethane	0.758	mg/kg	0.0018	ND
Vinyl chloride	0.758	mg/kg	0.0018	ND
Xylenes (Total)	0.758	mg/kg	0.00092	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	0.758	mg/kg	NA	ND
TotalVolatileTic	0.758	mg/kg	NA	ND

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Laboratory Chronicle

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Lab#: AD15713-001 **Sample ID: TB-101-1 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Cyanide (Soil/Waste) 9012B		02/18/20	asilva	EPA 9012B	2/19/20 13:14	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	02/18/20 08:30	bransaw	EPA 7471B	2/19/20 14:19	BA
Organochlorine Pesticides 8081	3510C/3550C	02/18/20 10:11	mwalker	EPA 8081B	2/20/20 04:00	MS/MLC
PCB 8082	3510C/3550C	02/18/20 10:11	mwalker	EPA 8082A	2/19/20 13:33	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	02/21/20 13:57	Lynda	EPA 8270D	2/24/20 14:14	AB/JB
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/18/20 19:39	CJA
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/19/20 02:22	CJA
TAL Metals 6020B	3005&10/3050	02/18/20 08:30	bransaw	EPA 6020B	2/18/20 18:20	PC

Lab#: AD15713-002 **Sample ID: TB-101-1 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/20/20 03:33	WP

Lab#: AD15713-003 **Sample ID: TB-101-2 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Cyanide (Soil/Waste) 9012B		02/18/20	asilva	EPA 9012B	2/19/20 13:16	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	02/18/20 08:30	bransaw	EPA 7471B	2/19/20 14:20	BA
Organochlorine Pesticides 8081	3510C/3550C	02/18/20 10:11	mwalker	EPA 8081B	2/21/20 04:48	MS/MLC
PCB 8082	3510C/3550C	02/18/20 10:11	mwalker	EPA 8082A	2/19/20 13:48	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	02/21/20 13:57	Lynda	EPA 8270D	2/24/20 11:31	AB/JB
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/18/20 19:43	CJA
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/19/20 02:26	CJA
TAL Metals 6020B	3005&10/3050	02/18/20 08:30	bransaw	EPA 6020B	2/18/20 18:24	PC

Lab#: AD15713-004 **Sample ID: TB-101-2 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/20/20 03:56	WP

Laboratory Chronicle

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Lab#: AD15713-005 **Sample ID: TB-101-3 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Cyanide (Soil/Waste) 9012B		02/18/20	asilva	EPA 9012B	2/19/20 13:18	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	02/18/20 08:30	bransaw	EPA 7471B	2/19/20 14:21	BA
Organochlorine Pesticides 8081	3510C/3550C	02/18/20 10:11	mwalker	EPA 8081B	2/24/20 13:47	MS/MLC
PCB 8082	3510C/3550C	02/18/20 10:11	mwalker	EPA 8082A	2/19/20 14:03	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	02/21/20 13:57	Lynda	EPA 8270D	2/24/20 14:37	AB/JB
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/18/20 19:47	CJA
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/19/20 02:30	CJA
TAL Metals 6020B	3005&10/3050	02/18/20 08:30	bransaw	EPA 6020B	2/18/20 18:29	PC

Lab#: AD15713-006 **Sample ID: TB-101-3 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/20/20 04:19	WP

Lab#: AD15713-007 **Sample ID: TB-101-4 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Cyanide (Soil/Waste) 9012B		02/18/20	asilva	EPA 9012B	2/19/20 13:19	JMP
Mercury (Soil/Waste) 7471B	EPA 7471B	02/18/20 08:30	bransaw	EPA 7471B	2/19/20 14:23	BA
Organochlorine Pesticides 8081	3510C/3550C	02/18/20 10:11	mwalker	EPA 8081B	2/20/20 04:40	MS/MLC
PCB 8082	3510C/3550C	02/18/20 10:11	mwalker	EPA 8082A	2/19/20 14:19	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	02/21/20 13:57	Lynda	EPA 8270D	2/24/20 13:59	AH/JB
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/18/20 19:51	CJA
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/19/20 02:35	CJA
TAL Metals 6020B	3005&10/3050	02/18/20 08:30	bransaw	EPA 6020B	2/18/20 18:46	PC

Lab#: AD15713-008 **Sample ID: TB-101-4 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/20/20 12:36	WP

Laboratory Chronicle

Client: ARCADIS
Project: Long Beach

HC Project #: 0021406

Lab#: AD15713-009 **Sample ID: TB-101-5 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Cyanide (Soil/Waste) 9012B		02/19/20	asilva	EPA 9012B	2/19/20 18:31	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	02/18/20 08:30	bransaw	EPA 7471B	2/19/20 14:24	BA
Organochlorine Pesticides 8081	3510C/3550C	02/18/20 10:11	mwalker	EPA 8081B	2/20/20 04:58	MS/MLC
PCB 8082	3510C/3550C	02/18/20 10:11	mwalker	EPA 8082A	2/19/20 14:36	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	02/21/20 13:57	Lynda	EPA 8270D	2/24/20 14:22	AH/JB
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/18/20 20:03	CJA
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/19/20 01:05	CJA
TAL Metals 6020B	3005&10/3050	02/18/20 08:30	bransaw	EPA 6020B	2/18/20 18:50	PC

Lab#: AD15713-010 **Sample ID: TB-101-5 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/20/20 05:06	WP

Lab#: AD15713-011 **Sample ID: TB-101-6 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Cyanide (Soil/Waste) 9012B		02/19/20	asilva	EPA 9012B	2/19/20 18:33	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	02/18/20 08:30	bransaw	EPA 7471B	2/19/20 14:28	BA
Organochlorine Pesticides 8081	3510C/3550C	02/18/20 10:11	mwalker	EPA 8081B	2/20/20 05:16	MS/MLC
PCB 8082	3510C/3550C	02/18/20 10:11	mwalker	EPA 8082A	2/19/20 14:51	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	02/21/20 13:57	Lynda	EPA 8270D	2/23/20 15:29	AH/JB
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/18/20 20:07	CJA
TAL Metals 6010D	3005&10/3050	02/18/20 08:30	bransaw	EPA 6010D	2/19/20 01:10	CJA
TAL Metals 6020B	3005&10/3050	02/18/20 08:30	bransaw	EPA 6020B	2/18/20 18:55	PC

Lab#: AD15713-012 **Sample ID: TB-101-6 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/15/20 00:00	jessica
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/20/20 05:29	WP

Chain of Custody

0021406 0044

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0021406

Page 1 of 1

Customer Information

1a) Customer: Arcadis
Address: 17-17 St Route 208 N
Fair Lawn, NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmour@arcadis.com
1d) Send Report to: Max.goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 30016/5.00040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 Days		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # A215713

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA + 15	TCL SVOC-BNA+15	TAL Metals	TAL CN	TCL PCB	TCL Pest	8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	TB-110-1	So	2/13/20	1200	X	X	X	X	X	X	X	X	3	2							
003/004	TB-110-2	So	2/13/20	1205	X	X	X	X	X	X	X	X	3	2							
005/006	TB-110-3	So	2/13/20	1210	X	X	X	X	X	X	X	X	3	2							
007/008	TB-110-4	So	2/13/20	1215	X	X	X	X	X	X	X	X	3	2							
009/010	TB-110-5	So	2/13/20	1230	X	X	X	X	X	X	X	X	3	2							
011/012	TB-110-6	So	2/13/20	1300	X	X	X	X	X	X	X	X	3	2							

10) Relinquished by:	Accepted by:	Date	Time
Max Goldstein	[signature]	2/14	1052
[signature]	[signature]	2/14/20	1115

11) Sampler (print name): Max Goldstein Date: 2/14

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.5

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

PROJECT MODIFICATIONS

Client: ARCADIS-FAIR
Project: Long Beach

HC Project #: 0021406

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sherree192.168.1.210
2/25/2020 10:04:30 AM

Per Richard Gilmour, sample IDs should start with TB-101, not TB-110 as written on the COC. SB 2/25/20

CONDITION UPON RECEIPT

Batch Number AD15713

Entered By: Ricardo
Date Entered 2/14/2020 12:57:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T-461	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.5
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	No	Do the contents match the COC? If no, specify ID ON SAMPLES STATE ID AS TB-101-1 AND SO ON. THE COC STATES ID AS TB-110-1 AND SO ON.
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD15713-001	02/14/20 11:15	RICAR	0	M	Received
AD15713-001	02/14/20 12:57	RICAR	0	M	Login
AD15713-001	02/14/20 13:29	R12	1	A	NONE
AD15713-001	02/14/20 21:26	PA	1	A	mix
AD15713-001	02/14/20 21:26	R12	1	A	NONE
AD15713-001	02/18/20 08:56	BR	1	A	TDSI/HG
AD15713-001	02/18/20 08:57	BR	1	A	R12
AD15713-001	02/18/20 11:27	MW	1	A	P/P
AD15713-001	02/18/20 11:27	R12	1	A	NONE
AD15713-001	02/18/20 12:24	ANS	1	A	CNS
AD15713-001	02/18/20 15:55	R12	1	A	NONE
AD15713-001	02/19/20 10:30	ANS	1	A	CNS
AD15713-001	02/19/20 11:15	R12	1	A	NONE
AD15713-001	02/21/20 14:57	LV	1	A	BN/BNA
AD15713-001	02/21/20 14:57	R12	1	A	NONE
AD15713-002	02/14/20 11:15	RICAR	0	M	Received
AD15713-002	02/14/20 12:57	RICAR	0	M	Login
AD15713-002	02/14/20 13:29	R12	1	A	NONE
AD15713-002	02/14/20 21:26	PA	1	A	mix
AD15713-002	02/14/20 21:26	R12	1	A	NONE
AD15713-002	02/14/20 13:39	R31	2	A	NONE
AD15713-002	02/15/20 20:59	BK	2	A	VOA
AD15713-002	02/15/20 23:58	R31	2	A	NONE
AD15713-002	02/14/20 13:39	F19	3	A	none
AD15713-002	02/19/20 11:08	WP	3	A	VOA
AD15713-002	02/14/20 13:39	F19	4	A	none
AD15713-003	02/14/20 11:15	RICAR	0	M	Received
AD15713-003	02/14/20 12:57	RICAR	0	M	Login
AD15713-003	02/14/20 13:29	R12	1	A	NONE
AD15713-003	02/14/20 21:26	PA	1	A	mix
AD15713-003	02/14/20 21:26	R12	1	A	NONE
AD15713-003	02/18/20 08:56	BR	1	A	TDSI/HG
AD15713-003	02/18/20 08:57	BR	1	A	R12
AD15713-003	02/18/20 11:27	R12	1	A	NONE
AD15713-003	02/18/20 11:27	MW	1	A	P/P
AD15713-003	02/18/20 12:24	ANS	1	A	CNS
AD15713-003	02/18/20 15:55	R12	1	A	NONE
AD15713-003	02/21/20 14:57	LV	1	A	BN/BNA
AD15713-003	02/21/20 14:57	R12	1	A	NONE
AD15713-004	02/14/20 11:15	RICAR	0	M	Received
AD15713-004	02/14/20 12:57	RICAR	0	M	Login
AD15713-004	02/14/20 13:29	R12	1	A	NONE
AD15713-004	02/14/20 21:26	R12	1	A	NONE
AD15713-004	02/14/20 21:26	PA	1	A	mix
AD15713-004	02/14/20 13:39	R31	2	A	NONE
AD15713-004	02/15/20 20:59	BK	2	A	VOA
AD15713-004	02/15/20 23:58	R31	2	A	NONE
AD15713-004	02/14/20 13:39	F19	3	A	none
AD15713-004	02/19/20 11:08	WP	3	A	VOA
AD15713-004	02/14/20 13:39	F19	4	A	none
AD15713-005	02/14/20 11:15	RICAR	0	M	Received
AD15713-005	02/14/20 12:57	RICAR	0	M	Login
AD15713-005	02/14/20 13:29	R12	1	A	NONE
AD15713-005	02/14/20 21:26	PA	1	A	mix
AD15713-005	02/14/20 21:26	R12	1	A	NONE
AD15713-005	02/18/20 08:56	BR	1	A	TDSI/HG
AD15713-005	02/18/20 08:57	BR	1	A	R12
AD15713-005	02/18/20 11:27	MW	1	A	P/P
AD15713-005	02/18/20 11:27	R12	1	A	NONE
AD15713-005	02/18/20 12:26	ANS	1	A	CNS
AD15713-005	02/18/20 15:55	R12	1	A	NONE
AD15713-005	02/21/20 14:57	LV	1	A	BN/BNA
AD15713-005	02/21/20 14:57	R12	1	A	NONE
AD15713-006	02/14/20 11:15	RICAR	0	M	Received
AD15713-006	02/14/20 12:57	RICAR	0	M	Login
AD15713-006	02/14/20 13:29	R12	1	A	NONE
AD15713-006	02/14/20 21:26	PA	1	A	mix
AD15713-006	02/14/20 21:26	R12	1	A	NONE
AD15713-006	02/14/20 13:39	R31	2	A	NONE
AD15713-006	02/15/20 20:59	BK	2	A	VOA
AD15713-006	02/15/20 23:58	R31	2	A	NONE
AD15713-006	02/14/20 13:39	F19	3	A	none
AD15713-006	02/19/20 11:08	WP	3	A	VOA
AD15713-006	02/14/20 13:39	F19	4	A	none
AD15713-007	02/14/20 11:15	RICAR	0	M	Received
AD15713-007	02/14/20 12:57	RICAR	0	M	Login
AD15713-007	02/14/20 13:29	R12	1	A	NONE
AD15713-007	02/14/20 21:26	R12	1	A	NONE
AD15713-007	02/14/20 21:26	PA	1	A	mix
AD15713-007	02/18/20 08:56	BR	1	A	TDSI/HG
AD15713-007	02/18/20 08:57	BR	1	A	R12
AD15713-007	02/18/20 11:27	R12	1	A	NONE
AD15713-007	02/18/20 11:27	MW	1	A	P/P
AD15713-007	02/18/20 12:24	ANS	1	A	CNS
AD15713-007	02/18/20 15:55	R12	1	A	NONE
AD15713-007	02/21/20 14:57	R12	1	A	NONE
AD15713-007	02/21/20 14:57	LV	1	A	BN/BNA
AD15713-008	02/14/20 11:15	RICAR	0	M	Received
AD15713-008	02/14/20 12:57	RICAR	0	M	Login
AD15713-008	02/14/20 13:29	R12	1	A	NONE
AD15713-008	02/14/20 21:26	PA	1	A	mix
AD15713-008	02/14/20 21:26	R12	1	A	NONE
AD15713-008	02/14/20 13:39	R31	2	A	NONE
AD15713-008	02/15/20 20:59	BK	2	A	VOA
AD15713-008	02/15/20 23:58	R31	2	A	NONE
AD15713-008	02/14/20 13:39	F19	3	A	none
AD15713-008	02/19/20 11:08	WP	3	A	VOA
AD15713-008	02/14/20 13:39	F19	4	A	none
AD15713-008	02/20/20 06:33	WP	4	M	VOA
AD15713-009	02/14/20 11:15	RICAR	0	M	Received
AD15713-009	02/14/20 12:57	RICAR	0	M	Login
AD15713-009	02/14/20 13:29	R12	1	A	NONE
AD15713-009	02/14/20 21:26	PA	1	A	mix
AD15713-009	02/14/20 21:26	R12	1	A	NONE
AD15713-009	02/18/20 08:56	BR	1	A	TDSI/HG
AD15713-009	02/18/20 08:57	BR	1	A	R12
AD15713-009	02/18/20 11:27	MW	1	A	P/P
AD15713-009	02/18/20 11:27	R12	1	A	NONE
AD15713-009	02/19/20 10:30	ANS	1	A	CNS
AD15713-009	02/19/20 11:15	R12	1	A	NONE
AD15713-009	02/21/20 14:57	LV	1	A	BN/BNA
AD15713-009	02/21/20 14:57	R12	1	A	NONE
AD15713-010	02/14/20 11:15	RICAR	0	M	Received
AD15713-010	02/14/20 12:57	RICAR	0	M	Login
AD15713-010	02/14/20 13:29	R12	1	A	NONE
AD15713-010	02/14/20 21:26	R12	1	A	NONE
AD15713-010	02/14/20 21:26	PA	1	A	mix
AD15713-010	02/14/20 13:39	R31	2	A	NONE
AD15713-010	02/15/20 20:59	BK	2	A	VOA
AD15713-010	02/15/20 23:58	R31	2	A	NONE
AD15713-010	02/14/20 13:39	F19	3	A	none
AD15713-010	02/19/20 11:08	WP	3	A	VOA
AD15713-010	02/14/20 13:39	F19	4	A	none
AD15713-011	02/14/20 11:15	RICAR	0	M	Received
AD15713-011	02/14/20 12:57	RICAR	0	M	Login
AD15713-011	02/14/20 13:29	R12	1	A	NONE
AD15713-011	02/14/20 21:26	PA	1	A	mix
AD15713-011	02/14/20 21:26	R12	1	A	NONE
AD15713-011	02/18/20 08:56	BR	1	A	TDSI/HG
AD15713-011	02/18/20 08:57	BR	1	A	R12
AD15713-011	02/18/20 11:27	MW	1	A	P/P
AD15713-011	02/18/20 11:27	R12	1	A	NONE
AD15713-011	02/21/20 14:57	LV	1	A	BN/BNA
AD15713-011	02/21/20 14:57	R12	1	A	NONE
AD15713-012	02/14/20 11:15	RICAR	0	M	Received
AD15713-012	02/14/20 12:57	RICAR	0	M	Login
AD15713-012	02/14/20 13:29	R12	1	A	NONE
AD15713-012	02/14/20 21:26	PA	1	A	mix
AD15713-012	02/14/20 21:26	R12	1	A	NONE
AD15713-012	02/14/20 13:39	R31	2	A	NONE
AD15713-012	02/15/20 20:59	BK	2	A	VOA
AD15713-012	02/15/20 23:58	R31	2	A	NONE
AD15713-012	02/14/20 13:39	F19	3	A	none
AD15713-012	02/19/20 11:08	WP	3	A	VOA
AD15713-012	02/14/20 13:39	F19	4	A	none

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15713-002
Client Id: TB-101-1 GRAB
Data File: 1M131132.D
Analysis Date: 02/20/20 03:33
Date Rec/Extracted: 02/14/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.94g
Final Vol: NA
Dilution: 0.720
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0015	U	56-23-5	Carbon Tetrachloride	0.0015	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0015	U	108-90-7	Chlorobenzene	0.0015	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0015	U	75-00-3	Chloroethane	0.0015	U
79-00-5	1,1,2-Trichloroethane	0.0015	U	67-66-3	Chloroform	0.0015	U
75-34-3	1,1-Dichloroethane	0.0015	U	74-87-3	Chloromethane	0.0015	U
75-35-4	1,1-Dichloroethene	0.0015	U	156-59-2	cis-1,2-Dichloroethene	0.0015	U
87-61-6	1,2,3-Trichlorobenzene	0.0015	U	10061-01-5	cis-1,3-Dichloropropene	0.0015	U
120-82-1	1,2,4-Trichlorobenzene	0.0015	U	110-82-7	Cyclohexane	0.0015	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0015	U	124-48-1	Dibromochloromethane	0.0015	U
106-93-4	1,2-Dibromoethane	0.00060	U	75-71-8	Dichlorodifluoromethane	0.0015	U
95-50-1	1,2-Dichlorobenzene	0.0015	U	100-41-4	Ethylbenzene	0.00077	U
107-06-2	1,2-Dichloroethane	0.0015	U	98-82-8	Isopropylbenzene	0.00077	U
78-87-5	1,2-Dichloropropane	0.0015	U	**79601-23-1**	**m&p-Xylenes**	**0.00077**	**0.0011**
541-73-1	1,3-Dichlorobenzene	0.0015	U	79-20-9	Methyl Acetate	0.0015	U
106-46-7	1,4-Dichlorobenzene	0.0015	U	108-87-2	Methylcyclohexane	0.0015	U
123-91-1	1,4-Dioxane	0.077	U	75-09-2	Methylene Chloride	0.0015	U
78-93-3	**2-Butanone**	**0.0015**	**0.019**	1634-04-4	Methyl-t-butyl ether	0.00077	U
591-78-6	2-Hexanone	0.0015	U	**95-47-6**	**o-Xylene**	**0.00077**	**0.0014**
108-10-1	4-Methyl-2-Pentanone	0.0015	U	100-42-5	Styrene	0.0015	U
67-64-1	**Acetone**	**0.0077**	**0.20**	127-18-4	Tetrachloroethene	0.0015	U
71-43-2	**Benzene**	**0.00077**	**0.0015**	**108-88-3**	**Toluene**	**0.00077**	**0.0024**
74-97-5	Bromochloromethane	0.0015	U	156-60-5	trans-1,2-Dichloroethene	0.0015	U
75-27-4	Bromodichloromethane	0.0015	U	10061-02-6	trans-1,3-Dichloropropene	0.0015	U
75-25-2	Bromoform	0.0015	U	79-01-6	Trichloroethene	0.0015	U
74-83-9	Bromomethane	0.0015	U	75-69-4	Trichlorofluoromethane	0.0015	U
75-15-0	**Carbon Disulfide**	**0.0015**	**0.0031**	75-01-4	Vinyl Chloride	0.0015	U
1330-20-7	**Xylenes (Total)**	**0.00077**	**0.0025**				

Worksheet #: 547905 ***Total Target Concentration*** 0.23 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-002
Client Id: TB-101-1 GRAB
Data File: 1M131132.D
Analysis Date: 02/20/20 03:33
Date Rec/Extracted: 02/14/20-NA

Matrix: Soil
Initial Vol: 6.94g
Final Vol: NA
Dilution: 0.720
Solids: 93
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	124-18-5	Decane	7.78	0.010 J
2	108-67-8	Benzene, 1,3,5-trimethyl-	7.81	0.0068 J
3	2847-72-5	Decane, 4-methyl-	7.95	0.0054 J
4		unknown	8.18	0.0086 J
5	99-87-6	Benzene, 1-methyl-4-(1-methylethyl)-	8.20	0.0062 J
6	1120-21-4	Undecane	8.45	0.0080 J
7	91-17-8	Naphthalene, decahydro-	8.49	0.0063 J
8	527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	8.64	0.0059 J
9		unknown	8.72	0.0056 J
10		unknown	8.85	0.0064 J
11	488-23-3	Benzene, 1,2,3,4-tetramethyl-	9.17	0.010 J
12	629-50-5	Tridecane	9.68	0.0056 J
13	90-12-0	Naphthalene, 1-methyl-	10.26	0.0051 J

Worksheet #: 547905

Total Tentatively Identified Concentration 0.09

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

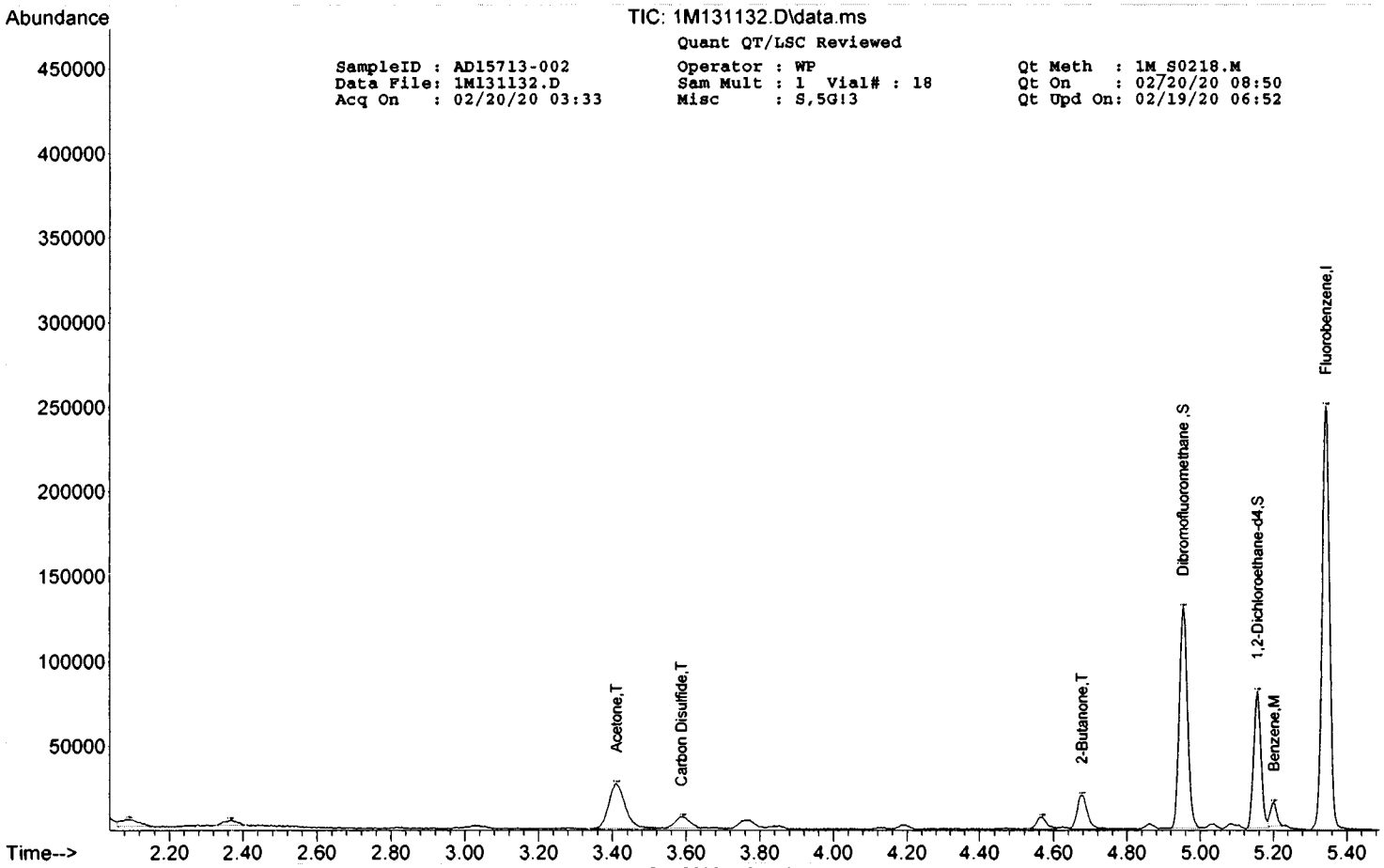
0021406 0051

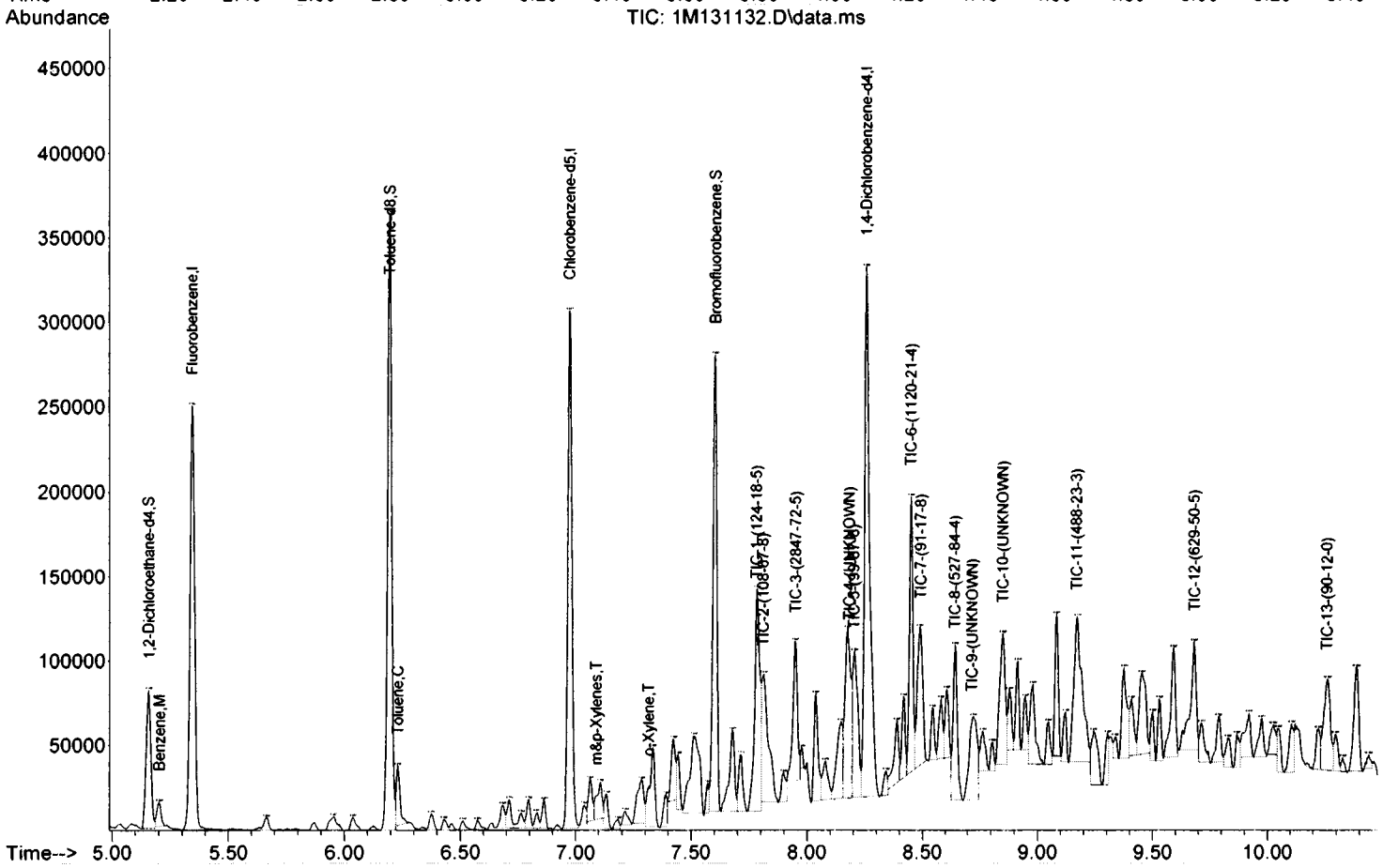
SampleID : AD15713-002 Operator : WP Qt Meth : 1M_S0218.M
Data File: 1M131132.D Sam Mult : 1 Vial# : 18 Qt On : 02/20/20 08:50
Acq On : 02/20/20 03:33 Misc : S,5G!3 Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.342	96	172592	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.973	117	127702	30.00	ug/l	-0.01
70) 1,4-Dichlorobenzene-d4	8.256	152	62239	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	61281	38.41	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	128.03%	
39) 1,2-Dichloroethane-d4	5.156	67	21834	31.58	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	105.27%	
66) Toluene-d8	6.195	98	169917	31.25	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	104.17%	
76) Bromofluorobenzene	7.603	174	53251	34.60	ug/l	0.00
Spiked Amount 30.000			Recovery	=	115.33%	
Target Compounds						Qvalue
19) Acetone	3.410	43	49751	263.6973	ug/l	99
20) Carbon Disulfide	3.587	76	15865	3.9514	ug/l	100
41) 2-Butanone	4.677	43	22176	24.4151	ug/l	90
50) Benzene	5.201	78	10737	1.9894	ug/l	100
67) Toluene	6.230	92	10492	3.1332	ug/l	89
78) m&p-Xylenes	7.088	106	2883	1.3939	ug/l	93
79) o-Xylene	7.313	106	3796	1.8506	ug/l	85
Library Search Internal Standards TIC Results						
1) Fluorobenzene	5.342		349375	30.00	ug/l	--
2) Chlorobenzene-d5	6.973		377494	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	8.256		487659	30.00	ug/l	--
Library Search Compounds						
1) 124-18-5	7.780		212988	13.10	ug/l	90
2) 108-67-8	7.810		143449	8.82	ug/l	53
3) 2847-72-5	7.950		113738	7.00	ug/l	62
4) UNKNOWN	8.180		180436	11.10	ug/l	--
5) 99-87-6	8.200		130603	8.03	ug/l	90
6) 1120-21-4	8.450		166992	10.27	ug/l	49
7) 91-17-8	8.490		133145	8.19	ug/l	89
8) 527-84-4	8.640		123893	7.62	ug/l	94
9) UNKNOWN	8.720		117944	7.26	ug/l	--
10) UNKNOWN	8.850		134187	8.25	ug/l	--
11) 488-23-3	9.170		217241	13.36	ug/l	87
12) 629-50-5	9.680		116492	7.17	ug/l	78
13) 90-12-0	10.260		106310	6.54	ug/l	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 1M131132.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD15713-002
Data File: 1M131132.D
Acq On : 02/20/20 03:33
Operator : WP
Sam Mult : 1 Vial# : 18
Misc : S,5G!3
Qt Meth : 1M_S0218.M
Qt On : 02/20/20 08:50
Qt Upd On: 02/19/20 06:52
Acetone,T
Carbon Disulfide,T
2-Butanone,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Time-->


Abundance
TIC: 1M131132.D\data.ms
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Benzene,M
Fluorobenzene,I
Toluene-d8,S
Toluene,C
Chlorobenzene-d5,I
m&p-Xylenes,T
o-Xylene,T
Bromofluorobenzene,S
TIC-2-(108-67-8)
TIC-3-(2847-72-5)
1,4-Dichlorobenzene-d4,I
TIC-6-(1120-21-4)
TIC-7-(91-17-8)
TIC-8-(527-84-4)
TIC-9-(UNKNOWN)
TIC-10-(UNKNOWN)
TIC-11-(488-23-3)
TIC-12-(629-50-5)
TIC-13-(90-12-0)
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15713-004
Client Id: TB-101-2 GRAB
Data File: 1M131133.D
Analysis Date: 02/20/20 03:56
Date Rec/Extracted: 02/14/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.24g
Final Vol: NA
Dilution: 0.801
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	**108-90-7**	**Chlorobenzene**	**0.0017**	**0.0027**
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.0017	U
87-61-6	1,2,3-Trichlorobenzene	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
120-82-1	1,2,4-Trichlorobenzene	0.0017	U	110-82-7	Cyclohexane	0.0017	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0017	U	124-48-1	Dibromochloromethane	0.0017	U
106-93-4	1,2-Dibromoethane	0.00067	U	75-71-8	Dichlorodifluoromethane	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.0017	U	**100-41-4**	**Ethylbenzene**	**0.00086**	**0.0011**
107-06-2	1,2-Dichloroethane	0.0017	U	**98-82-8**	**Isopropylbenzene**	**0.00086**	**0.0020**
78-87-5	1,2-Dichloropropane	0.0017	U	**79601-23-1**	**m&p-Xylenes**	**0.00086**	**0.0031**
541-73-1	1,3-Dichlorobenzene	0.0017	U	79-20-9	Methyl Acetate	0.0017	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	108-87-2	Methylcyclohexane	0.0017	U
123-91-1	1,4-Dioxane	0.086	U	**75-09-2**	**Methylene Chloride**	**0.0017**	**0.0046**
78-93-3	**2-Butanone**	**0.0017**	**0.014**	1634-04-4	Methyl-t-butyl ether	0.00086	U
591-78-6	2-Hexanone	0.0017	U	**95-47-6**	**o-Xylene**	**0.00086**	**0.0042**
108-10-1	4-Methyl-2-Pentanone	0.0017	U	100-42-5	Styrene	0.0017	U
67-64-1	**Acetone**	**0.0086**	**0.18**	127-18-4	Tetrachloroethene	0.0017	U
71-43-2	**Benzene**	**0.00086**	**0.0054**	**108-88-3**	**Toluene**	**0.00086**	**0.0066**
74-97-5	Bromochloromethane	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-25-2	Bromoform	0.0017	U	79-01-6	Trichloroethene	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
75-15-0	**Carbon Disulfide**	**0.0017**	**0.0056**	75-01-4	Vinyl Chloride	0.0017	U
1330-20-7	**Xylenes (Total)**	**0.00086**	**0.0073**				

Worksheet #: 547905

Total Target Concentration 0.23

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-004
Client Id: TB-101-2 GRAB
Data File: 1M131133.D
Analysis Date: 02/20/20 03:56
Date Rec/Extracted: 02/14/20-NA

Matrix: Soil
Initial Vol: 6.24g
Final Vol: NA
Dilution: 0.801
Solids: 93
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	124-18-5	Decane	7.78	0.015J
2		unknown	7.81	0.013J
3	2847-72-5	Decane, 4-methyl-	7.95	0.0099J
4		unknown	8.18	0.011J
5	535-77-3	Benzene, 1-methyl-3-(1-methylethyl)-	8.20	0.0075J
6	1120-21-4	Undecane	8.45	0.011J
7	493-01-6	Naphthalene, decahydro-, cis-	8.49	0.0079J
8	527-84-4	Benzene, 1-methyl-2-(1-methylethyl)-	8.65	0.0082J
9		unknown	8.73	0.0081J
10		unknown	8.85	0.0077J
11	934-74-7	Benzene, 1-ethyl-3,5-dimethyl-	9.17	0.013J
12	91-20-3	Naphthalene	9.59	0.017J
13	7098-21-7	Tritetracontane	9.68	0.0084J
14	90-12-0	Naphthalene, 1-methyl-	10.26	0.015J
15	90-12-0	Naphthalene, 1-methyl-	10.39	0.0098J

Worksheet #: 547905

Total Tentatively Identified Concentration 0.16

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

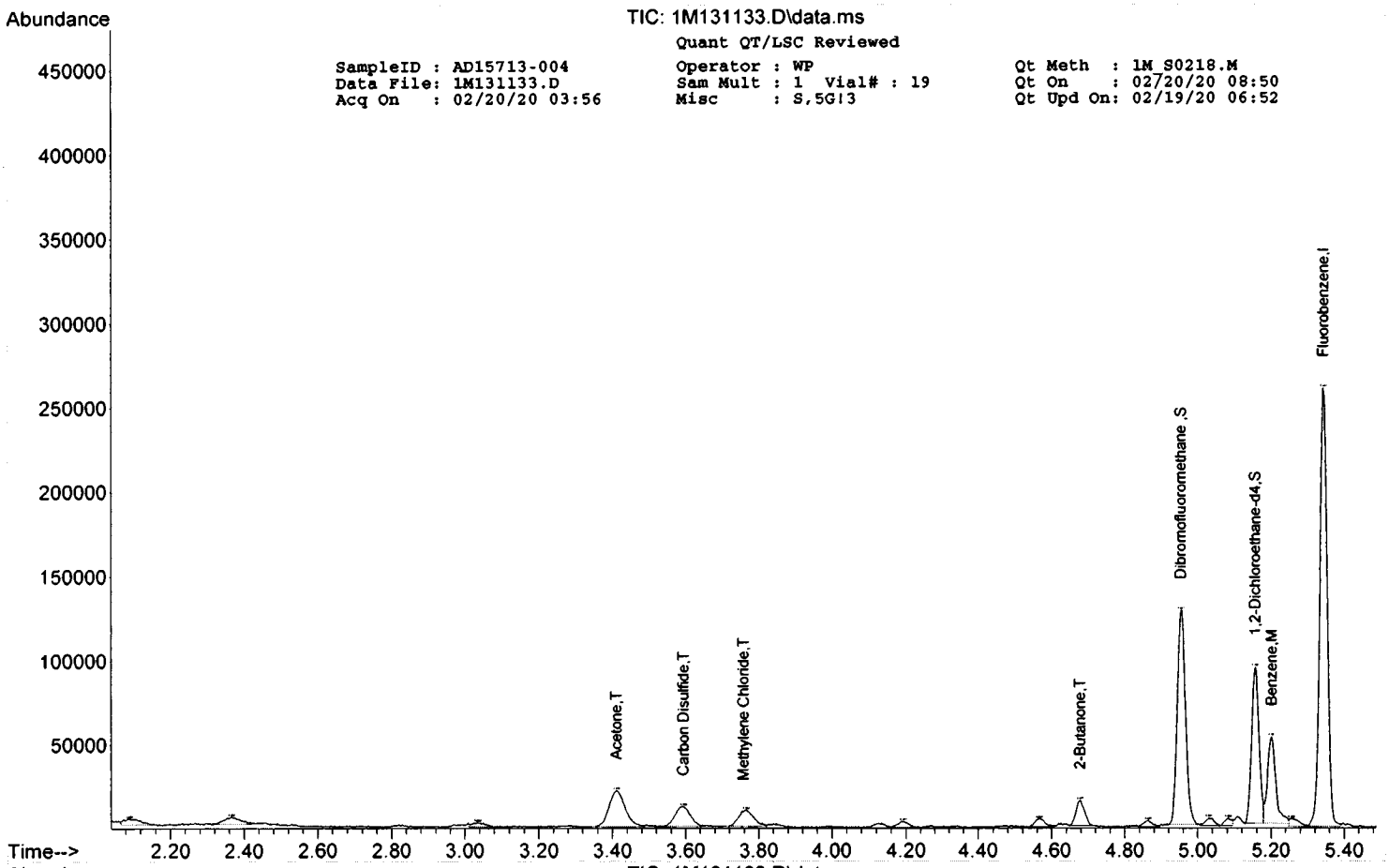
0021406 0055

SampleID : AD15713-004 Operator : WP Qt Meth : 1M_S0218.M
Data File: 1M131133.D Sam Mult : 1 Vial# : 19 Qt On : 02/20/20 08:50
Acq On : 02/20/20 03:56 Misc : S,5G!3 Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.343	96	182691	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.976	117	121772	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.256	152	51051	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	61451	36.38	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	121.27%	
39) 1,2-Dichloroethane-d4	5.156	67	25942	35.45	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	118.17%	
66) Toluene-d8	6.195	98	166764	32.16	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	107.20%	
76) Bromofluorobenzene	7.603	174	47214	37.40	ug/l	0.00
Spiked Amount 30.000			Recovery	=	124.67%	
Target Compounds						Qvalue
15) Methylene Chloride	3.757	84	8203	5.3702	ug/l	83
19) Acetone	3.410	43	40805	203.5836	ug/l	94
20) Carbon Disulfide	3.593	76	27654	6.5068	ug/l	100
41) 2-Butanone	4.677	43	15593	16.2184	ug/l	90
50) Benzene	5.201	78	35817	6.2695	ug/l	100
67) Toluene	6.230	92	24313	7.6141	ug/l	95
69) Chlorobenzene	6.989	112	11375	3.1015	ug/l	97
74) Ethylbenzene	7.031	106	1579	1.2851	ug/l	60
78) m&p-Xylenes	7.092	106	6007	3.5407	ug/l	90
79) o-Xylene	7.317	106	8116	4.8239	ug/l	78
84) Isopropylbenzene	7.506	105	10310	2.3718	ug/l	81
Library Search Internal Standards TIC Results						
1) Fluorobenzene	5.343		366538	30.00	ug/l	--
2) Chlorobenzene-d5	6.976		379113	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	8.256		455878	30.00	ug/l	--
Library Search Compounds						
1) 124-18-5	7.780		260258	17.13	ug/l	81
2) UNKNOWN	7.810		230921	15.20	ug/l	--
3) 2847-72-5	7.950		175400	11.54	ug/l	50
4) UNKNOWN	8.180		186060	12.24	ug/l	--
5) 535-77-3	8.200		132794	8.74	ug/l	83
6) 1120-21-4	8.450		190239	12.52	ug/l	58
7) 493-01-6	8.490		138858	9.14	ug/l	52
8) 527-84-4	8.650		144331	9.50	ug/l	94
9) UNKNOWN	8.730		143032	9.41	ug/l	--
10) UNKNOWN	8.850		136543	8.99	ug/l	--
11) 934-74-7	9.170		230735	15.18	ug/l	86
12) 91-20-3	9.590		295623	19.45	ug/l	86
13) 7098-21-7	9.680		148893	9.80	ug/l	64
14) 90-12-0	10.260		256312	16.87	ug/l	94
15) 90-12-0	10.390		172071	11.32	ug/l	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed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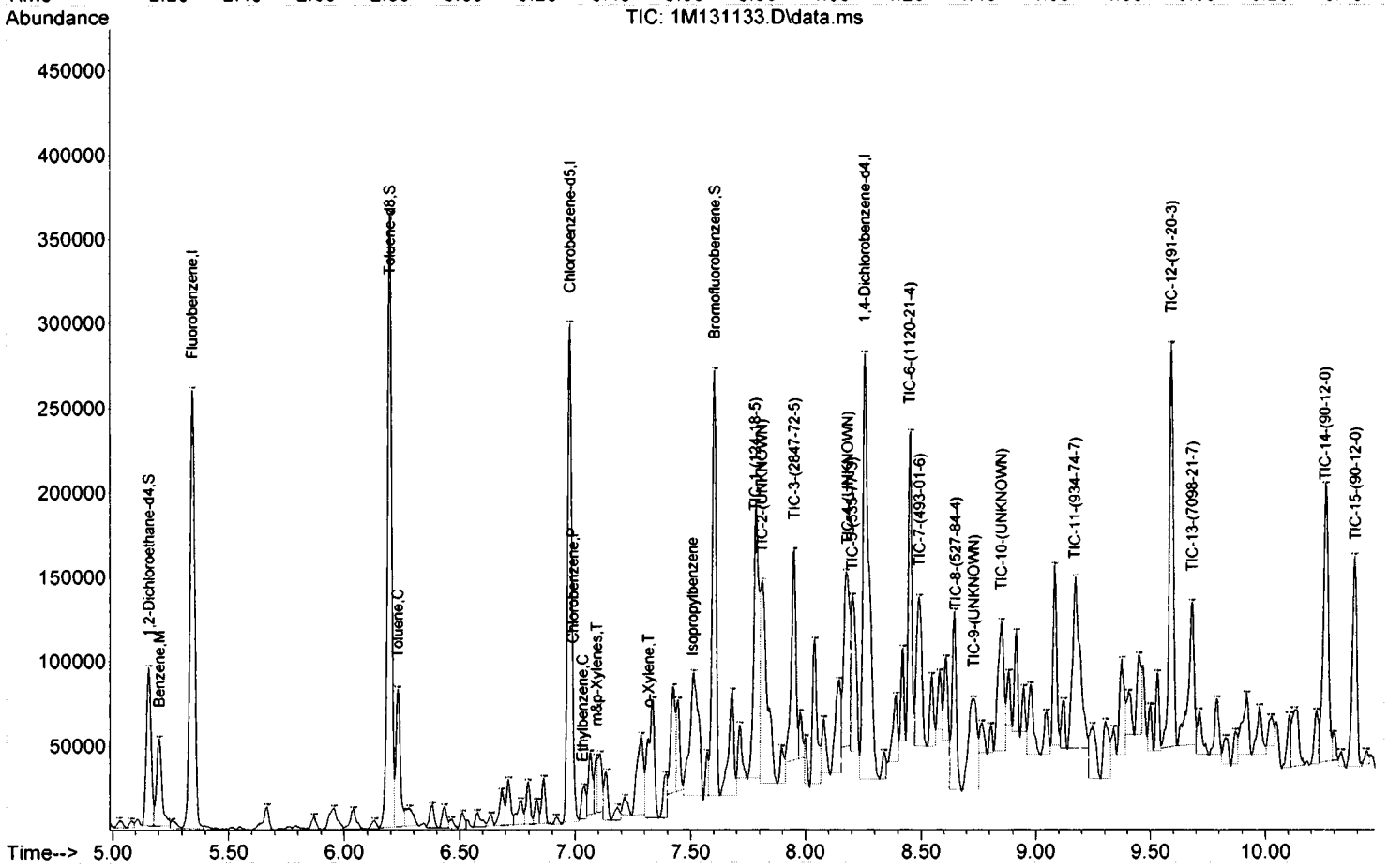
Quant QT/LSC Reviewed
SampleID : AD15713-004
Data File: 1M131133.D
Acq On : 02/20/20 03:56
Operator : WP
Sam Mult : 1 Vial# : 19
Misc : S,5G!3
Qt Meth : 1M_S0218.M
Qt On : 02/20/20 08:50
Qt Upd On: 02/19/20 06:52
Abundance
Time-->
Acetone,T
Carbon Disulfide,T
Methylene Chloride,T
2-Butanone,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I


TIC: 1M131133.D\data.ms
Abundance
Time-->
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Toluene-d8,S
Toluene,C
Chlorobenzene-d5,I
Chlorobenzene,P
Ethylbenzene,C
m&p-Xylenes,T
o-Xylene,T
Isopropylbenzene
Bromofluorobenzene,S
TIC-2-(UNKNOWN)
TIC-3-(2847-72-5)
1,4-Dichlorobenzene-d4,I
TIC-6-(1120-21-4)
TIC-7-(493-01-6)
TIC-8-(527-84-4)
TIC-9-(UNKNOWN)
TIC-10-(UNKNOWN)
TIC-11-(934-74-7)
TIC-12-(91-20-3)
TIC-13-(7098-21-7)
TIC-14-(90-12-0)
TIC-15-(90-12-0)

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15713-006
Client Id: TB-101-3 GRAB
Data File: 1M131134.D
Analysis Date: 02/20/20 04:19
Date Rec/Extracted: 02/14/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.66g
Final Vol: NA
Dilution: 0.751
Solids: 89

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	**108-90-7**	**Chlorobenzene**	**0.0017**	**0.0038**
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.0017	U
87-61-6	1,2,3-Trichlorobenzene	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
120-82-1	1,2,4-Trichlorobenzene	0.0017	U	110-82-7	Cyclohexane	0.0017	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0017	U	124-48-1	Dibromochloromethane	0.0017	U
106-93-4	1,2-Dibromoethane	0.00066	U	75-71-8	Dichlorodifluoromethane	0.0017	U
95-50-1	**1,2-Dichlorobenzene**	**0.0017**	**0.020**	**100-41-4**	**Ethylbenzene**	**0.00084**	**0.0024**
107-06-2	1,2-Dichloroethane	0.0017	U	**98-82-8**	**Isopropylbenzene**	**0.00084**	**0.0048**
78-87-5	1,2-Dichloropropane	0.0017	U	**79601-23-1**	**m&p-Xylenes**	**0.00084**	**0.014**
541-73-1	**1,3-Dichlorobenzene**	**0.0017**	**0.0040**	79-20-9	Methyl Acetate	0.0017	U
106-46-7	**1,4-Dichlorobenzene**	**0.0017**	**0.036**	108-87-2	Methylcyclohexane	0.0017	U
123-91-1	1,4-Dioxane	0.084	U	**75-09-2**	**Methylene Chloride**	**0.0017**	**0.0098**
78-93-3	**2-Butanone**	**0.0017**	**0.059**	1634-04-4	Methyl-t-butyl ether	0.00084	U
591-78-6	2-Hexanone	0.0017	U	**95-47-6**	**o-Xylene**	**0.00084**	**0.011**
108-10-1	4-Methyl-2-Pentanone	0.0017	U	100-42-5	Styrene	0.0017	U
67-64-1	**Acetone**	**0.0084**	**0.66**	127-18-4	Tetrachloroethene	0.0017	U
71-43-2	**Benzene**	**0.00084**	**0.0032**	**108-88-3**	**Toluene**	**0.00084**	**0.0071**
74-97-5	Bromochloromethane	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-25-2	Bromoform	0.0017	U	79-01-6	Trichloroethene	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
75-15-0	**Carbon Disulfide**	**0.0017**	**0.015**	75-01-4	Vinyl Chloride	0.0017	U
1330-20-7	**Xylenes (Total)**	**0.00084**	**0.025**				

Worksheet #: 547905

Total Target Concentration 0.85

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-006
Client Id: TB-101-3 GRAB
Data File: 1M131134.D
Analysis Date: 02/20/20 04:19
Date Rec/Extracted: 02/14/20-NA

Matrix: Soil
Initial Vol: 6.66g
Final Vol: NA
Dilution: 0.751
Solids: 89
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	6236-88-0	Cyclohexane, 1-ethyl-4-methyl-, trans-	7.28	0.013J
2	2051-30-1	Octane, 2,6-dimethyl-	7.34	0.014J
3	29350-67-2	Cyclohexene, 1-methyl-4-(1-methylethyl)	7.54	0.053J
4	108-67-8	Benzene, 1,3,5-trimethyl-	7.81	0.017J
5	138-86-3	dl-Limonene	8.19	0.058J
6	934-80-5	Benzene, 4-ethyl-1,2-dimethyl-	8.65	0.013J
7		unknown	8.85	0.017J
8	17301-22-3	Undecane, 2,5-dimethyl-	9.17	0.034J
9	17312-76-4	Undecane, 6,6-dimethyl-	9.53	0.026J
10	91-20-3	Naphthalene	9.59	0.014J
11		unknown	9.97	0.015J
12		unknown	10.10	0.014J
13	638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	10.14	0.025J
14	90-12-0	Naphthalene, 1-methyl-	10.27	0.014J
15	90-12-0	Naphthalene, 1-methyl-	10.39	0.019J

Worksheet #: 547905

Total Tentatively Identified Concentration 0.35

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

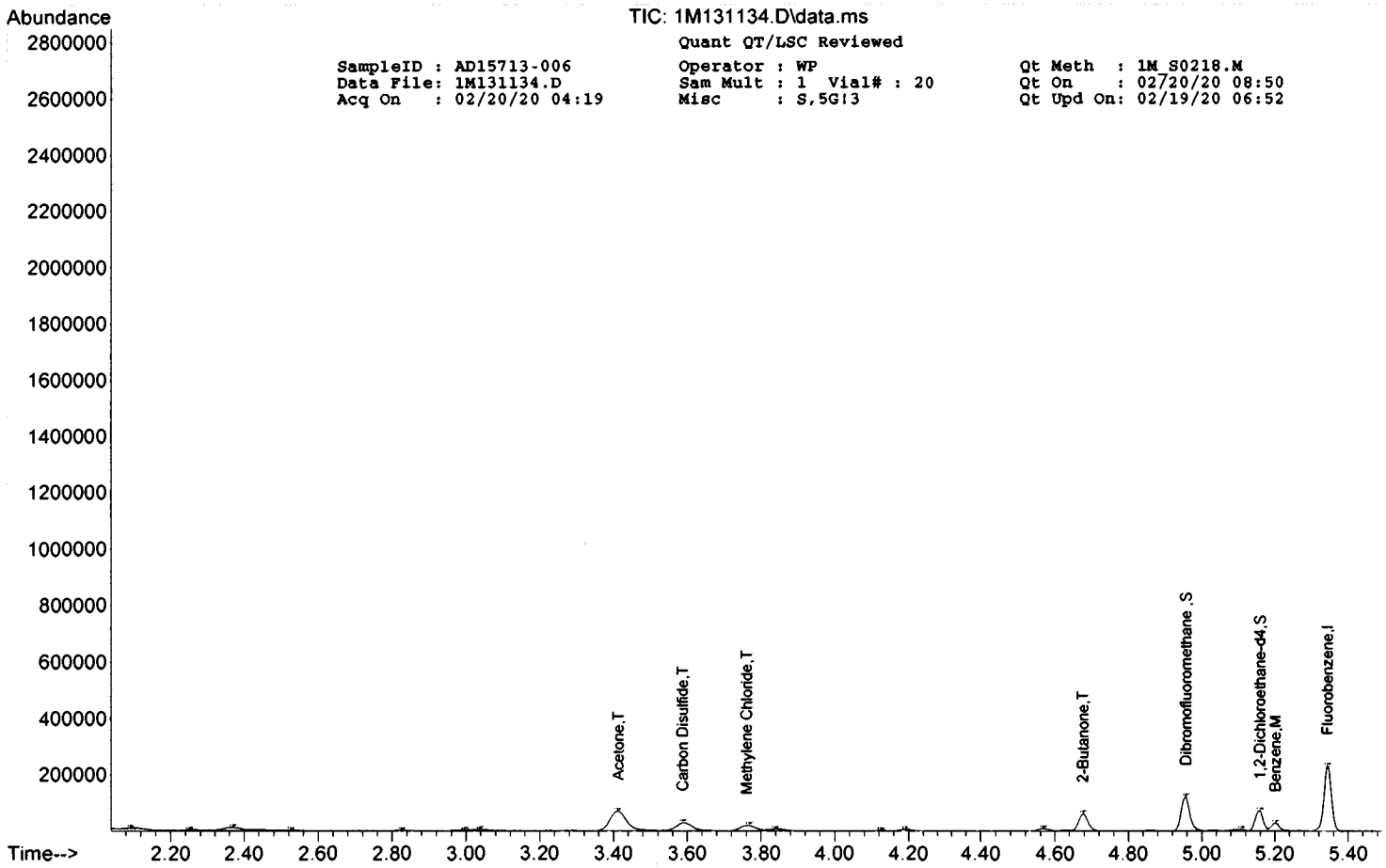
0021406 0059

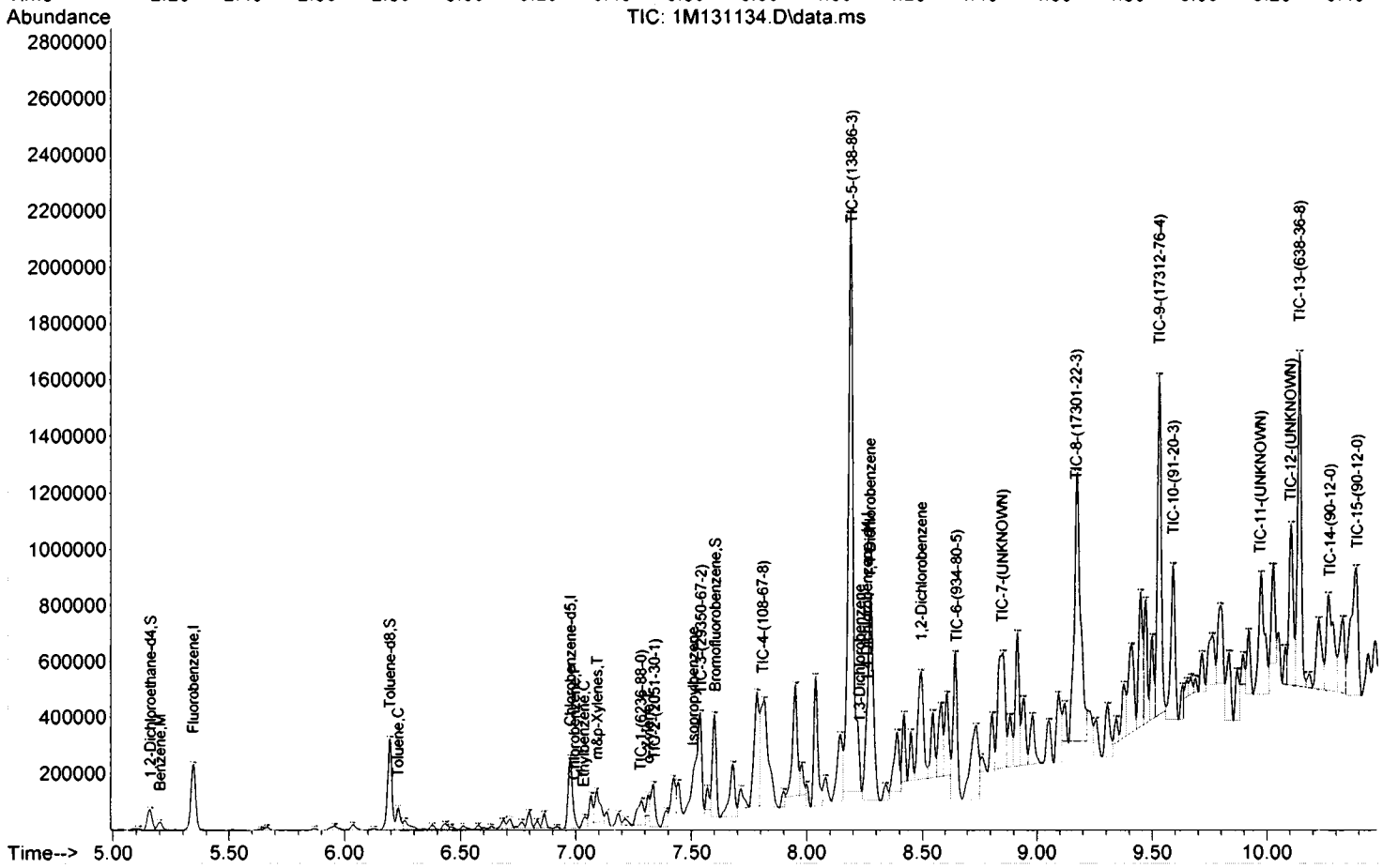
SampleID : AD15713-006 Operator : WP Qt Meth : 1M_S0218.M
Data File: 1M131134.D Sam Mult : 1 Vial# : 20 Qt On : 02/20/20 08:50
Acq On : 02/20/20 04:19 Misc : S,5G!3 Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.342	96	162989	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.976	117	102607	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.259	152	43759	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.957	111	57158	37.93	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	126.43%	
39) 1,2-Dichloroethane-d4	5.159	67	20464	31.34	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	104.47%	
66) Toluene-d8	6.194	98	147717	33.81	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	112.70%	
76) Bromofluorobenzene	7.603	174	40430	37.36	ug/l	0.00
Spiked Amount 30.000			Recovery	=	124.53%	
Target Compounds						Qvalue
15) Methylene Chloride	3.760	84	15821	11.6208	ug/l	89
19) Acetone	3.413	43	135422	784.8385	ug/l	93
20) Carbon Disulfide	3.587	76	66041	17.4174	ug/l	100
41) 2-Butanone	4.677	43	60249	70.2405	ug/l	86
50) Benzene	5.201	78	19490	3.8239	ug/l	100
67) Toluene	6.230	92	22752	8.4561	ug/l	95
69) Chlorobenzene	6.992	112	13975	4.5221	ug/l	95
74) Ethylbenzene	7.034	106	2982m	2.8314	ug/l	
78) m&p-Xylenes	7.091	106	23951	16.4701	ug/l	92
79) o-Xylene	7.313	106	19612	13.5991	ug/l	94
81) 1,3-Dichlorobenzene	8.226	146	8979	4.7273	ug/l	91
82) 1,4-Dichlorobenzene	8.271	146	79536	42.6255	ug/l	92
83) 1,2-Dichlorobenzene	8.493	146	42317	24.0029	ug/l	86
84) Isopropylbenzene	7.506	105	21269	5.7083	ug/l	91
Library Search Internal Standards TIC Results						
1) Fluorobenzene	5.342		333555	30.00	ug/l	--
2) Chlorobenzene-d5	6.976		336653	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	8.275		1339850	30.00	ug/l	--
Library Search Compounds						
1) 6236-88-0	7.280		179201	15.97	ug/l	53
2) 2051-30-1	7.340		189881	16.92	ug/l	68
3) 29350-67-2	7.540		709995	63.27	ug/l	72
4) 108-67-8	7.810		889486	19.92	ug/l	62
5) 138-86-3	8.190		3095584	69.31	ug/l	91
6) 934-80-5	8.650		707916	15.85	ug/l	93
7) UNKNOWN	8.850		890567	19.94	ug/l	--
8) 17301-22-3	9.170		1805287	40.42	ug/l	87
9) 17312-76-4	9.530		1395372	31.24	ug/l	53
10) 91-20-3	9.590		725328	16.24	ug/l	87
11) UNKNOWN	9.970		791378	17.72	ug/l	--
12) UNKNOWN	10.100		751288	16.82	ug/l	--
13) 638-36-8	10.140		1320482	29.57	ug/l	86
14) 90-12-0	10.270		754676	16.90	ug/l	93
15) 90-12-0	10.390		1022483	22.89	ug/l	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 1M131134.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD15713-006
Data File: 1M131134.D
Acq On : 02/20/20 04:19
Operator : WP
Sam Mult : 1 Vial# : 20
Misc : S,5G!3
Qt Meth : 1M_S0218.M
Qt On : 02/20/20 08:50
Qt Upd On: 02/19/20 06:52
Acetone,T
Carbon Disulfide,T
Methylene Chloride,T
2-Butanone,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Time-->


Abundance
TIC: 1M131134.D\data.ms
1,2-Dichloroethane-d4,S
Benzene,M
Fluorobenzene,I
Toluene-d8,S
Toluene,C
Ethylbenzene,C
m&p-Xylenes,T
Bromofluorobenzene,S
TIC-4-(108-67-8)
TIC-5-(138-86-3)
1,2-Dichlorobenzene
TIC-6-(934-80-5)
TIC-7-(UNKNOWN)
TIC-8-(17301-22-3)
TIC-9-(17312-76-4)
TIC-10-(91-20-3)
TIC-11-(UNKNOWN)
TIC-12-(UNKNOWN)
TIC-13-(638-36-8)
TIC-14-(90-12-0)
TIC-15-(90-12-0)
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15713-008
Client Id: TB-101-4 GRAB
Data File: 1M131156.D
Analysis Date: 02/20/20 12:36
Date Rec/Extracted: 02/14/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.26g
Final Vol: NA
Dilution: 0.799
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0019	U	56-23-5	Carbon Tetrachloride	0.0019	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0019	U	108-90-7	Chlorobenzene	0.0019	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0019	U	75-00-3	Chloroethane	0.0019	U
79-00-5	1,1,2-Trichloroethane	0.0019	U	67-66-3	Chloroform	0.0019	U
75-34-3	1,1-Dichloroethane	0.0019	U	74-87-3	Chloromethane	0.0019	U
75-35-4	1,1-Dichloroethene	0.0019	U	156-59-2	cis-1,2-Dichloroethene	0.0019	U
87-61-6	1,2,3-Trichlorobenzene	0.0019	U	10061-01-5	cis-1,3-Dichloropropene	0.0019	U
120-82-1	1,2,4-Trichlorobenzene	0.0019	U	110-82-7	Cyclohexane	0.0019	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0019	U	124-48-1	Dibromochloromethane	0.0019	U
106-93-4	1,2-Dibromoethane	0.00076	U	75-71-8	Dichlorodifluoromethane	0.0019	U
95-50-1	1,2-Dichlorobenzene	0.0019	U	100-41-4	Ethylbenzene	0.00097	U
107-06-2	1,2-Dichloroethane	0.0019	U	98-82-8	Isopropylbenzene	0.00097	U
78-87-5	1,2-Dichloropropane	0.0019	U	79601-23-1	m&p-Xylenes	0.00097	U
541-73-1	1,3-Dichlorobenzene	0.0019	U	79-20-9	Methyl Acetate	0.0019	U
106-46-7	1,4-Dichlorobenzene	0.0019	U	108-87-2	Methylcyclohexane	0.0019	U
123-91-1	1,4-Dioxane	0.097	U	75-09-2	Methylene Chloride	0.0019	U
78-93-3	2-Butanone	0.0019	U	1634-04-4	Methyl-t-butyl ether	0.00097	U
591-78-6	2-Hexanone	0.0019	U	95-47-6	o-Xylene	0.00097	U
108-10-1	4-Methyl-2-Pentanone	0.0019	U	100-42-5	Styrene	0.0019	U
67-64-1	Acetone	0.0097	U	127-18-4	Tetrachloroethene	0.0019	U
71-43-2	Benzene	0.00097	U	108-88-3	Toluene	0.00097	U
74-97-5	Bromochloromethane	0.0019	U	156-60-5	trans-1,2-Dichloroethene	0.0019	U
75-27-4	Bromodichloromethane	0.0019	U	10061-02-6	trans-1,3-Dichloropropene	0.0019	U
75-25-2	Bromoform	0.0019	U	79-01-6	Trichloroethene	0.0019	U
74-83-9	Bromomethane	0.0019	U	75-69-4	Trichlorofluoromethane	0.0019	U
75-15-0	Carbon Disulfide	0.0019	U	75-01-4	Vinyl Chloride	0.0019	U
1330-20-7	Xylenes (Total)	0.00097	U				

Worksheet #: 547905 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-008
Client Id: TB-101-4 GRAB
Data File: 1M131156.D
Analysis Date: 02/20/20 12:36
Date Rec/Extracted: 02/14/20-NA

Matrix: Soil
Initial Vol: 6.26g
Final Vol: NA
Dilution: 0.799
Solids: 82
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 547905

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

0021406 0063

SampleID : AD15713-008 Operator : WP Qt Meth : 1M_S0218.M
Data File: 1M131156.D Sam Mult : 1 Vial# : 3 Qt On : 02/20/20 13:39
Acq On : 02/20/20 12:36 Misc : S,5G!4 Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-20-20\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.343	96	164738	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.976	117	129084	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.256	152	69364	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	59935	39.35	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	131.17%	
39) 1,2-Dichloroethane-d4	5.156	67	23555	35.69	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	118.97%	
66) Toluene-d8	6.195	98	164797	29.98	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	99.93%	
76) Bromofluorobenzene	7.603	174	53808	31.37	ug/l	0.00
Spiked Amount 30.000			Recovery	=	104.57%	

Target Compounds Qvalue

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed

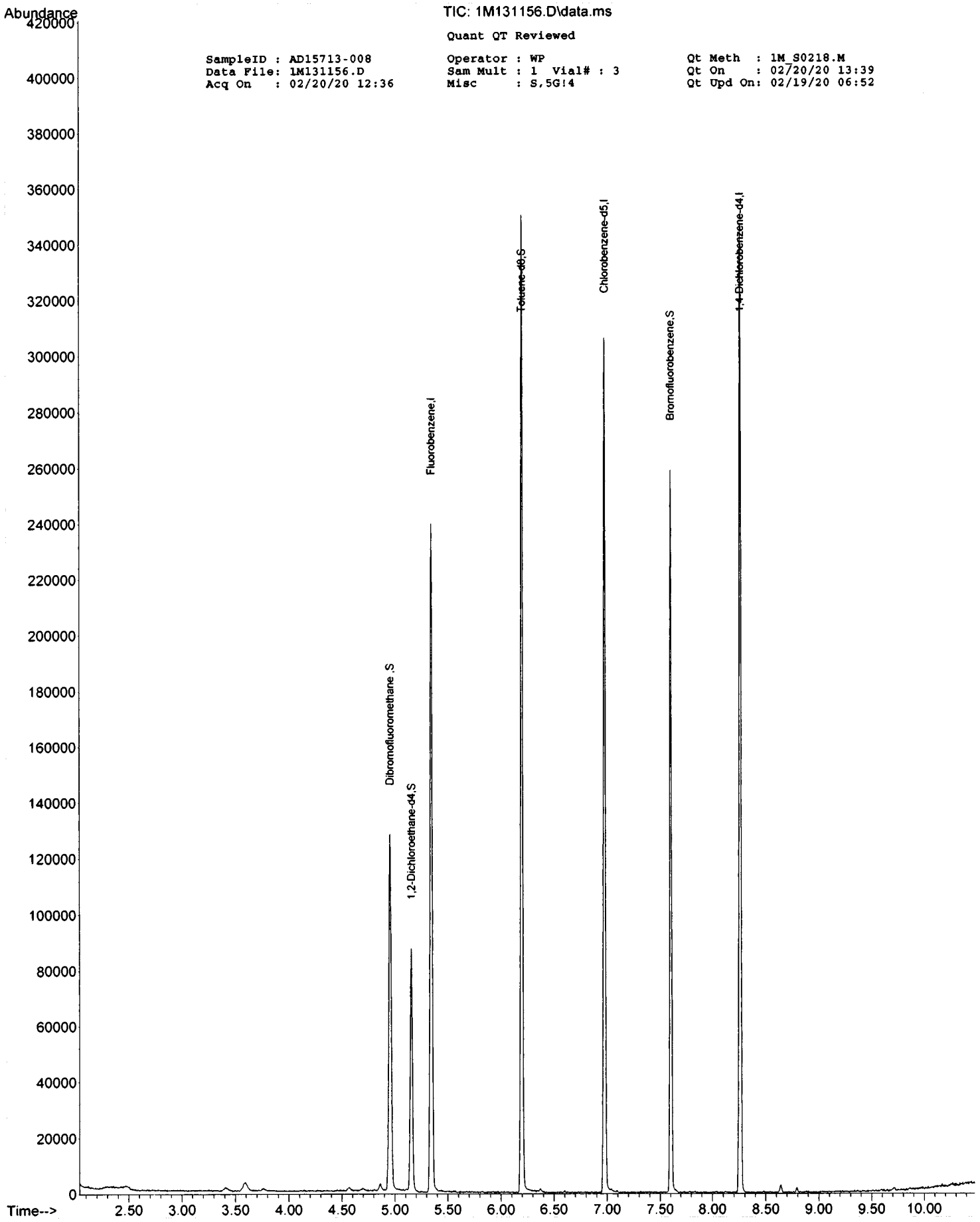
TIC: 1M131156.D\data.ms

Quant QT Reviewed

SampleID : AD15713-008
Data File: 1M131156.D
Acq On : 02/20/20 12:36

Operator : WP
Sam Mult : 1 Vial# : 3
Misc : S,5G!4

Qt Meth : 1M_S0218.M
Qt On : 02/20/20 13:39
Qt Upd On: 02/19/20 06:52



Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15713-010
Client Id: TB-101-5 GRAB
Data File: 1M131136.D
Analysis Date: 02/20/20 05:06
Date Rec/Extracted: 02/14/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7.18g
Final Vol: NA
Dilution: 0.696
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0017	U	56-23-5	Carbon Tetrachloride	0.0017	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0017	U	108-90-7	Chlorobenzene	0.0017	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0017	U	75-00-3	Chloroethane	0.0017	U
79-00-5	1,1,2-Trichloroethane	0.0017	U	67-66-3	Chloroform	0.0017	U
75-34-3	1,1-Dichloroethane	0.0017	U	74-87-3	Chloromethane	0.0017	U
75-35-4	1,1-Dichloroethene	0.0017	U	156-59-2	cis-1,2-Dichloroethene	0.0017	U
87-61-6	1,2,3-Trichlorobenzene	0.0017	U	10061-01-5	cis-1,3-Dichloropropene	0.0017	U
120-82-1	1,2,4-Trichlorobenzene	0.0017	U	110-82-7	Cyclohexane	0.0017	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0017	U	124-48-1	Dibromochloromethane	0.0017	U
106-93-4	1,2-Dibromoethane	0.00066	U	75-71-8	Dichlorodifluoromethane	0.0017	U
95-50-1	1,2-Dichlorobenzene	0.0017	U	100-41-4	Ethylbenzene	0.00085	U
107-06-2	1,2-Dichloroethane	0.0017	U	98-82-8	Isopropylbenzene	0.00085	U
78-87-5	1,2-Dichloropropane	0.0017	U	79601-23-1	m&p-Xylenes	0.00085	U
541-73-1	1,3-Dichlorobenzene	0.0017	U	79-20-9	Methyl Acetate	0.0017	U
106-46-7	1,4-Dichlorobenzene	0.0017	U	108-87-2	Methylcyclohexane	0.0017	U
123-91-1	1,4-Dioxane	0.085	U	75-09-2	Methylene Chloride	0.0017	U
78-93-3	2-Butanone	0.0017	U	1634-04-4	Methyl-t-butyl ether	0.00085	U
591-78-6	2-Hexanone	0.0017	U	95-47-6	o-Xylene	0.00085	U
108-10-1	4-Methyl-2-Pentanone	0.0017	U	100-42-5	Styrene	0.0017	U
67-64-1	Acetone	0.0085	U	127-18-4	Tetrachloroethene	0.0017	U
71-43-2	Benzene	0.00085	U	108-88-3	Toluene	0.00085	U
74-97-5	Bromochloromethane	0.0017	U	156-60-5	trans-1,2-Dichloroethene	0.0017	U
75-27-4	Bromodichloromethane	0.0017	U	10061-02-6	trans-1,3-Dichloropropene	0.0017	U
75-25-2	Bromoform	0.0017	U	79-01-6	Trichloroethene	0.0017	U
74-83-9	Bromomethane	0.0017	U	75-69-4	Trichlorofluoromethane	0.0017	U
75-15-0	**Carbon Disulfide**	**0.0017**	**0.0033**	75-01-4	Vinyl Chloride	0.0017	U
1330-20-7	Xylenes (Total)	0.00085	U				

Worksheet #: 547905

Total Target Concentration 0.0033

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-010
Client Id: TB-101-5 GRAB
Data File: 1M131136.D
Analysis Date: 02/20/20 05:06
Date Rec/Extracted: 02/14/20-NA

Matrix: Soil
Initial Vol: 7.18g
Final Vol: NA
Dilution: 0.696
Solids: 82
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 547905

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

0021406 0067

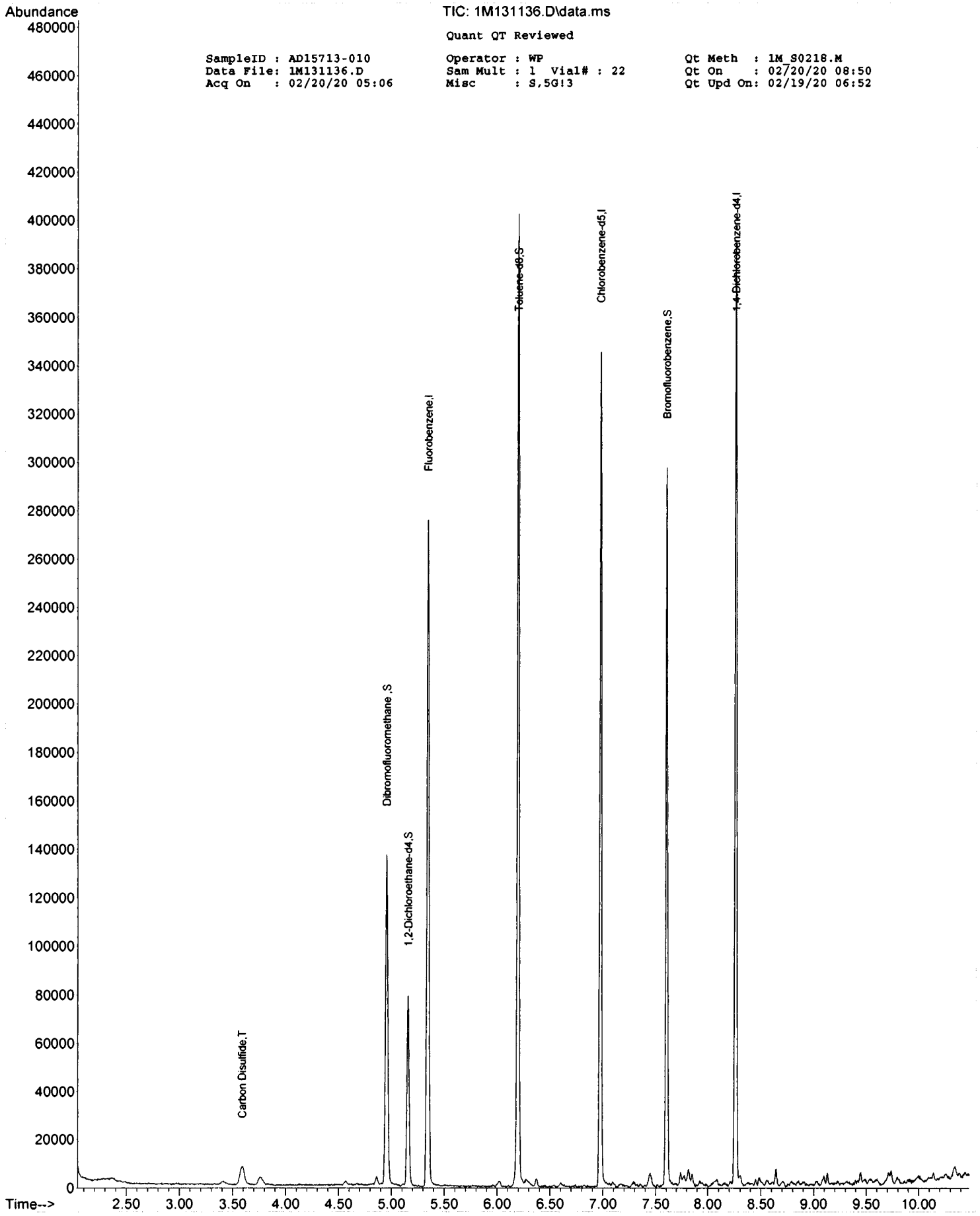
SampleID : AD15713-010 Operator : WP Qt Meth : 1M_S0218.M
Data File: 1M131136.D Sam Mult : 1 Vial# : 22 Qt On : 02/20/20 08:50
Acq On : 02/20/20 05:06 Misc : S,5G!3 Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.342	96	192839	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.973	117	146370	30.00	ug/l	-0.01
70) 1,4-Dichlorobenzene-d4	8.256	152	79011	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	64410	36.13	ug/l	-0.02
Spiked Amount 30.000			Recovery = 120.43%			
39) 1,2-Dichloroethane-d4	5.156	67	21845	28.28	ug/l	-0.02
Spiked Amount 30.000			Recovery = 94.27%			
66) Toluene-d8	6.195	98	190995	30.65	ug/l	-0.01
Spiked Amount 30.000			Recovery = 102.17%			
76) Bromofluorobenzene	7.603	174	63244	32.37	ug/l	0.00
Spiked Amount 30.000			Recovery = 107.90%			
Target Compounds						Qvalue
20) Carbon Disulfide	3.587	76	17487	3.8981	ug/l	100

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 1M131136.D\data.ms
Quant QT Reviewed
SampleID : AD15713-010
Data File: 1M131136.D
Acq On : 02/20/20 05:06
Operator : WP
Sam Mult : 1 Vial# : 22
Misc : S,5G!3
Qt Meth : 1M_S0218.M
Qt On : 02/20/20 08:50
Qt Upd On: 02/19/20 06:52
Carbon Disulfide,T
Dibromofluoromethane,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15713-012
Client Id: TB-101-6 GRAB
Data File: 1M131137.D
Analysis Date: 02/20/20 05:29
Date Rec/Extracted: 02/14/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 6.6g
Final Vol: NA
Dilution: 0.758
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0018	U	56-23-5	Carbon Tetrachloride	0.0018	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0018	U	108-90-7	Chlorobenzene	0.0018	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0018	U	75-00-3	Chloroethane	0.0018	U
79-00-5	1,1,2-Trichloroethane	0.0018	U	67-66-3	Chloroform	0.0018	U
75-34-3	1,1-Dichloroethane	0.0018	U	74-87-3	Chloromethane	0.0018	U
75-35-4	1,1-Dichloroethene	0.0018	U	156-59-2	cis-1,2-Dichloroethene	0.0018	U
87-61-6	1,2,3-Trichlorobenzene	0.0018	U	10061-01-5	cis-1,3-Dichloropropene	0.0018	U
120-82-1	1,2,4-Trichlorobenzene	0.0018	U	110-82-7	Cyclohexane	0.0018	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0018	U	124-48-1	Dibromochloromethane	0.0018	U
106-93-4	1,2-Dibromoethane	0.00072	U	75-71-8	Dichlorodifluoromethane	0.0018	U
95-50-1	1,2-Dichlorobenzene	0.0018	U	100-41-4	Ethylbenzene	0.00092	U
107-06-2	1,2-Dichloroethane	0.0018	U	98-82-8	Isopropylbenzene	0.00092	U
78-87-5	1,2-Dichloropropane	0.0018	U	79601-23-1	m&p-Xylenes	0.00092	U
541-73-1	1,3-Dichlorobenzene	0.0018	U	79-20-9	Methyl Acetate	0.0018	U
106-46-7	1,4-Dichlorobenzene	0.0018	U	108-87-2	Methylcyclohexane	0.0018	U
123-91-1	1,4-Dioxane	0.092	U	**75-09-2**	**Methylene Chloride**	**0.0018**	**0.0022**
78-93-3	2-Butanone	0.0018	U	1634-04-4	Methyl-t-butyl ether	0.00092	U
591-78-6	2-Hexanone	0.0018	U	95-47-6	o-Xylene	0.00092	U
108-10-1	4-Methyl-2-Pentanone	0.0018	U	100-42-5	Styrene	0.0018	U
67-64-1	Acetone	0.0092	U	127-18-4	Tetrachloroethene	0.0018	U
71-43-2	Benzene	0.00092	U	108-88-3	Toluene	0.00092	U
74-97-5	Bromochloromethane	0.0018	U	156-60-5	trans-1,2-Dichloroethene	0.0018	U
75-27-4	Bromodichloromethane	0.0018	U	10061-02-6	trans-1,3-Dichloropropene	0.0018	U
75-25-2	Bromoform	0.0018	U	79-01-6	Trichloroethene	0.0018	U
74-83-9	Bromomethane	0.0018	U	75-69-4	Trichlorofluoromethane	0.0018	U
75-15-0	**Carbon Disulfide**	**0.0018**	**0.0029**	75-01-4	Vinyl Chloride	0.0018	U
1330-20-7	Xylenes (Total)	0.00092	U				

Worksheet #: 547844

Total Target Concentration 0.0051

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-012
Client Id: TB-101-6 GRAB
Data File: 1M131137.D
Analysis Date: 02/20/20 05:29
Date Rec/Extracted: 02/14/20-NA

Matrix: Soil
Initial Vol: 6.6g
Final Vol: NA
Dilution: 0.758
Solids: 82
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 547844

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

0021406 0071

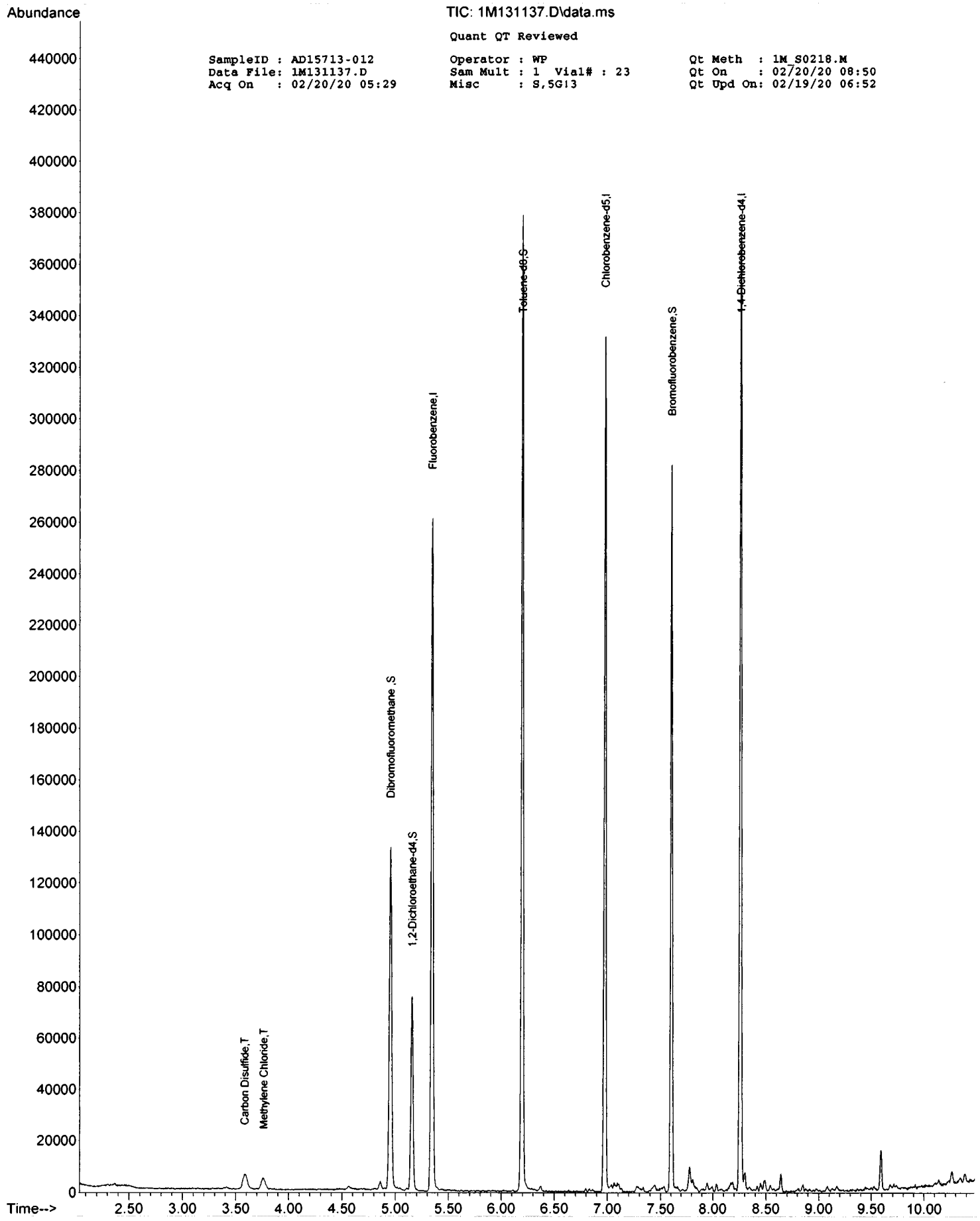
SampleID : AD15713-012 Operator : WP Qt Meth : 1M_S0218.M
Data File: 1M131137.D Sam Mult : 1 Vial# : 23 Qt On : 02/20/20 08:50
Acq On : 02/20/20 05:29 Misc : S,5G!3 Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.342	96	181143	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.973	117	140168	30.00	ug/l	-0.01
70) 1,4-Dichlorobenzene-d4	8.256	152	75713	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	63032	37.64	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	125.47%	
39) 1,2-Dichloroethane-d4	5.156	67	20938	28.86	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	96.20%	
66) Toluene-d8	6.195	98	179856	30.14	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	100.47%	
76) Bromofluorobenzene	7.603	174	60149	32.13	ug/l	0.00
Spiked Amount 30.000			Recovery	=	107.10%	
Target Compounds						Qvalue
15) Methylene Chloride	3.764	84	3546	2.3402	ug/l	96
20) Carbon Disulfide	3.584	76	13103	3.1094	ug/l	100

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 1M131137.D\data.ms
Quant QT Reviewed
SampleID : AD15713-012
Data File: 1M131137.D
Acq On : 02/20/20 05:29
Operator : WP
Sam Mult : 1 Vial# : 23
Misc : S,5G13
Qt Meth : 1M_S0218.M
Qt On : 02/20/20 08:50
Qt Upd On: 02/19/20 06:52
Carbon Disulfide,T
Methylene Chloride,T
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 1M131120.D
Analysis Date: 02/19/20 22:54
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.00078	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	108-88-3	Toluene	0.0010	U
74-97-5	Bromochloromethane	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-25-2	Bromoform	0.0020	U	79-01-6	Trichloroethene	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 545954 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 1M131120.D
Analysis Date: 02/19/20 22:54
Date Rec/Extracted:

Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 545954

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

0021406 0075

SampleID : DAILY BLANK
Data File: 1M131120.D
Acq On : 02/19/20 22:54

Operator : WP
Sam Mult : 1 Vial# : 6
Misc : S,5G

Qt Meth : 1M_S0218.M
Qt On : 02/20/20 06:40
Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.342	96	163966	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.973	117	124356	30.00	ug/l	-0.01
70) 1,4-Dichlorobenzene-d4	8.255	152	65620	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	58760	38.76	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	129.20%	
39) 1,2-Dichloroethane-d4	5.153	67	21132	32.17	ug/l	-0.02
Spiked Amount 30.000			Recovery	=	107.23%	
66) Toluene-d8	6.194	98	162727	30.73	ug/l	-0.01
Spiked Amount 30.000			Recovery	=	102.43%	
76) Bromofluorobenzene	7.603	174	49822	30.70	ug/l	0.00
Spiked Amount 30.000			Recovery	=	102.33%	

Target Compounds Qvalue

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed

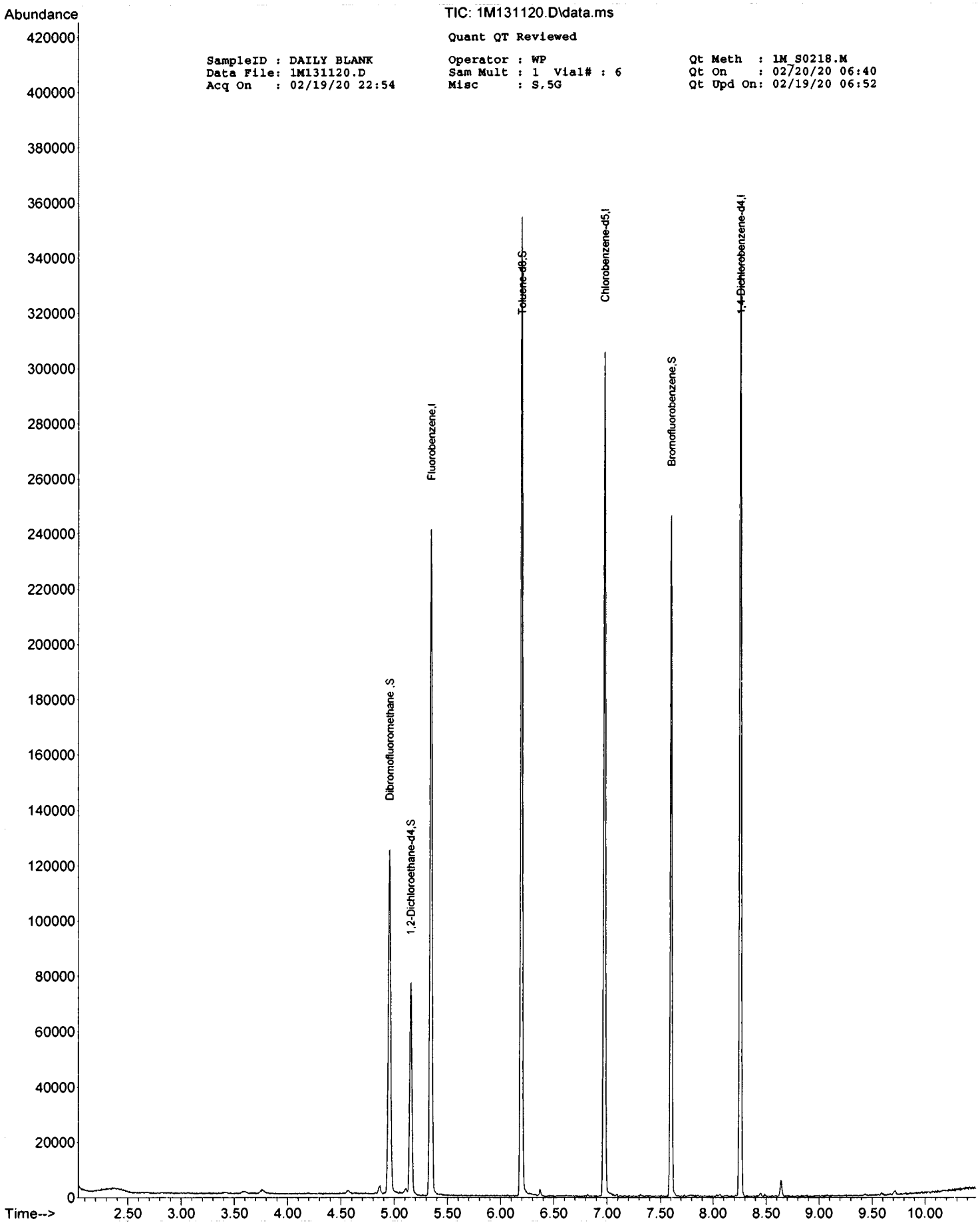
TIC: 1M131120.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 1M131120.D
Acq On : 02/19/20 22:54

Operator : WP
Sam Mult : 1 Vial# : 6
Misc : S,5G

Qt Meth : 1M_S0218.M
Qt On : 02/20/20 06:40
Qt Upd On: 02/19/20 06:52



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 1M131155.D
Analysis Date: 02/20/20 12:13
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.00078	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0020	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	108-88-3	Toluene	0.0010	U
74-97-5	Bromochloromethane	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-25-2	Bromoform	0.0020	U	79-01-6	Trichloroethene	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 545954 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 1M131155.D
Analysis Date: 02/20/20 12:13
Date Rec/Extracted:

Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 545954

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

0021406 0079

SampleID : DAILY BLANK
Data File: 1M131155.D
Acq On : 02/20/20 12:13

Operator : WP
Sam Mult : 1 Vial# : 2
Misc : S,5G

Qt Meth : 1M_S0218.M
Qt On : 02/20/20 13:39
Qt Upd On: 02/19/20 06:52

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-20-20\
Qt Path : G:\GcMsData\2020\GCMS_1\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.342	96	166903	30.00	ug/l	-0.02
52) Chlorobenzene-d5	6.976	117	129098	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.255	152	69488	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.953	111	58878	38.16	ug/l	-0.02
Spiked Amount 30.000			Recovery = 127.20%			
39) 1,2-Dichloroethane-d4	5.156	67	19700	29.47	ug/l	-0.02
Spiked Amount 30.000			Recovery = 98.23%			
66) Toluene-d8	6.194	98	168054	30.57	ug/l	-0.01
Spiked Amount 30.000			Recovery = 101.90%			
76) Bromofluorobenzene	7.603	174	53853	31.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.47%			

Target Compounds Qvalue

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed

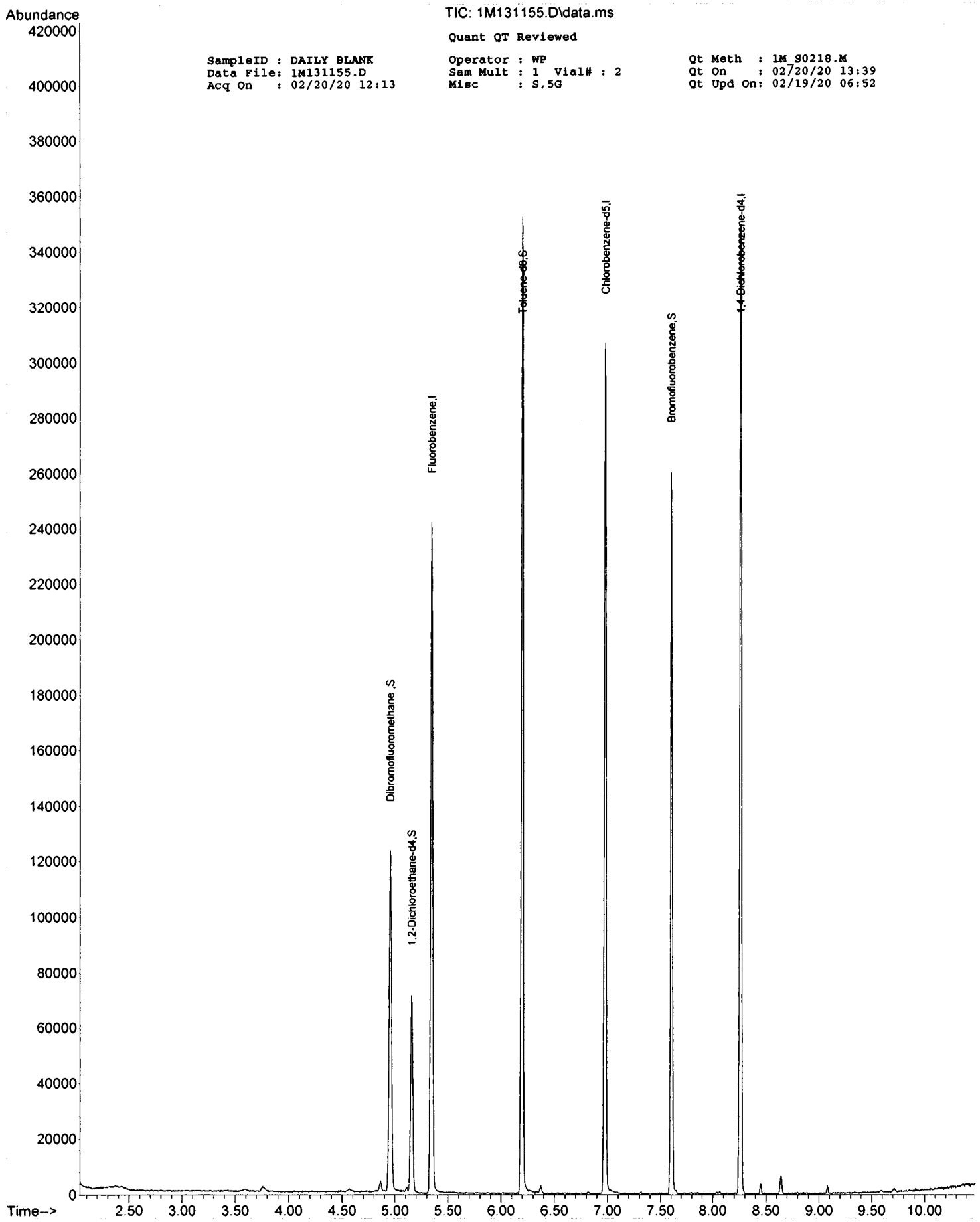
TIC: 1M131155.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 1M131155.D
Acq On : 02/20/20 12:13

Operator : WP
Sam Mult : 1 Vial# : 2
Misc : S,5G

Qt Meth : 1M_S0218.M
Qt On : 02/20/20 13:39
Qt Upd On: 02/19/20 06:52



FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
1M131120.D	DAILY BLANK	S	02/19/20 22:54	1		129	107	102	102		
1M131155.D	DAILY BLANK	S	02/20/20 12:13	1		127	98	102	104		
1M131132.D	AD15713-002	S	02/20/20 03:33	1		128	105	104	115		
1M131133.D	AD15713-004	S	02/20/20 03:56	1		121	118	107	125		
1M131134.D	AD15713-006	S	02/20/20 04:19	1		126	104	113	125		
1M131156.D	AD15713-008	S	02/20/20 12:36	1		131	119	100	105		
1M131136.D	AD15713-010	S	02/20/20 05:06	1		120	94	102	108		
1M131137.D	AD15713-012	S	02/20/20 05:29	1		125	96	100	107		
1M131121.D	MBS84430	S	02/19/20 23:17	1		122	108	101	95		
1M131123.D	AD15697-003	S	02/20/20 00:04	1		98	98	102	102		
1M131125.D	AD15697-003(MS)	S	02/20/20 00:50	1		107	92	93	127		
1M131126.D	AD15697-003(MSD)	S	02/20/20 01:14	1		108	94	99	105		
1M131157.D	AD15618-002	S	02/20/20 12:59	1		100	98	101	106		
1M131161.D	MBS84442	S	02/20/20 14:32	1		113	96	98	104		
1M131162.D	AD15618-002(MS)	S	02/20/20 14:55	1		119	116	102	105		
1M131163.D	AD15618-002(MSD)	S	02/20/20 15:18	1		124	97	101	102		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84430

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131121.D	MBS84430	2/19/2020 11:17:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	49.4623	0	50	99	20	130
Dichlorodifluoromethane	1	44.2125	0	50	88	20	130
Chloromethane	1	53.1187	0	50	106	20	130
Bromomethane	1	48.308	0	50	97	20	130
Vinyl Chloride	1	53.8638	0	50	108	20	130
Chloroethane	1	55.8531	0	50	112	20	130
Trichlorofluoromethane	1	54.2768	0	50	109	20	130
Ethyl ether	1	56.9273	0	50	114	50	130
Furan	1	56.0103	0	50	112	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	55.6098	0	50	111	50	130
Methylene Chloride	1	60.9599	0	50	122	50	130
Acrolein	1	266.9889	0	200	133*	20	130
Acrylonitrile	1	53.9233	0	50	108	20	130
Iodomethane	1	54.8752	0	50	110	50	130
Acetone	1	275.9481	0	200	138*	20	130
Carbon Disulfide	1	51.3489	0	50	103	50	130
t-Butyl Alcohol	1	254.554	0	200	127	20	130
n-Hexane	1	56.5499	0	50	113	50	130
Di-isopropyl-ether	1	54.4566	0	50	109	50	130
1,1-Dichloroethene	1	55.0867	0	50	110	50	130
Methyl Acetate	1	52.3448	0	50	105	50	130
Methyl-t-butyl ether	1	53.9437	0	50	108	50	130
1,1-Dichloroethane	1	55.0086	0	50	110	50	130
trans-1,2-Dichloroethene	1	54.7867	0	50	110	50	130
Ethyl-t-butyl ether	1	53.9463	0	50	108	50	130
cis-1,2-Dichloroethene	1	54.6259	0	50	109	50	130
Bromochloromethane	1	51.558	0	50	103	50	130
2,2-Dichloropropane	1	52.114	0	50	104	50	130
Ethyl acetate	1	52.7301	0	50	105	50	130
1,4-Dioxane	1	2553.341	0	2500	102	50	130
1,1-Dichloropropene	1	53.3251	0	50	107	50	130
Chloroform	1	52.0787	0	50	104	50	130
Cyclohexane	1	53.6785	0	50	107	50	130
1,2-Dichloroethane	1	45.7248	0	50	91	50	130
2-Butanone	1	43.7011	0	50	87	20	130
1,1,1-Trichloroethane	1	54.1041	0	50	108	50	130
Carbon Tetrachloride	1	53.8009	0	50	108	50	130
Vinyl Acetate	1	52.1116	0	50	104	50	130
Bromodichloromethane	1	53.0805	0	50	106	50	130
Methylcyclohexane	1	51.4288	0	50	103	50	130
Dibromomethane	1	49.8368	0	50	100	50	130
1,2-Dichloropropane	1	51.2897	0	50	103	50	130
Trichloroethene	1	45.6974	0	50	91	50	130
Benzene	1	44.5193	0	50	89	50	130
tert-Amyl methyl ether	1	43.6682	0	50	87	50	130
Iso-propylacetate	1	37.2252	0	50	74	50	130
Methyl methacrylate	1	43.4586	0	50	87	50	130
Dibromochloromethane	1	44.9033	0	50	90	50	130
2-Chloroethylvinylether	1	44.3839	0	50	89	50	130
cis-1,3-Dichloropropene	1	45.4907	0	50	91	50	130
trans-1,3-Dichloropropene	1	45.4905	0	50	91	50	130
Ethyl methacrylate	1	44.5459	0	50	89	50	130
1,1,2-Trichloroethane	1	44.75	0	50	90	50	130
1,2-Dibromoethane	1	45.8752	0	50	92	50	130
1,3-Dichloropropane	1	44.2296	0	50	88	50	130
4-Methyl-2-Pentanone	1	45.2344	0	50	90	20	130
2-Hexanone	1	46.3374	0	50	93	20	130
Tetrachloroethene	1	41.2638	0	50	83	50	130
Toluene	1	44.7179	0	50	89	50	130
1,1,1,2-Tetrachloroethane	1	43.1203	0	50	86	50	130
Chlorobenzene	1	43.1855	0	50	86	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84430

Method: 8260C	Matrix: Soil	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	42.8359	0	50	86	50	130
n-Amyl acetate	1	44.7961	0	50	90	50	130
Bromoform	**1**	**41.1083**	**0**	**50**	**82**	**20**	**130**
Ethylbenzene	**1**	**40.6129**	**0**	**50**	**81**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**41.5971**	**0**	**50**	**83**	**50**	**130**
Styrene	**1**	**42.2984**	**0**	**50**	**85**	**50**	**130**
m&p-Xylenes	**1**	**83.2917**	**0**	**100**	**83**	**50**	**130**
o-Xylene	**1**	**41.5457**	**0**	**50**	**83**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	43.2237	0	50	86	20	130
1,3-Dichlorobenzene	**1**	**42.4325**	**0**	**50**	**85**	**50**	**130**
1,4-Dichlorobenzene	**1**	**43.095**	**0**	**50**	**86**	**50**	**130**
1,2-Dichlorobenzene	**1**	**42.607**	**0**	**50**	**85**	**50**	**130**
Isopropylbenzene	**1**	**42.6502**	**0**	**50**	**85**	**50**	**130**
Cyclohexanone	1	199.6122	0	250	80	50	130
Camphene	1	43.5125	0	50	87	50	130
1,2,3-Trichloropropane	1	41.7592	0	50	84	50	130
2-Chlorotoluene	1	42.3652	0	50	85	50	130
p-Ethyltoluene	1	42.8693	0	50	86	50	130
4-Chlorotoluene	1	42.6022	0	50	85	50	130
n-Propylbenzene	1	44.0229	0	50	88	50	130
Bromobenzene	1	42.6099	0	50	85	50	130
1,3,5-Trimethylbenzene	1	42.3578	0	50	85	50	130
Butyl methacrylate	1	43.2856	0	50	87	50	130
t-Butylbenzene	1	43.8268	0	50	88	50	130
1,2,4-Trimethylbenzene	1	43.4488	0	50	87	50	130
sec-Butylbenzene	1	44.8899	0	50	90	50	130
4-Isopropyltoluene	1	44.7522	0	50	90	50	130
n-Butylbenzene	1	45.0044	0	50	90	50	130
p-Diethylbenzene	1	42.1825	0	50	84	50	130
1,2,4,5-Tetramethylbenzene	1	41.9673	0	50	84	50	130
1,2-Dibromo-3-Chloropropane	**1**	**42.4087**	**0**	**50**	**85**	**50**	**130**
Camphor	1	425.9371	0	500	85	50	130
Hexachlorobutadiene	1	41.5254	0	50	83	50	130
1,2,4-Trichlorobenzene	**1**	**41.4071**	**0**	**50**	**83**	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**41.1093**	**0**	**50**	**82**	**50**	**130**
Naphthalene	1	40.2429	0	50	80	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84430

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131125.D	AD15697-003(MS)	2/20/2020 12:50:00 AM
Non Spike(If applicable):	1M131123.D	AD15697-003	2/20/2020 12:04:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	69.5691	0	50	139*	20	130
Dichlorodifluoromethane	1	60.4798	0	50	121	20	130
Chloromethane	1	53.9493	0	50	108	20	130
Bromomethane	1	36.7257	0	50	73	20	130
Vinyl Chloride	1	52.9782	0	50	106	20	130
Chloroethane	1	47.7542	0	50	96	20	130
Trichlorofluoromethane	1	48.5855	0	50	97	20	130
Ethyl ether	1	45.8016	0	50	92	50	130
Furan	1	44.9066	0	50	90	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	50.9232	0	50	102	50	130
Methylene Chloride	1	46.8843	0	50	94	50	130
Acrolein	1	0	0	200	0*	20	130
Acrylonitrile	1	35.7871	0	50	72	20	130
Iodomethane	1	40.2835	0	50	81	50	130
Acetone	1	210.9529	0	200	105	20	130
Carbon Disulfide	1	38.4308	0	50	77	50	130
t-Butyl Alcohol	1	194.3217	0	200	97	20	130
n-Hexane	1	40.2185	0	50	80	50	130
Di-isopropyl-ether	1	42.1643	0	50	84	50	130
1,1-Dichloroethene	1	46.4436	0	50	93	50	130
Methyl Acetate	1	14.3166	0	50	29*	50	130
Methyl-t-butyl ether	1	43.5054	0	50	87	50	130
1,1-Dichloroethane	1	43.9779	0	50	88	50	130
trans-1,2-Dichloroethene	1	44.2259	0	50	88	50	130
Ethyl-t-butyl ether	1	41.7101	0	50	83	50	130
cis-1,2-Dichloroethene	1	37.6836	0	50	75	50	130
Bromochloromethane	1	36.8391	0	50	74	50	130
2,2-Dichloropropane	1	40.4075	0	50	81	50	130
Ethyl acetate	1	7.4246	0	50	15*	50	130
1,4-Dioxane	1	2364.125	0	2500	95	50	130
1,1-Dichloropropene	1	38.9461	0	50	78	50	130
Chloroform	1	40.1336	0	50	80	50	130
Cyclohexane	1	39.6062	0	50	79	50	130
1,2-Dichloroethane	1	36.1006	0	50	72	50	130
2-Butanone	1	8.8527	0	50	18*	20	130
1,1,1-Trichloroethane	1	44.4657	0	50	89	50	130
Carbon Tetrachloride	1	41.6184	0	50	83	50	130
Vinyl Acetate	1	23.7938	0	50	48*	50	130
Bromodichloromethane	1	46.1792	0	50	92	50	130
Methylcyclohexane	1	40.9057	0	50	82	50	130
Dibromomethane	1	60.2409	0	50	120	50	130
1,2-Dichloropropane	1	45.279	0	50	91	50	130
Trichloroethene	1	44.2172	0	50	88	50	130
Benzene	1	35.9955	0	50	72	50	130
tert-Amyl methyl ether	1	36.7281	0	50	73	50	130
Iso-propylacetate	1	16.4621	0	50	33*	50	130
Methyl methacrylate	1	22.654	0	50	45*	50	130
Dibromochloromethane	1	45.2946	0	50	91	50	130
2-Chloroethylvinylether	1	30.7657	0	50	62	50	130
cis-1,3-Dichloropropene	1	31.6024	0	50	63	50	130
trans-1,3-Dichloropropene	1	30.9298	0	50	62	50	130
Ethyl methacrylate	1	7.5021	0	50	15*	50	130
1,1,2-Trichloroethane	1	39.1183	0	50	78	50	130
1,2-Dibromoethane	1	37.7005	0	50	75	50	130
1,3-Dichloropropane	1	36.3513	0	50	73	50	130
4-Methyl-2-Pentanone	1	7.4371	0	50	15*	20	130
2-Hexanone	1	4.9457	0	50	9.9*	20	130
Tetrachloroethene	1	39.2572	0	50	79	50	130
Toluene	1	32.6512	0	50	65	50	130
1,1,1,2-Tetrachloroethane	1	36.2218	0	50	72	50	130
Chlorobenzene	1	32.619	0	50	65	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84430

Method: 8260C	Matrix: Soil			QC Type: MS			
Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	0	0	50	0*	50	130
n-Amyl acetate	1	0	0	50	0*	50	130
Bromoform	**1**	**36.4988**	**0**	**50**	**73**	**20**	**130**
Ethylbenzene	**1**	**28.1676**	**0**	**50**	**56**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**33.6893**	**0**	**50**	**67**	**50**	**130**
Styrene	**1**	**21.3312**	**0**	**50**	**43***	**50**	**130**
m&p-Xylenes	**1**	**42.7805**	**0**	**100**	**43***	**50**	**130**
o-Xylene	**1**	**29.4289**	**0**	**50**	**59**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	25.4142	0	50	51	20	130
1,3-Dichlorobenzene	**1**	**27.0389**	**0**	**50**	**54**	**50**	**130**
1,4-Dichlorobenzene	**1**	**27.2863**	**0**	**50**	**55**	**50**	**130**
1,2-Dichlorobenzene	**1**	**21.7331**	**0**	**50**	**43***	**50**	**130**
Isopropylbenzene	**1**	**27.4926**	**0**	**50**	**55**	**50**	**130**
Cyclohexanone	1	49.8292	0	250	20*	50	130
Camphene	1	30.3519	0	50	61	50	130
1,2,3-Trichloropropane	1	29.4152	0	50	59	50	130
2-Chlorotoluene	1	23.8158	0	50	48*	50	130
p-Ethyltoluene	1	20.3521	0	50	41*	50	130
4-Chlorotoluene	1	22.4539	0	50	45*	50	130
n-Propylbenzene	1	19.8422	0	50	40*	50	130
Bromobenzene	1	25.3393	0	50	51	50	130
1,3,5-Trimethylbenzene	1	24.5447	0	50	49*	50	130
Butyl methacrylate	1	5.3535	0	50	11*	50	130
t-Butylbenzene	1	26.4768	0	50	53	50	130
1,2,4-Trimethylbenzene	1	14.579	0	50	29*	50	130
sec-Butylbenzene	1	19.7108	0	50	39*	50	130
4-Isopropyltoluene	1	19.1752	0	50	38*	50	130
n-Butylbenzene	1	5.6199	0	50	11*	50	130
p-Diethylbenzene	1	18.1579	0	50	36*	50	130
1,2,4,5-Tetramethylbenzene	1	16.0317	0	50	32*	50	130
1,2-Dibromo-3-Chloropropane	**1**	**33.629**	**0**	**50**	**67**	**50**	**130**
Camphor	1	242.9913	0	500	49*	50	130
Hexachlorobutadiene	1	27.9422	0	50	56	50	130
1,2,4-Trichlorobenzene	**1**	**20.8335**	**0**	**50**	**42***	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**19.7565**	**0**	**50**	**40***	**50**	**130**
Naphthalene	1	2.4036	0	50	4.8*	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84430

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131126.D	AD15697-003(MSD)	2/20/2020 1:14:00 AM
Non Spike(If applicable):	1M131123.D	AD15697-003	2/20/2020 12:04:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	55.4176	0	50	111	20	130
Dichlorodifluoromethane	1	50.526	0	50	101	20	130
Chloromethane	1	46.5356	0	50	93	20	130
Bromomethane	1	31.7141	0	50	63	20	130
Vinyl Chloride	1	47.5544	0	50	95	20	130
Chloroethane	1	46.0072	0	50	92	20	130
Trichlorofluoromethane	1	47.5221	0	50	95	20	130
Ethyl ether	1	44.5365	0	50	89	50	130
Furan	1	41.4664	0	50	83	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.8412	0	50	100	50	130
Methylene Chloride	1	45.9093	0	50	92	50	130
Acrolein	1	0	0	200	0*	20	130
Acrylonitrile	1	28.4674	0	50	57	20	130
Iodomethane	1	33.555	0	50	67	50	130
Acetone	1	198.7588	0	200	99	20	130
Carbon Disulfide	1	36.8731	0	50	74	50	130
t-Butyl Alcohol	1	195.4051	0	200	98	20	130
n-Hexane	1	36.0593	0	50	72	50	130
Di-isopropyl-ether	1	42.182	0	50	84	50	130
1,1-Dichloroethene	1	44.9596	0	50	90	50	130
Methyl Acetate	1	10.2322	0	50	20*	50	130
Methyl-t-butyl ether	1	42.9664	0	50	86	50	130
1,1-Dichloroethane	1	44.6161	0	50	89	50	130
trans-1,2-Dichloroethene	1	44.6304	0	50	89	50	130
Ethyl-t-butyl ether	1	42.4189	0	50	85	50	130
cis-1,2-Dichloroethene	1	38.4637	0	50	77	50	130
Bromochloromethane	1	36.9201	0	50	74	50	130
2,2-Dichloropropane	1	42.6477	0	50	85	50	130
Ethyl acetate	1	5.5212	0	50	11*	50	130
1,4-Dioxane	1	2441.612	0	2500	98	50	130
1,1-Dichloropropene	1	34.6618	0	50	69	50	130
Chloroform	1	41.748	0	50	83	50	130
Cyclohexane	1	34.9889	0	50	70	50	130
1,2-Dichloroethane	1	34.3504	0	50	69	50	130
2-Butanone	1	10.0766	0	50	20	20	130
1,1,1-Trichloroethane	1	41.6722	0	50	83	50	130
Carbon Tetrachloride	1	38.7571	0	50	78	50	130
Vinyl Acetate	1	23.6058	0	50	47*	50	130
Bromodichloromethane	1	42.9193	0	50	86	50	130
Methylcyclohexane	1	36.5443	0	50	73	50	130
Dibromomethane	1	47.2158	0	50	94	50	130
1,2-Dichloropropane	1	41.9647	0	50	84	50	130
Trichloroethene	1	42.3688	0	50	85	50	130
Benzene	1	33.289	0	50	67	50	130
tert-Amyl methyl ether	1	35.317	0	50	71	50	130
Iso-propylacetate	1	17.9503	0	50	36*	50	130
Methyl methacrylate	1	17.4303	0	50	35*	50	130
Dibromochloromethane	1	37.1353	0	50	74	50	130
2-Chloroethylvinylether	1	31.1138	0	50	62	50	130
cis-1,3-Dichloropropene	1	31.0388	0	50	62	50	130
trans-1,3-Dichloropropene	1	29.177	0	50	58	50	130
Ethyl methacrylate	1	0	0	50	0*	50	130
1,1,2-Trichloroethane	1	37.6044	0	50	75	50	130
1,2-Dibromoethane	1	35.7373	0	50	71	50	130
1,3-Dichloropropane	1	34.8774	0	50	70	50	130
4-Methyl-2-Pentanone	1	7.6712	0	50	15*	20	130
2-Hexanone	1	4.9158	0	50	9.8*	20	130
Tetrachloroethene	1	37.935	0	50	76	50	130
Toluene	1	30.7462	0	50	61	50	130
1,1,1,2-Tetrachloroethane	1	36.6202	0	50	73	50	130
Chlorobenzene	1	30.8883	0	50	62	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84430

Method: 8260C	Matrix: Soil	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	0	0	50	0*	50	130
n-Amyl acetate	1	0	0	50	0*	50	130
Bromoform	**1**	**33.1207**	**0**	**50**	**66**	**20**	**130**
Ethylbenzene	**1**	**26.4173**	**0**	**50**	**53**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**31.5024**	**0**	**50**	**63**	**50**	**130**
Styrene	**1**	**18.5435**	**0**	**50**	**37***	**50**	**130**
m&p-Xylenes	**1**	**37.419**	**0**	**100**	**37***	**50**	**130**
o-Xylene	**1**	**24.1074**	**0**	**50**	**48***	**50**	**130**
trans-1,4-Dichloro-2-butene	1	21.771	0	50	44	20	130
1,3-Dichlorobenzene	**1**	**24.8094**	**0**	**50**	**50**	**50**	**130**
1,4-Dichlorobenzene	**1**	**24.8234**	**0**	**50**	**50**	**50**	**130**
1,2-Dichlorobenzene	**1**	**19.4942**	**0**	**50**	**39***	**50**	**130**
Isopropylbenzene	**1**	**22.9266**	**0**	**50**	**46***	**50**	**130**
Cyclohexanone	1	150.2581	0	250	60	50	130
Camphene	1	28.0104	0	50	56	50	130
1,2,3-Trichloropropane	1	26.6472	0	50	53	50	130
2-Chlorotoluene	1	22.0377	0	50	44*	50	130
p-Ethyltoluene	1	17.8218	0	50	36*	50	130
4-Chlorotoluene	1	19.8446	0	50	40*	50	130
n-Propylbenzene	1	16.6829	0	50	33*	50	130
Bromobenzene	1	25.2795	0	50	51	50	130
1,3,5-Trimethylbenzene	1	21.3187	0	50	43*	50	130
Butyl methacrylate	1	0	0	50	0*	50	130
t-Butylbenzene	1	25.2836	0	50	51	50	130
1,2,4-Trimethylbenzene	1	10.325	0	50	21*	50	130
sec-Butylbenzene	1	16.7967	0	50	34*	50	130
4-Isopropyltoluene	1	17.6623	0	50	35*	50	130
n-Butylbenzene	1	4.5777	0	50	9.2*	50	130
p-Diethylbenzene	1	17.382	0	50	35*	50	130
1,2,4,5-Tetramethylbenzene	1	14.9818	0	50	30*	50	130
1,2-Dibromo-3-Chloropropane	**1**	**33.2725**	**0**	**50**	**67**	**50**	**130**
Camphor	1	196.4008	0	500	39*	50	130
Hexachlorobutadiene	1	25.9538	0	50	52	50	130
1,2,4-Trichlorobenzene	**1**	**19.4304**	**0**	**50**	**39***	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**18.1757**	**0**	**50**	**36***	**50**	**130**
Naphthalene	1	0	0	50	0*	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84430

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131126.D	AD15697-003(MSD)	2/20/2020 1:14:00 AM
Duplicate(If applicable):	1M131125.D	AD15697-003(MS)	2/20/2020 12:50:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	55.4176	69.5691	23	30
Dichlorodifluoromethane	1	50.526	60.4798	18	30
Chloromethane	1	46.5356	53.9493	15	30
Bromomethane	1	31.7141	36.7257	15	30
Vinyl Chloride	1	47.5544	52.9782	11	40
Chloroethane	1	46.0072	47.7542	3.7	30
Trichlorofluoromethane	1	47.5221	48.5855	2.2	30
Ethyl ether	1	44.5365	45.8016	2.8	30
Furan	1	41.4664	44.9066	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1	49.8412	50.9232	2.1	30
Methylene Chloride	1	45.9093	46.8843	2.1	30
Acrolein	1	0	0	NA	30
Acrylonitrile	1	28.4674	35.7871	23	30
Iodomethane	1	33.555	40.2835	18	30
Acetone	1	198.7588	210.9529	6	30
Carbon Disulfide	1	36.8731	38.4308	4.1	30
t-Butyl Alcohol	1	195.4051	194.3217	0.56	30
n-Hexane	1	36.0593	40.2185	11	30
Di-isopropyl-ether	1	42.182	42.1643	0.04	30
1,1-Dichloroethene	1	44.9596	46.4436	3.2	40
Methyl Acetate	1	10.2322	14.3166	33*	30
Methyl-t-butyl ether	1	42.9664	43.5054	1.2	30
1,1-Dichloroethane	1	44.6161	43.9779	1.4	40
trans-1,2-Dichloroethene	1	44.6304	44.2259	0.91	30
Ethyl-t-butyl ether	1	42.4189	41.7101	1.7	30
cis-1,2-Dichloroethene	1	38.4637	37.6836	2	30
Bromochloromethane	1	36.9201	36.8391	0.22	30
2,2-Dichloropropane	1	42.6477	40.4075	5.4	30
Ethyl acetate	1	5.5212	7.4246	29	30
1,4-Dioxane	1	2441.612	2364.125	3.2	30
1,1-Dichloropropene	1	34.6618	38.9461	12	30
Chloroform	1	41.748	40.1336	3.9	40
Cyclohexane	1	34.9889	39.6062	12	30
1,2-Dichloroethane	1	34.3504	36.1006	5	40
2-Butanone	1	10.0766	8.8527	13	40
1,1,1-Trichloroethane	1	41.6722	44.4657	6.5	30
Carbon Tetrachloride	1	38.7571	41.6184	7.1	40
Vinyl Acetate	1	23.6058	23.7938	0.79	30
Bromodichloromethane	1	42.9193	46.1792	7.3	30
Methylcyclohexane	1	36.5443	40.9057	11	30
Dibromomethane	1	47.2158	60.2409	24	30
1,2-Dichloropropane	1	41.9647	45.279	7.6	30
Trichloroethene	1	42.3688	44.2172	4.3	40
Benzene	1	33.289	35.9955	7.8	40
tert-Amyl methyl ether	1	35.317	36.7281	3.9	30
Iso-propylacetate	1	17.9503	16.4621	8.6	30
Methyl methacrylate	1	17.4303	22.654	26	30
Dibromochloromethane	1	37.1353	45.2946	20	30
2-Chloroethylvinylether	1	31.1138	30.7657	1.1	30
cis-1,3-Dichloropropene	1	31.0388	31.6024	1.8	30
trans-1,3-Dichloropropene	1	29.177	30.9298	5.8	30
Ethyl methacrylate	1	0	7.5021	200*	30
1,1,2-Trichloroethane	1	37.6044	39.1183	3.9	30
1,2-Dibromoethane	1	35.7373	37.7005	5.3	30
1,3-Dichloropropane	1	34.8774	36.3513	4.1	30
4-Methyl-2-Pentanone	1	7.6712	7.4371	3.1	30
2-Hexanone	1	4.9158	4.9457	0.61	30
Tetrachloroethene	1	37.935	39.2572	3.4	40
Toluene	1	30.7462	32.6512	6	40
1,1,1,2-Tetrachloroethane	1	36.6202	36.2218	1.1	30
Chlorobenzene	1	30.8883	32.619	5.5	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84430

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	0	0	NA	30
n-Amyl acetate	1	0	0	NA	30
Bromoform	**1**	**33.1207**	**36.4988**	**9.7**	**30**
Ethylbenzene	**1**	**26.4173**	**28.1676**	**6.4**	**30**
1,1,2,2-Tetrachloroethane	**1**	**31.5024**	**33.6893**	**6.7**	**30**
Styrene	**1**	**18.5435**	**21.3312**	**14**	**30**
m&p-Xylenes	**1**	**37.419**	**42.7805**	**13**	**30**
o-Xylene	**1**	**24.1074**	**29.4289**	**20**	**30**
trans-1,4-Dichloro-2-butene	1	21.771	25.4142	15	30
1,3-Dichlorobenzene	**1**	**24.8094**	**27.0389**	**8.6**	**30**
1,4-Dichlorobenzene	**1**	**24.8234**	**27.2863**	**9.5**	**40**
1,2-Dichlorobenzene	**1**	**19.4942**	**21.7331**	**11**	**40**
Isopropylbenzene	**1**	**22.9266**	**27.4926**	**18**	**30**
Cyclohexanone	1	150.2581	49.8292	100*	30
Camphene	1	28.0104	30.3519	8	30
1,2,3-Trichloropropane	1	26.6472	29.4152	9.9	30
2-Chlorotoluene	1	22.0377	23.8158	7.8	30
p-Ethyltoluene	1	17.8218	20.3521	13	30
4-Chlorotoluene	1	19.8446	22.4539	12	30
n-Propylbenzene	1	16.6829	19.8422	17	40
Bromobenzene	1	25.2795	25.3393	0.24	30
1,3,5-Trimethylbenzene	1	21.3187	24.5447	14	30
Butyl methacrylate	1	0	5.3535	200*	30
t-Butylbenzene	1	25.2836	26.4768	4.6	30
1,2,4-Trimethylbenzene	1	10.325	14.579	34*	30
sec-Butylbenzene	1	16.7967	19.7108	16	40
4-Isopropyltoluene	1	17.6623	19.1752	8.2	30
n-Butylbenzene	1	4.5777	5.6199	20	30
p-Diethylbenzene	1	17.382	18.1579	4.4	30
1,2,4,5-Tetramethylbenzene	1	14.9818	16.0317	6.8	30
1,2-Dibromo-3-Chloropropane	**1**	**33.2725**	**33.629**	**1.1**	**30**
Camphor	1	196.4008	242.9913	21	30
Hexachlorobutadiene	1	25.9538	27.9422	7.4	30
1,2,4-Trichlorobenzene	**1**	**19.4304**	**20.8335**	**7**	**30**
1,2,3-Trichlorobenzene	**1**	**18.1757**	**19.7565**	**8.3**	**30**
Naphthalene	1	0	2.4036	200*	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84442

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131161.D	MBS84442	2/20/2020 2:32:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	54.7023	0	50	109	20	130
Dichlorodifluoromethane	1	62.0437	0	50	124	20	130
Chloromethane	1	55.1298	0	50	110	20	130
Bromomethane	1	48.2303	0	50	96	20	130
Vinyl Chloride	1	56.1745	0	50	112	20	130
Chloroethane	1	53.3733	0	50	107	20	130
Trichlorofluoromethane	1	56.1186	0	50	112	20	130
Ethyl ether	1	51.4291	0	50	103	50	130
Furan	1	50.1724	0	50	100	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	59.6119	0	50	119	50	130
Methylene Chloride	1	60.3283	0	50	121	50	130
Acrolein	1	260.6457	0	200	130	20	130
Acrylonitrile	1	52.1268	0	50	104	20	130
Iodomethane	1	56.2213	0	50	112	50	130
Acetone	1	260.271	0	200	130	20	130
Carbon Disulfide	1	53.2551	0	50	107	50	130
t-Butyl Alcohol	1	255.8417	0	200	128	20	130
n-Hexane	1	60.2675	0	50	121	50	130
Di-isopropyl-ether	1	49.4363	0	50	99	50	130
1,1-Dichloroethene	1	54.3026	0	50	109	50	130
Methyl Acetate	1	48.8672	0	50	98	50	130
Methyl-t-butyl ether	1	52.6391	0	50	105	50	130
1,1-Dichloroethane	1	52.0254	0	50	104	50	130
trans-1,2-Dichloroethene	1	56.7516	0	50	114	50	130
Ethyl-t-butyl ether	1	50.1707	0	50	100	50	130
cis-1,2-Dichloroethene	1	52.1091	0	50	104	50	130
Bromochloromethane	1	46.6889	0	50	93	50	130
2,2-Dichloropropane	1	55.1783	0	50	110	50	130
Ethyl acetate	1	40.4725	0	50	81	50	130
1,4-Dioxane	1	2758.002	0	2500	110	50	130
1,1-Dichloropropene	1	50.5433	0	50	101	50	130
Chloroform	1	50.9088	0	50	102	50	130
Cyclohexane	1	55.1046	0	50	110	50	130
1,2-Dichloroethane	1	44.0994	0	50	88	50	130
2-Butanone	1	17.4079	0	50	35	20	130
1,1,1-Trichloroethane	1	54.8839	0	50	110	50	130
Carbon Tetrachloride	1	50.6125	0	50	101	50	130
Vinyl Acetate	1	48.5287	0	50	97	50	130
Bromodichloromethane	1	54.1399	0	50	108	50	130
Methylcyclohexane	1	58.8356	0	50	118	50	130
Dibromomethane	1	57.7891	0	50	116	50	130
1,2-Dichloropropane	1	51.4415	0	50	103	50	130
Trichloroethene	1	53.6871	0	50	107	50	130
Benzene	1	46.2935	0	50	93	50	130
tert-Amyl methyl ether	1	43.4991	0	50	87	50	130
Iso-propylacetate	1	36.4972	0	50	73	50	130
Methyl methacrylate	1	39.6435	0	50	79	50	130
Dibromochloromethane	1	49.9847	0	50	100	50	130
2-Chloroethylvinylether	1	51.3942	0	50	103	50	130
cis-1,3-Dichloropropene	1	49.5703	0	50	99	50	130
trans-1,3-Dichloropropene	1	49.917	0	50	100	50	130
Ethyl methacrylate	1	45.4044	0	50	91	50	130
1,1,2-Trichloroethane	1	46.9793	0	50	94	50	130
1,2-Dibromoethane	1	51.7801	0	50	104	50	130
1,3-Dichloropropane	1	46.2667	0	50	93	50	130
4-Methyl-2-Pentanone	1	46.1395	0	50	92	20	130
2-Hexanone	1	46.8686	0	50	94	20	130
Tetrachloroethene	1	51.8962	0	50	104	50	130
Toluene	1	48.9234	0	50	98	50	130
1,1,1,2-Tetrachloroethane	1	52.1662	0	50	104	50	130
Chlorobenzene	1	49.4774	0	50	99	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84442

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	50.9835	0	50	102	50	130
n-Amyl acetate	1	47.394	0	50	95	50	130
Bromoform	**1**	**50.8956**	**0**	**50**	**102**	**20**	**130**
Ethylbenzene	**1**	**49.183**	**0**	**50**	**98**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**46.3359**	**0**	**50**	**93**	**50**	**130**
Styrene	**1**	**49.1108**	**0**	**50**	**98**	**50**	**130**
m&p-Xylenes	**1**	**99.5228**	**0**	**100**	**100**	**50**	**130**
o-Xylene	**1**	**50.1175**	**0**	**50**	**100**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	48.8119	0	50	98	20	130
1,3-Dichlorobenzene	**1**	**52.9257**	**0**	**50**	**106**	**50**	**130**
1,4-Dichlorobenzene	**1**	**53.6023**	**0**	**50**	**107**	**50**	**130**
1,2-Dichlorobenzene	**1**	**52.3115**	**0**	**50**	**105**	**50**	**130**
Isopropylbenzene	**1**	**50.5192**	**0**	**50**	**101**	**50**	**130**
Cyclohexanone	1	291.1569	0	250	116	50	130
Camphene	1	49.3947	0	50	99	50	130
1,2,3-Trichloropropane	1	45.6656	0	50	91	50	130
2-Chlorotoluene	1	48.4416	0	50	97	50	130
p-Ethyltoluene	1	49.8657	0	50	100	50	130
4-Chlorotoluene	1	49.3646	0	50	99	50	130
n-Propylbenzene	1	50.4993	0	50	101	50	130
Bromobenzene	1	47.1618	0	50	94	50	130
1,3,5-Trimethylbenzene	1	51.7253	0	50	103	50	130
Butyl methacrylate	1	45.9586	0	50	92	50	130
t-Butylbenzene	1	53.2627	0	50	107	50	130
1,2,4-Trimethylbenzene	1	53.3613	0	50	107	50	130
sec-Butylbenzene	1	52.8487	0	50	106	50	130
4-Isopropyltoluene	1	55.4491	0	50	111	50	130
n-Butylbenzene	1	54.5662	0	50	109	50	130
p-Diethylbenzene	1	54.6138	0	50	109	50	130
1,2,4,5-Tetramethylbenzene	1	59.6232	0	50	119	50	130
1,2-Dibromo-3-Chloropropane	**1**	**60.6711**	**0**	**50**	**121**	**50**	**130**
Camphor	1	611.3056	0	500	122	50	130
Hexachlorobutadiene	1	63.6437	0	50	127	50	130
1,2,4-Trichlorobenzene	**1**	**63.3588**	**0**	**50**	**127**	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**60.5732**	**0**	**50**	**121**	**50**	**130**
Naphthalene	1	53.9417	0	50	108	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84442

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131162.D	AD15618-002(MS)	2/20/2020 2:55:00 PM
Non Spike(If applicable):	1M131157.D	AD15618-002	2/20/2020 12:59:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	45.2268	0	50	90	20	130
Dichlorodifluoromethane	1	37.2391	0	50	74	20	130
Chloromethane	1	33.5543	0	50	67	20	130
Bromomethane	1	22.8165	0	50	46	20	130
Vinyl Chloride	1	30.967	0	50	62	20	130
Chloroethane	1	34.1508	0	50	68	20	130
Trichlorofluoromethane	1	36.9394	0	50	74	20	130
Ethyl ether	1	43.2961	2.0053	50	83	50	130
Furan	1	29.6728	0	50	59	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	39.3033	0	50	79	50	130
Methylene Chloride	1	69.3953	16.7369	50	105	50	130
Acrolein	1	0	0	200	0*	20	130
Acrylonitrile	1	25.4858	0	50	51	20	130
Iodomethane	1	20.7628	0	50	42*	50	130
Acetone	1	205.631	0	200	103	20	130
Carbon Disulfide	1	18.2113	0	50	36*	50	130
t-Butyl Alcohol	1	195.4918	0	200	98	20	130
n-Hexane	1	29.9024	0	50	60	50	130
Di-isopropyl-ether	1	37.9034	0	50	76	50	130
1,1-Dichloroethene	1	30.6765	0	50	61	50	130
Methyl Acetate	1	13.3799	0	50	27*	50	130
Methyl-t-butyl ether	1	41.6921	0	50	83	50	130
1,1-Dichloroethane	1	35.8684	0	50	72	50	130
trans-1,2-Dichloroethene	1	23.5314	0	50	47*	50	130
Ethyl-t-butyl ether	1	39.8343	0	50	80	50	130
cis-1,2-Dichloroethene	1	23.9834	0	50	48*	50	130
Bromochloromethane	1	26.1396	0	50	52	50	130
2,2-Dichloropropane	1	31.8871	0	50	64	50	130
Ethyl acetate	1	14.0812	0	50	28*	50	130
1,4-Dioxane	1	2131.685	0	2500	85	50	130
1,1-Dichloropropene	1	27.0859	0	50	54	50	130
Chloroform	1	33.3181	0	50	67	50	130
Cyclohexane	1	31.9827	0	50	64	50	130
1,2-Dichloroethane	1	28.1565	0	50	56	50	130
2-Butanone	1	13.5269	0	50	27	20	130
1,1,1-Trichloroethane	1	37.3543	0	50	75	50	130
Carbon Tetrachloride	1	35.6104	0	50	71	50	130
Vinyl Acetate	1	21.8094	0	50	44*	50	130
Bromodichloromethane	1	32.5314	0	50	65	50	130
Methylcyclohexane	1	29.5703	0	50	59	50	130
Dibromomethane	1	27.639	0	50	55	50	130
1,2-Dichloropropane	1	32.7539	0	50	66	50	130
Trichloroethene	1	24.363	0	50	49*	50	130
Benzene	1	24.6371	0	50	49*	50	130
tert-Amyl methyl ether	1	34.9736	0	50	70	50	130
Iso-propylacetate	1	7.4683	0	50	15*	50	130
Methyl methacrylate	1	18.0716	0	50	36*	50	130
Dibromochloromethane	1	25.5862	0	50	51	50	130
2-Chloroethylvinylether	1	18.8503	0	50	38*	50	130
cis-1,3-Dichloropropene	1	18.8835	0	50	38*	50	130
trans-1,3-Dichloropropene	1	13.9274	0	50	28*	50	130
Ethyl methacrylate	1	2.3535	0	50	4.7*	50	130
1,1,2-Trichloroethane	1	28.0124	0	50	56	50	130
1,2-Dibromoethane	1	20.5048	0	50	41*	50	130
1,3-Dichloropropane	1	24.1061	0	50	48*	50	130
4-Methyl-2-Pentanone	1	29.4941	0	50	59	20	130
2-Hexanone	1	17.8121	0	50	36	20	130
Tetrachloroethene	1	59.8294	12.2352	50	95	50	130
Toluene	1	19.7281	0	50	39*	50	130
1,1,1,2-Tetrachloroethane	1	27.4513	0	50	55	50	130
Chlorobenzene	1	12.9061	0	50	26*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84442

Method: 8260C	Matrix: Soil	QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	0	0	50	0*	50	130
n-Amyl acetate	1	0	0	50	0*	50	130
Bromoform	**1**	**22.0399**	**0**	**50**	**44**	**20**	**130**
Ethylbenzene	**1**	**20.5876**	**0**	**50**	**41***	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**25.834**	**0**	**50**	**52**	**50**	**130**
Styrene	**1**	**9.3182**	**0**	**50**	**19***	**50**	**130**
m&p-Xylenes	**1**	**36.0093**	**0**	**100**	**36***	**50**	**130**
o-Xylene	**1**	**17.6358**	**0**	**50**	**35***	**50**	**130**
trans-1,4-Dichloro-2-butene	1	18.6269	0	50	37	20	130
1,3-Dichlorobenzene	**1**	**8.4703**	**0**	**50**	**17***	**50**	**130**
1,4-Dichlorobenzene	**1**	**7.4726**	**0**	**50**	**15***	**50**	**130**
1,2-Dichlorobenzene	**1**	**8.136**	**0**	**50**	**16***	**50**	**130**
Isopropylbenzene	**1**	**22.6237**	**0**	**50**	**45***	**50**	**130**
Cyclohexanone	1	18.1298	0	250	7.3*	50	130
Camphene	1	25.8363	0	50	52	50	130
1,2,3-Trichloropropane	1	20.192	0	50	40*	50	130
2-Chlorotoluene	1	13.6675	0	50	27*	50	130
p-Ethyltoluene	1	17.9566	0	50	36*	50	130
4-Chlorotoluene	1	10.2474	0	50	20*	50	130
n-Propylbenzene	1	18.4369	0	50	37*	50	130
Bromobenzene	1	5.602	0	50	11*	50	130
1,3,5-Trimethylbenzene	1	19.5916	0	50	39*	50	130
Butyl methacrylate	1	3.9122	0	50	7.8*	50	130
t-Butylbenzene	1	23.2985	0	50	47*	50	130
1,2,4-Trimethylbenzene	1	15.8723	0	50	32*	50	130
sec-Butylbenzene	1	21.3411	0	50	43*	50	130
4-Isopropyltoluene	1	20.1356	0	50	40*	50	130
n-Butylbenzene	1	15.7008	0	50	31*	50	130
p-Diethylbenzene	1	16.2694	0	50	33*	50	130
1,2,4,5-Tetramethylbenzene	1	12.592	0	50	25*	50	130
1,2-Dibromo-3-Chloropropane	**1**	**20.216**	**0**	**50**	**40***	**50**	**130**
Camphor	1	378.3582	0	500	76	50	130
Hexachlorobutadiene	1	18.1568	0	50	36*	50	130
1,2,4-Trichlorobenzene	**1**	**4.6807**	**0**	**50**	**9.4***	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**4.4038**	**0**	**50**	**8.8***	**50**	**130**
Naphthalene	1	2.7108	0	50	5.4*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84442

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131163.D	AD15618-002(MSD)	2/20/2020 3:18:00 PM
Non Spike(If applicable):	1M131157.D	AD15618-002	2/20/2020 12:59:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	46.2812	0	50	93	20	130
Dichlorodifluoromethane	1	42.0019	0	50	84	20	130
Chloromethane	1	42.1695	0	50	84	20	130
Bromomethane	1	28.8319	0	50	58	20	130
Vinyl Chloride	1	40.7473	0	50	81	20	130
Chloroethane	1	43.1773	0	50	86	20	130
Trichlorofluoromethane	1	48.4539	0	50	97	20	130
Ethyl ether	1	43.3498	2.0053	50	83	50	130
Furan	1	35.3322	0	50	71	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	50.1482	0	50	100	50	130
Methylene Chloride	1	75.047	16.7369	50	117	50	130
Acrolein	1	0	0	200	0*	20	130
Acrylonitrile	1	24.9182	0	50	50	20	130
Iodomethane	1	30.8457	0	50	62	50	130
Acetone	1	192.9407	0	200	96	20	130
Carbon Disulfide	1	26.1175	0	50	52	50	130
t-Butyl Alcohol	1	187.5166	0	200	94	20	130
n-Hexane	1	37.0226	0	50	74	50	130
Di-isopropyl-ether	1	41.3414	0	50	83	50	130
1,1-Dichloroethene	1	40.7592	0	50	82	50	130
Methyl Acetate	1	35.5211	0	50	71	50	130
Methyl-t-butyl ether	1	42.2223	0	50	84	50	130
1,1-Dichloroethane	1	43.46	0	50	87	50	130
trans-1,2-Dichloroethene	1	29.6832	0	50	59	50	130
Ethyl-t-butyl ether	1	41.7631	0	50	84	50	130
cis-1,2-Dichloroethene	1	28.1178	0	50	56	50	130
Bromochloromethane	1	27.7051	0	50	55	50	130
2,2-Dichloropropane	1	40.0363	0	50	80	50	130
Ethyl acetate	1	17.1998	0	50	34*	50	130
1,4-Dioxane	1	2035.592	0	2500	81	50	130
1,1-Dichloropropene	1	30.5211	0	50	61	50	130
Chloroform	1	38.9267	0	50	78	50	130
Cyclohexane	1	40.822	0	50	82	50	130
1,2-Dichloroethane	1	26.9884	0	50	54	50	130
2-Butanone	1	16.486	0	50	33	20	130
1,1,1-Trichloroethane	1	46.789	0	50	94	50	130
Carbon Tetrachloride	1	38.342	0	50	77	50	130
Vinyl Acetate	1	23.2715	0	50	47*	50	130
Bromodichloromethane	1	36.159	0	50	72	50	130
Methylcyclohexane	1	38.1608	0	50	76	50	130
Dibromomethane	1	26.5739	0	50	53	50	130
1,2-Dichloropropane	1	36.3167	0	50	73	50	130
Trichloroethene	1	29.596	0	50	59	50	130
Benzene	1	26.7086	0	50	53	50	130
tert-Amyl methyl ether	1	33.7084	0	50	67	50	130
Iso-propylacetate	1	8.8159	0	50	18*	50	130
Methyl methacrylate	1	28.7547	0	50	58	50	130
Dibromochloromethane	1	26.7379	0	50	53	50	130
2-Chloroethylvinylether	1	17.7895	0	50	36*	50	130
cis-1,3-Dichloropropene	1	19.7356	0	50	39*	50	130
trans-1,3-Dichloropropene	1	13.6642	0	50	27*	50	130
Ethyl methacrylate	1	3.7348	0	50	7.5*	50	130
1,1,2-Trichloroethane	1	28.5742	0	50	57	50	130
1,2-Dibromoethane	1	20.0785	0	50	40*	50	130
1,3-Dichloropropane	1	24.3733	0	50	49*	50	130
4-Methyl-2-Pentanone	1	28.0573	0	50	56	20	130
2-Hexanone	1	17.8862	0	50	36	20	130
Tetrachloroethene	1	62.5171	12.2352	50	101	50	130
Toluene	1	24.3403	0	50	49*	50	130
1,1,1,2-Tetrachloroethane	1	30.4605	0	50	61	50	130
Chlorobenzene	1	15.911	0	50	32*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84442

Method: 8260C	Matrix: Soil	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	0	0	50	0*	50	130
n-Amyl acetate	1	0	0	50	0*	50	130
Bromoform	**1**	**21.9567**	**0**	**50**	**44**	**20**	**130**
Ethylbenzene	**1**	**23.8839**	**0**	**50**	**48***	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**24.7058**	**0**	**50**	**49***	**50**	**130**
Styrene	**1**	**11.6945**	**0**	**50**	**23***	**50**	**130**
m&p-Xylenes	**1**	**43.6086**	**0**	**100**	**44***	**50**	**130**
o-Xylene	**1**	**21.2876**	**0**	**50**	**43***	**50**	**130**
trans-1,4-Dichloro-2-butene	1	20.4497	0	50	41	20	130
1,3-Dichlorobenzene	**1**	**9.3327**	**0**	**50**	**19***	**50**	**130**
1,4-Dichlorobenzene	**1**	**8.229**	**0**	**50**	**16***	**50**	**130**
1,2-Dichlorobenzene	**1**	**8.9798**	**0**	**50**	**18***	**50**	**130**
Isopropylbenzene	**1**	**27.3235**	**0**	**50**	**55**	**50**	**130**
Cyclohexanone	1	15.934	0	250	6.4*	50	130
Camphene	1	29.5043	0	50	59	50	130
1,2,3-Trichloropropane	1	18.7724	0	50	38*	50	130
2-Chlorotoluene	1	16.7587	0	50	34*	50	130
p-Ethyltoluene	1	20.3899	0	50	41*	50	130
4-Chlorotoluene	1	12.507	0	50	25*	50	130
n-Propylbenzene	1	21.8172	0	50	44*	50	130
Bromobenzene	1	7.3767	0	50	15*	50	130
1,3,5-Trimethylbenzene	1	22.7446	0	50	45*	50	130
Butyl methacrylate	1	4.1433	0	50	8.3*	50	130
t-Butylbenzene	1	26.9828	0	50	54	50	130
1,2,4-Trimethylbenzene	1	18.5424	0	50	37*	50	130
sec-Butylbenzene	1	24.7752	0	50	50	50	130
4-Isopropyltoluene	1	22.5536	0	50	45*	50	130
n-Butylbenzene	1	16.8672	0	50	34*	50	130
p-Diethylbenzene	1	17.4729	0	50	35*	50	130
1,2,4,5-Tetramethylbenzene	1	12.9343	0	50	26*	50	130
1,2-Dibromo-3-Chloropropane	**1**	**18.892**	**0**	**50**	**38***	**50**	**130**
Camphor	1	319.5004	0	500	64	50	130
Hexachlorobutadiene	1	17.6312	0	50	35*	50	130
1,2,4-Trichlorobenzene	**1**	**4.3448**	**0**	**50**	**8.7***	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**4.0786**	**0**	**50**	**8.2***	**50**	**130**
Naphthalene	1	2.7305	0	50	5.5*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84442

	Data File	Sample ID:	Analysis Date
Spike or Dup:	1M131163.D	AD15618-002(MSD)	2/20/2020 3:18:00 PM
Duplicate(If applicable):	1M131162.D	AD15618-002(MS)	2/20/2020 2:55:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	46.2812	45.2268	2.3	30
Dichlorodifluoromethane	**1**	**42.0019**	**37.2391**	**12**	**30**
Chloromethane	**1**	**42.1695**	**33.5543**	**23**	**30**
Bromomethane	**1**	**28.8319**	**22.8165**	**23**	**30**
Vinyl Chloride	**1**	**40.7473**	**30.967**	**27**	**40**
Chloroethane	**1**	**43.1773**	**34.1508**	**23**	**30**
Trichlorofluoromethane	**1**	**48.4539**	**36.9394**	**27**	**30**
Ethyl ether	1	43.3498	43.2961	0.12	30
Furan	1	35.3322	29.6728	17	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**50.1482**	**39.3033**	**24**	**30**
Methylene Chloride	**1**	**75.047**	**69.3953**	**7.8**	**30**
Acrolein	1	0	0	NA	30
Acrylonitrile	1	24.9182	25.4858	2.3	30
Iodomethane	1	30.8457	20.7628	39*	30
Acetone	**1**	**192.9407**	**205.631**	**6.4**	**30**
Carbon Disulfide	**1**	**26.1175**	**18.2113**	**36***	**30**
t-Butyl Alcohol	1	187.5166	195.4918	4.2	30
n-Hexane	1	37.0226	29.9024	21	30
Di-isopropyl-ether	1	41.3414	37.9034	8.7	30
1,1-Dichloroethene	**1**	**40.7592**	**30.6765**	**28**	**40**
Methyl Acetate	**1**	**35.5211**	**13.3799**	**91***	**30**
Methyl-t-butyl ether	**1**	**42.2223**	**41.6921**	**1.3**	**30**
1,1-Dichloroethane	**1**	**43.46**	**35.8684**	**19**	**40**
trans-1,2-Dichloroethene	**1**	**29.6832**	**23.5314**	**23**	**30**
Ethyl-t-butyl ether	1	41.7631	39.8343	4.7	30
cis-1,2-Dichloroethene	**1**	**28.1178**	**23.9834**	**16**	**30**
Bromochloromethane	**1**	**27.7051**	**26.1396**	**5.8**	**30**
2,2-Dichloropropane	1	40.0363	31.8871	23	30
Ethyl acetate	1	17.1998	14.0812	20	30
1,4-Dioxane	**1**	**2035.592**	**2131.685**	**4.6**	**30**
1,1-Dichloropropene	1	30.5211	27.0859	12	30
Chloroform	**1**	**38.9267**	**33.3181**	**16**	**40**
Cyclohexane	**1**	**40.822**	**31.9827**	**24**	**30**
1,2-Dichloroethane	**1**	**26.9884**	**28.1565**	**4.2**	**40**
2-Butanone	**1**	**16.486**	**13.5269**	**20**	**40**
1,1,1-Trichloroethane	**1**	**46.789**	**37.3543**	**22**	**30**
Carbon Tetrachloride	**1**	**38.342**	**35.6104**	**7.4**	**40**
Vinyl Acetate	1	23.2715	21.8094	6.5	30
Bromodichloromethane	**1**	**36.159**	**32.5314**	**11**	**30**
Methylcyclohexane	**1**	**38.1608**	**29.5703**	**25**	**30**
Dibromomethane	1	26.5739	27.639	3.9	30
1,2-Dichloropropane	**1**	**36.3167**	**32.7539**	**10**	**30**
Trichloroethene	**1**	**29.596**	**24.363**	**19**	**40**
Benzene	**1**	**26.7086**	**24.6371**	**8.1**	**40**
tert-Amyl methyl ether	1	33.7084	34.9736	3.7	30
Iso-propylacetate	1	8.8159	7.4683	17	30
Methyl methacrylate	1	28.7547	18.0716	46*	30
Dibromochloromethane	**1**	**26.7379**	**25.5862**	**4.4**	**30**
2-Chloroethylvinylether	1	17.7895	18.8503	5.8	30
cis-1,3-Dichloropropene	**1**	**19.7356**	**18.8835**	**4.4**	**30**
trans-1,3-Dichloropropene	**1**	**13.6642**	**13.9274**	**1.9**	**30**
Ethyl methacrylate	1	3.7348	2.3535	45*	30
1,1,2-Trichloroethane	**1**	**28.5742**	**28.0124**	**2**	**30**
1,2-Dibromoethane	**1**	**20.0785**	**20.5048**	**2.1**	**30**
1,3-Dichloropropane	1	24.3733	24.1061	1.1	30
4-Methyl-2-Pentanone	**1**	**28.0573**	**29.4941**	**5**	**30**
2-Hexanone	**1**	**17.8862**	**17.8121**	**0.42**	**30**
Tetrachloroethene	**1**	**62.5171**	**59.8294**	**4.4**	**40**
Toluene	**1**	**24.3403**	**19.7281**	**21**	**40**
1,1,1,2-Tetrachloroethane	1	30.4605	27.4513	10	30
Chlorobenzene	**1**	**15.911**	**12.9061**	**21**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84442

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	0	0	NA	30
n-Amyl acetate	1	0	0	NA	30
Bromoform	**1**	**21.9567**	**22.0399**	**0.38**	**30**
Ethylbenzene	**1**	**23.8839**	**20.5876**	**15**	**30**
1,1,2,2-Tetrachloroethane	**1**	**24.7058**	**25.834**	**4.5**	**30**
Styrene	**1**	**11.6945**	**9.3182**	**23**	**30**
m&p-Xylenes	**1**	**43.6086**	**36.0093**	**19**	**30**
o-Xylene	**1**	**21.2876**	**17.6358**	**19**	**30**
trans-1,4-Dichloro-2-butene	1	20.4497	18.6269	9.3	30
1,3-Dichlorobenzene	**1**	**9.3327**	**8.4703**	**9.7**	**30**
1,4-Dichlorobenzene	**1**	**8.229**	**7.4726**	**9.6**	**40**
1,2-Dichlorobenzene	**1**	**8.9798**	**8.136**	**9.9**	**40**
Isopropylbenzene	**1**	**27.3235**	**22.6237**	**19**	**30**
Cyclohexanone	1	15.934	18.1298	13	30
Camphene	1	29.5043	25.8363	13	30
1,2,3-Trichloropropane	1	18.7724	20.192	7.3	30
2-Chlorotoluene	1	16.7587	13.6675	20	30
p-Ethyltoluene	1	20.3899	17.9566	13	30
4-Chlorotoluene	1	12.507	10.2474	20	30
n-Propylbenzene	1	21.8172	18.4369	17	40
Bromobenzene	1	7.3767	5.602	27	30
1,3,5-Trimethylbenzene	1	22.7446	19.5916	15	30
Butyl methacrylate	1	4.1433	3.9122	5.7	30
t-Butylbenzene	1	26.9828	23.2985	15	30
1,2,4-Trimethylbenzene	1	18.5424	15.8723	16	30
sec-Butylbenzene	1	24.7752	21.3411	15	40
4-Isopropyltoluene	1	22.5536	20.1356	11	30
n-Butylbenzene	1	16.8672	15.7008	7.2	30
p-Diethylbenzene	1	17.4729	16.2694	7.1	30
1,2,4,5-Tetramethylbenzene	1	12.9343	12.592	2.7	30
1,2-Dibromo-3-Chloropropane	**1**	**18.892**	**20.216**	**6.8**	**30**
Camphor	1	319.5004	378.3582	17	30
Hexachlorobutadiene	1	17.6312	18.1568	2.9	30
1,2,4-Trichlorobenzene	**1**	**4.3448**	**4.6807**	**7.4**	**30**
1,2,3-Trichlorobenzene	**1**	**4.0786**	**4.4038**	**7.7**	**30**
Naphthalene	1	2.7305	2.7108	0.72	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 1M131120.D
Matrix: Soil

Blank Analysis Date: 02/19/20 22:54
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD15713-002	1M131132.D	02/20/20 03:33
AD15713-004	1M131133.D	02/20/20 03:56
AD15713-006	1M131134.D	02/20/20 04:19
AD15713-010	1M131136.D	02/20/20 05:06
AD15713-012	1M131137.D	02/20/20 05:29
AD15697-003(MSD	1M131126.D	02/20/20 01:14
AD15697-003(MS)	1M131125.D	02/20/20 00:50
AD15697-003	1M131123.D	02/20/20 00:04
MBS84430	1M131121.D	02/19/20 23:17

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 1M131155.D
Matrix: Soil

Blank Analysis Date: 02/20/20 12:13
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD15713-008	1M131156.D	02/20/20 12:36
AD15618-002(MSD	1M131163.D	02/20/20 15:18
AD15618-002(MS)	1M131162.D	02/20/20 14:55
MBS84442	1M131161.D	02/20/20 14:32
AD15618-002	1M131157.D	02/20/20 12:59

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M131066.D
Analysis Date: 02/18/20 22:14
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.580 to 7.619 min

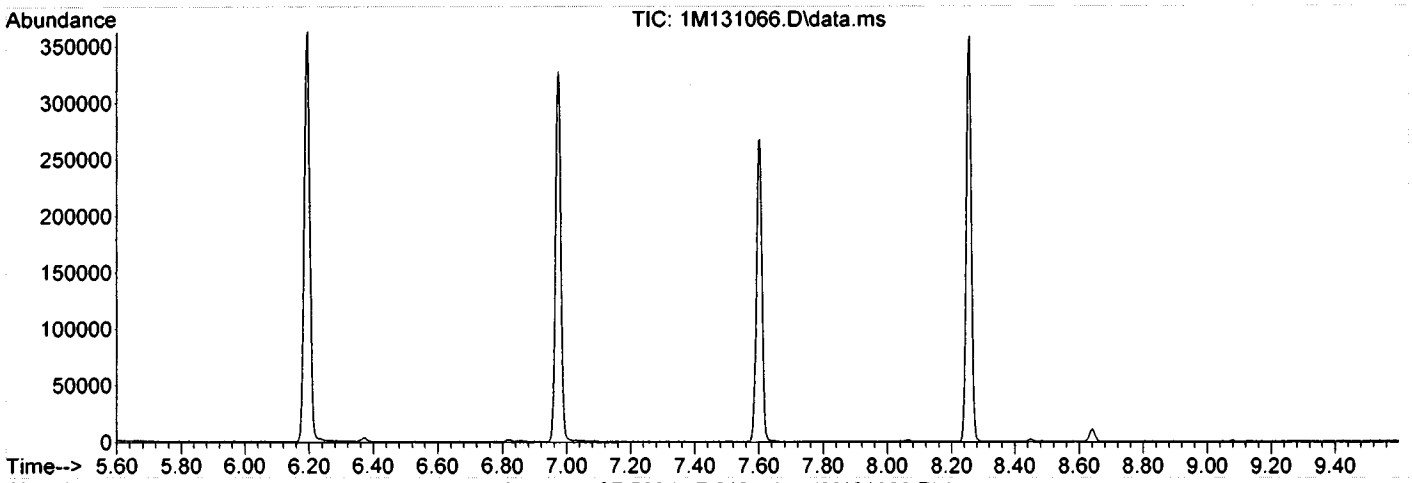
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.2	4165	PASS
75	95	30	60	50.0	12136	PASS
95	95	100	100	100.0	24273	PASS
96	95	5	9	6.7	1638	PASS
173	174	0.00	2	0.7	148	PASS
174	95	50	100	86.5	21007	PASS
175	174	5	9	7.6	1595	PASS
176	174	95	101	95.8	20130	PASS
177	176	5	9	7.1	1437	PASS

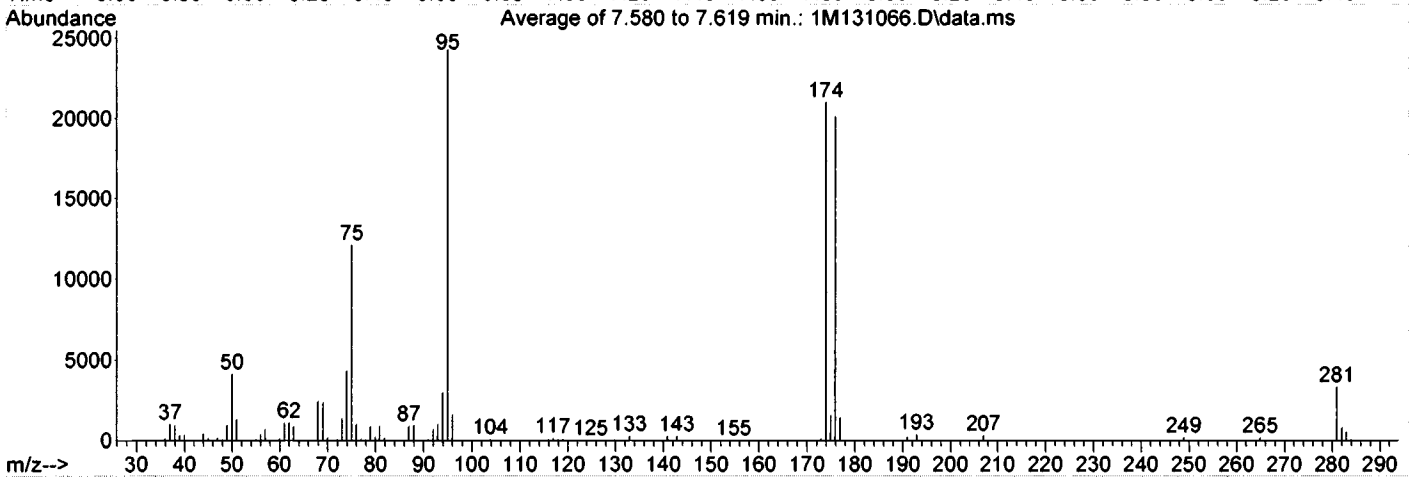
Data File	Sample Number	Analysis Date:
1M131067.D	CAL @ 0.5 PPB	02/18/20 22:37
1M131068.D	CAL @1 PPB	02/18/20 23:00
1M131069.D	CAL @ 2 PPB	02/18/20 23:23
1M131070.D	CAL @ 5 PPB	02/18/20 23:47
1M131071.D	CAL @ 20 PPB	02/19/20 00:10
1M131072.D	CAL @ 50 PPB	02/19/20 00:33
1M131073.D	CAL @ 500 PPB	02/19/20 00:56
1M131075.D	CAL @ 250 PPB	02/19/20 01:43
1M131077.D	CAL @ 100 PPB	02/19/20 02:29
1M131081.D	ICV	02/19/20 04:03

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1820\
Data File : 1M131066.D
Acq On : 18 Feb 2020 22:14
Operator : WP
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 5 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_1\MethodQt\1M_S0115.M
Title : @GCMS_1,ug,624,8260
Last Update : Thu Jan 16 09:36:57 2020





Spectrum Information: Average of 7.580 to 7.619 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	4165	PASS
75	95	30	60	50.0	12136	PASS
95	95	100	100	100.0	24273	PASS
96	95	5	9	6.7	1638	PASS
173	174	0.00	2	0.7	148	PASS
174	95	50	100	86.5	21007	PASS
175	174	5	9	7.6	1595	PASS
176	174	95	101	95.8	20130	PASS
177	176	5	9	7.1	1437	PASS

Form 5

Tune Name: BFB TUNE **Data File:** 1M131116.D
Instrument: GCMS 1 **Analysis Date:** 02/19/20 21:21
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.583 to 7.622 min

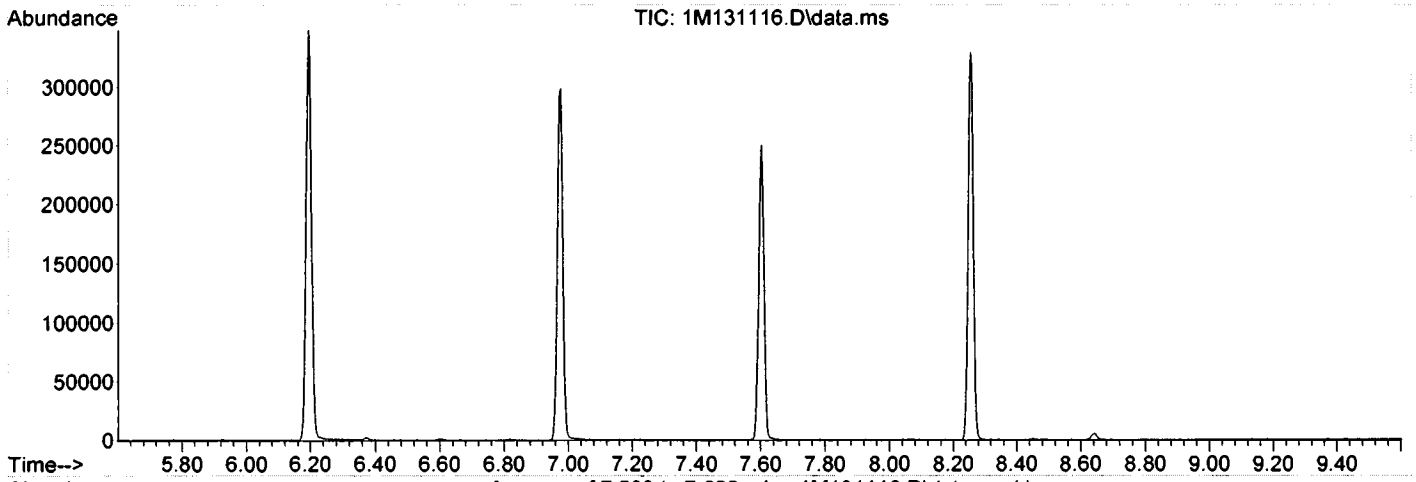
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.0	3934	PASS
75	95	30	60	50.1	10959	PASS
95	95	100	100	100.0	21888	PASS
96	95	5	9	7.0	1540	PASS
173	174	0.00	2	1.1	218	PASS
174	95	50	100	86.8	18996	PASS
175	174	5	9	8.3	1570	PASS
176	174	95	101	98.0	18609	PASS
177	176	5	9	7.2	1337	PASS

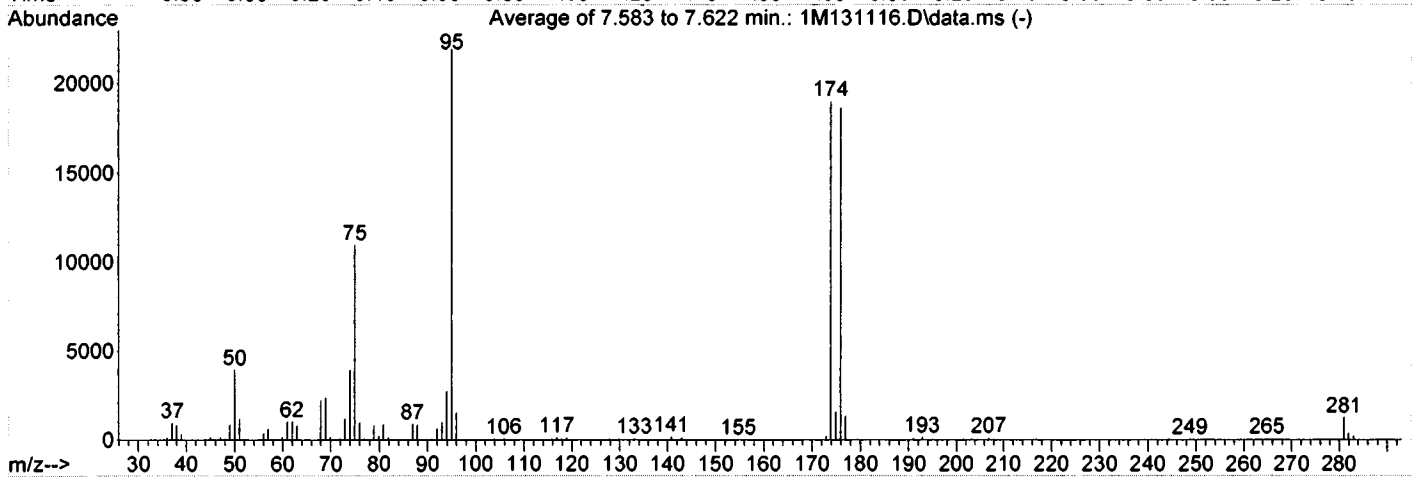
Data File	Sample Number	Analysis Date:
1M131117.D	50 PPB	02/19/20 21:44
1M131118.D	CAL @ 50 PPB	02/19/20 22:08
1M131119.D	BLK	02/19/20 22:31
1M131120.D	DAILY BLANK	02/19/20 22:54
1M131121.D	MBS84430	02/19/20 23:17
1M131122.D	BLK	02/19/20 23:41
1M131123.D	AD15697-003	02/20/20 00:04
1M131124.D	AD15766-001(5X)	02/20/20 00:27
1M131125.D	AD15697-003(MS)	02/20/20 00:50
1M131126.D	AD15697-003(MSD	02/20/20 01:14
1M131127.D	BLK	02/20/20 01:37
1M131128.D	AD15704-002	02/20/20 02:00
1M131129.D	AD15687-012	02/20/20 02:23
1M131130.D	AD15704-004	02/20/20 02:47
1M131131.D	AD15704-006	02/20/20 03:10
1M131132.D	AD15713-002	02/20/20 03:33
1M131133.D	AD15713-004	02/20/20 03:56
1M131134.D	AD15713-006	02/20/20 04:19
1M131135.D	AD15713-008	02/20/20 04:43
1M131136.D	AD15713-010	02/20/20 05:06
1M131137.D	AD15713-012	02/20/20 05:29
1M131138.D	AD15714-001	02/20/20 05:53
1M131139.D	AD15714-002	02/20/20 06:16
1M131140.D	AD15715-001	02/20/20 06:39
1M131141.D	AD15715-002	02/20/20 07:02
1M131142.D	AD15715-003	02/20/20 07:26
1M131143.D	AD15715-004	02/20/20 07:49
1M131144.D	AD15719-001	02/20/20 08:12
1M131145.D	AD15719-002	02/20/20 08:35
1M131146.D	AD15719-001	02/20/20 08:59
1M131147.D	BLK	02/20/20 09:22

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-1920\
Data File : 1M131116.D
Acq On : 19 Feb 2020 21:21
Operator : WP
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 2 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_1\MethodQt\1M_S0218.M
Title : @GCMS_1,ug,624,8260
Last Update : Wed Feb 19 06:51:52 2020





Spectrum Information: Average of 7.583 to 7.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.0	3934	PASS
75	95	30	60	50.1	10959	PASS
95	95	100	100	100.0	21888	PASS
96	95	5	9	7.0	1540	PASS
173	174	0.00	2	1.1	218	PASS
174	95	50	100	86.8	18996	PASS
175	174	5	9	8.3	1570	PASS
176	174	95	101	98.0	18609	PASS
177	176	5	9	7.2	1337	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 1

Data File: 1M131152.D
Analysis Date: 02/20/20 11:03
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.580 to 7.622 min

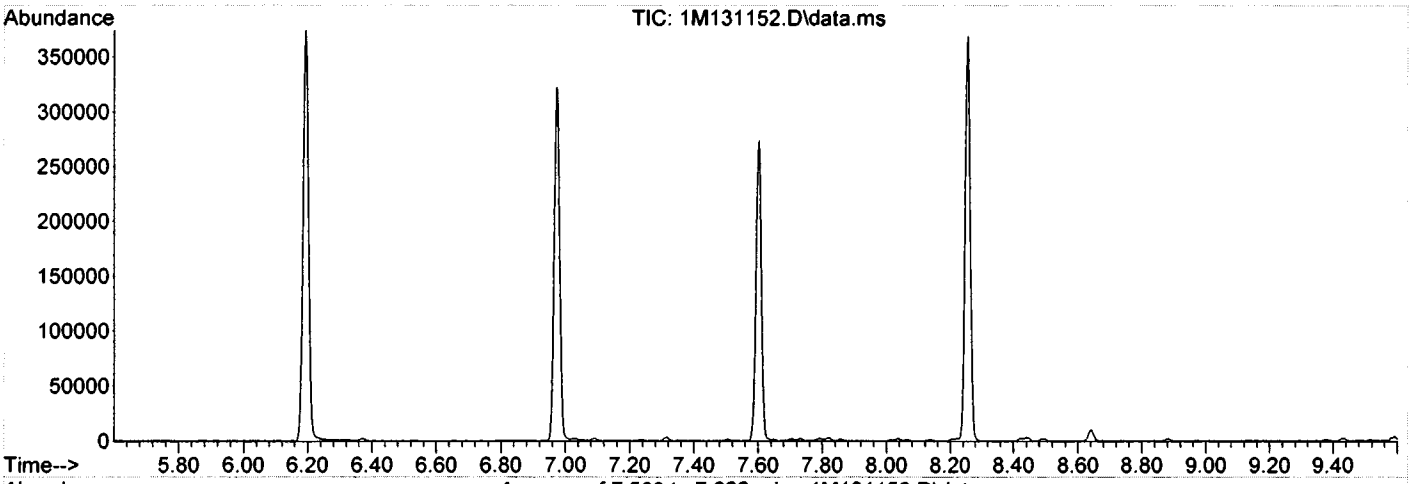
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	16.4	3730	PASS
75	95	30	60	48.9	11157	PASS
95	95	100	100	100.0	22795	PASS
96	95	5	9	7.0	1586	PASS
173	174	0.00	2	0.8	174	PASS
174	95	50	100	90.8	20691	PASS
175	174	5	9	6.7	1385	PASS
176	174	95	101	99.6	20599	PASS
177	176	5	9	6.5	1334	PASS

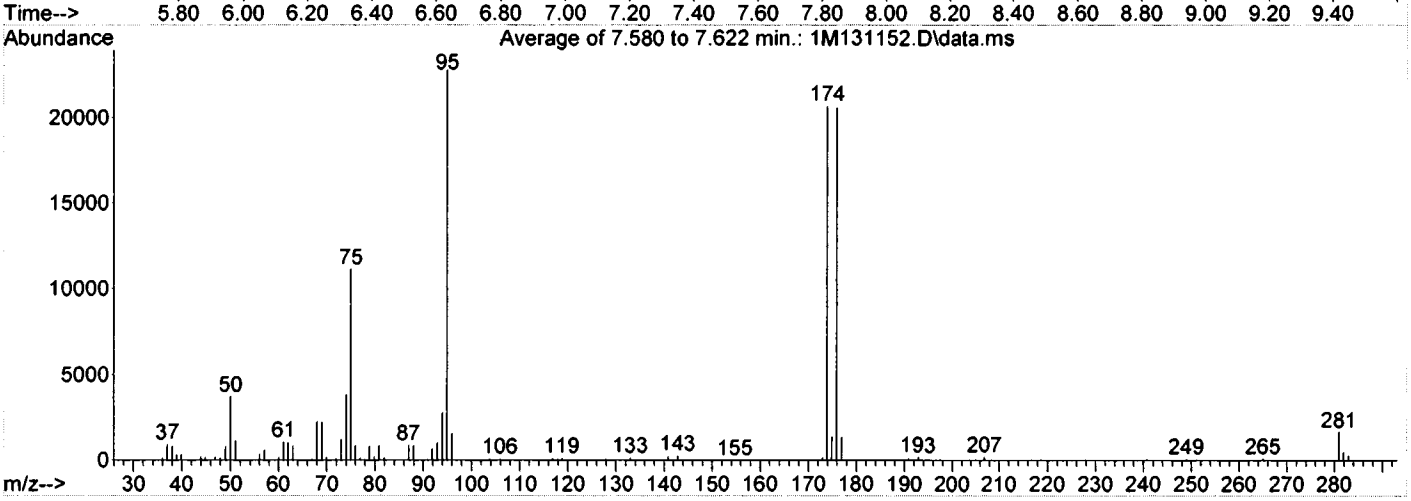
Data File	Sample Number	Analysis Date:
1M131153.D	CAL @ 50 PPB	02/20/20 11:26
1M131154.D	BLK	02/20/20 11:49
1M131155.D	DAILY BLANK	02/20/20 12:13
1M131156.D	AD15713-008	02/20/20 12:36
1M131157.D	AD15618-002	02/20/20 12:59
1M131158.D	AD15618-004	02/20/20 13:22
1M131159.D	AD15816-004	02/20/20 13:45
1M131160.D	AD15816-002	02/20/20 14:09
1M131161.D	MBS84442	02/20/20 14:32
1M131162.D	AD15618-002(MS)	02/20/20 14:55
1M131163.D	AD15618-002(MSD	02/20/20 15:18
1M131164.D	AD15751-001	02/20/20 15:42
1M131165.D	AD15806-001	02/20/20 16:05
1M131166.D	AD15806-006	02/20/20 16:28
1M131167.D	AD15806-005	02/20/20 16:51
1M131168.D	AD15718-001	02/20/20 17:15
1M131169.D	AD15718-002	02/20/20 17:38
1M131170.D	AD15718-005	02/20/20 18:01
1M131171.D	AD15718-006	02/20/20 18:24
1M131172.D	AD15718-007	02/20/20 18:47
1M131173.D	AD15718-008	02/20/20 19:11
1M131174.D	AD15739-002	02/20/20 19:34
1M131175.D	AD15739-004	02/20/20 19:57
1M131176.D	AD15739-006	02/20/20 20:20
1M131177.D	AD15739-008	02/20/20 20:43
1M131178.D	AD15739-010	02/20/20 21:07
1M131179.D	AD15739-012	02/20/20 21:30
1M131180.D	BLK	02/20/20 21:53

Data Path : G:\GcMsData\2020\GCMS_1\Data\02-20-20\
Data File : 1M131152.D
Acq On : 20 Feb 2020 11:03
Operator : WP
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 7 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_1\MethodQt\1M_S0218.M
Title : @GCMS_1,ug,624,8260
Last Update : Wed Feb 19 06:51:52 2020





Spectrum Information: Average of 7.580 to 7.622 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.4	3730	PASS
75	95	30	60	48.9	11157	PASS
95	95	100	100	100.0	22795	PASS
96	95	5	9	7.0	1586	PASS
173	174	0.00	2	0.8	174	PASS
174	95	50	100	90.8	20691	PASS
175	174	5	9	6.7	1385	PASS
176	174	95	101	99.6	20599	PASS
177	176	5	9	6.5	1334	PASS

0021406 0106

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1M131071.D	CAL @ 20 PPB	02/19/20 00:10	2	1M131070.D	CAL @ 5 PPB	02/18/20 23:47
3	1M131069.D	CAL @ 2 PPB	02/18/20 23:23	4	1M131072.D	CAL @ 50 PPB	02/19/20 00:33
5	1M131077.D	CAL @ 100 PPB	02/19/20 02:29	6	1M131075.D	CAL @ 250 PPB	02/19/20 01:43
7	1M131073.D	CAL @ 500 PPB	02/19/20 00:56	8	1M131068.D	CAL @1 PPB	02/18/20 23:00
9	1M131067.D	CAL @ 0.5 PPB	02/18/20 22:37				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2199	0.2246	0.1802	0.1860	0.1822	0.1942	0.1874	-----	-----	0.196	2.19	1.00	1.00	9.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluorometha	1	0	Avg	0.2218	0.2195	0.1540	0.1841	0.1789	0.1951	0.1929	-----	-----	0.192	2.15	1.00	1.00	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Avg	0.2414	0.2337	0.1880	0.1932	0.1923	0.1989	0.1824	-----	-----	0.204	2.35	0.998	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.2340	0.2464	0.2097	0.1825	0.2240	0.2399	0.2585	-----	-----	0.228	2.71	0.998	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.3146	0.3073	0.2483	0.2597	0.2489	0.2759	0.2584	-----	-----	0.273	2.42	0.999	0.999	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.1987	0.1873	0.1329	0.1568	0.1657	0.1726	0.1672	-----	-----	0.169	2.79	1.00	1.00	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethan	1	0	Avg	0.4943	0.4791	0.3749	0.3797	0.3897	0.4284	0.4110	-----	-----	0.422	3.00	0.999	0.999	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1712	0.1726	0.1144	0.1314	0.1385	0.1424	0.1352	-----	-----	0.144	3.21	0.999	1.00	15	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.3055	0.3082	0.2476	0.2386	0.2406	0.2558	0.2445	-----	-----	0.263	3.26	0.999	1.00	12	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.2340	0.2208	0.1714	0.1791	0.1839	0.2014	0.1982	-----	-----	0.198	3.41	1.00	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Qua	0.3489	0.4290	0.2537	0.2431	0.2378	0.2427	0.2313	-----	-----	0.284	3.79	0.999	1.00	27	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0229	0.0219	0.0149	0.0168	0.0181	0.0187	0.0170	-----	-----	0.0187	3.32	0.998	0.999	15		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.0604	0.0613	0.0359	0.0440	0.0469	0.0466	0.0429	-----	-----	0.0483	3.97	0.998	1.00	19		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Qua	0.2678	0.1481	0.0632	0.2750	0.2701	0.3115	0.3060	-----	-----	0.235	3.55	0.999	0.999	40		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	Qua	0.0412	0.0478	0.0457	0.0297	0.0320	0.0310	0.0283	-----	-----	0.0366	3.44	0.998	1.00	22	0.10 a	100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	0.7842	0.7659	0.6483	0.6404	0.6537	0.7062	0.6862	-----	-----	0.698	3.62	1.00	1.00	8.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0189	0.0190	0.0136	0.0142	0.0156	0.0144	0.0130	-----	-----	0.0156	3.84	0.997	1.00	16		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.2871	0.2768	0.2236	0.2264	0.2250	0.2368	0.2320	-----	-----	0.244	4.21	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.5619	0.5557	0.4306	0.4339	0.4459	0.4704	0.4570	-----	-----	0.479	4.35	1.00	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1-Dichloroethene	1	0	Avg	0.3704	0.3617	0.2753	0.2934	0.2930	0.3186	0.3111	-----	-----	0.318	3.42	1.00	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.1364	0.1443	0.1253	0.0954	0.1009	0.0983	0.0903	-----	-----	0.113	3.69	0.998	1.00	19	0.10 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.6133	0.5984	0.4671	0.4729	0.4991	0.5181	0.4954	0.4973	-----	0.520	4.00	0.999	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.4838	0.4807	0.3721	0.3781	0.3754	0.3979	0.3882	-----	-----	0.411	4.32	1.00	1.00	12	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,2-Dichloroethe	1	0	Avg	0.3175	0.2967	0.2335	0.2465	0.2473	0.2663	0.2636	-----	-----	0.267	4.01	1.00	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.6435	0.6380	0.4898	0.5000	0.5242	0.5414	0.5346	-----	-----	0.553	4.59	1.00	1.00	11	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,2-Dichloroethene	1	0	Avg	0.4402	0.4387	0.3359	0.3342	0.3449	0.3642	0.3730	-----	-----	0.376	4.70	0.999	1.00	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.1838	0.1952	0.1462	0.1436	0.1678	0.1692	0.1670	-----	-----	0.168	4.84	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2,2-Dichloropropane	1	0	Avg	0.3965	0.3925	0.3023	0.3136	0.3214	0.3534	0.3690	-----	-----	0.350	4.71	0.999	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.1908	0.1870	0.1164	0.1379	0.1449	0.1432	0.1424	-----	-----	0.152	4.72	1.00	1.00	18		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dioxane	1	0	Avg	0.0019	0.0019	0.0012	0.0016	0.0017	0.0018	0.0017	-----	-----	0.00173	5.74	1.00	1.00	13		1000.	250.0	100.0	2500.	5000.	12500	25000		
1,1-Dichloropropene	1	0	Avg	0.3435	0.3935	0.2978	0.3072	0.3121	0.3406	0.3565	-----	-----	0.336	5.09	0.999	1.00	9.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.5484	0.6036	0.5429	0.4119	0.4192	0.4365	0.4410	-----	-----	0.486	4.88	1.00	1.00	16	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethan	1	0	Avg	0.3333	0.3337	0.2643	0.2574	0.2632	0.2576	0.2597	0.2671	0.2595	0.277	4.97	-1	-1	12		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.3597	0.3549	0.2966	0.2859	0.2896	0.3133	0.3201	-----	-----	0.317	5.05	0.999	1.00	9.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloroethane-d4	1	0	Avg	0.1212	0.1500	0.1200	0.1140	0.1168	0.1108	0.1097	0.1210	0.1177	0.120	5.17	-1	-1	9.9		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.2773	0.3429	0.2656	0.2611	0.2691	0.2841	0.3045	-----	-----	0.286	5.21	0.999	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Butanone	1	0	Avg	0.2242	0.1547	0.1210	0.1461	0.1490	0.1545	0.1553	-----	-----	0.158	4.70	0.999	1.00	20	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,1-Trichloroethane	1	0	Avg	0.4937	0.4814	0.3630	0.3823	0.3875	0.4192	0.4271	-----	-----	0.422	5.01	0.999	1.00	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.3722	0.4248	0.3165	0.3523	0.3585	0.4053	0.4283	-----	-----	0.380	5.10	0.999	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.4934	0.4914	0.4050	0.3854	0.3961	0.4147	0.4011	-----	-----	0.427	4.35	1.00	1.00	11		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethan	1	0	Avg	0.2946	0.2732	0.2153	0.2381	0.2483	0.2792	0.2849	-----	-----	0.262	5.82	0.999	1.00	11	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.05
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0021406 0107

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1M131071.D	CAL @ 20 PPB	02/19/20 00:10	2	1M131070.D	CAL @ 5 PPB	02/18/20 23:47
3	1M131069.D	CAL @ 2 PPB	02/18/20 23:23	4	1M131072.D	CAL @ 50 PPB	02/19/20 00:33
5	1M131077.D	CAL @ 100 PPB	02/19/20 02:29	6	1M131075.D	CAL @ 250 PPB	02/19/20 01:43
7	1M131073.D	CAL @ 500 PPB	02/19/20 00:56	8	1M131068.D	CAL @1 PPB	02/18/20 23:00
9	1M131067.D	CAL @ 0.5 PPB	02/18/20 22:37				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.3241	0.2929	0.2291	0.3119	0.2804	0.3309	0.3410	-----	-----	0.301	5.68	0.999	0.999	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1389	0.1345	0.0989	0.1236	0.1233	0.1406	0.1489	-----	-----	0.130	5.75	0.998	1.00	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloropropane	1	0	Avg	0.1998	0.1908	0.1446	0.1906	0.1727	0.1952	0.1964	-----	-----	0.184	5.68	0.999	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.2543	0.2561	0.2027	0.2607	0.2637	0.2997	0.2561	-----	-----	0.256	5.56	0.993	0.998	11	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	0.8731	1.0816	0.8739	0.8896	0.8995	0.9857	1.0274	0.8739	-----	0.938	5.22	0.999	1.00	8.7	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.4652	0.5687	0.4536	0.4821	0.5082	0.5305	0.5313	-----	-----	0.506	5.26	1.00	1.00	8.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.2936	0.3793	0.3888	0.3572	0.3578	0.3493	0.3504	-----	-----	0.354	5.20	1.00	1.00	8.6	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.1502	0.1424	0.1544	0.1770	0.1583	0.1581	0.1481	-----	-----	0.156	5.70	0.999	1.00	7.1	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethan	1	0	Avg	0.2978	0.2698	0.2682	0.3051	0.3176	0.3492	0.3472	-----	-----	0.308	6.67	1.00	1.00	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylethe	1	0	Avg	0.0736	0.0722	0.0642	0.0756	0.0765	0.0752	0.0734	-----	-----	0.0730	5.95	1.00	1.00	5.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropen	1	0	Avg	0.4005	0.3751	0.3753	0.4066	0.4141	0.4449	0.4455	-----	-----	0.409	6.05	1.00	1.00	7.1	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprop	1	0	Avg	0.3548	0.3154	0.2823	0.3706	0.3833	0.4126	0.4054	-----	-----	0.361	6.34	1.00	1.00	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	Avg	0.1666	0.1577	0.1480	0.1626	0.1714	0.1709	0.1610	-----	-----	0.163	6.36	0.999	1.00	5.0	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2428	0.2430	0.2359	0.2404	0.2433	0.2559	0.2479	-----	-----	0.244	6.44	1.00	1.00	2.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2432	0.2352	0.2373	0.2452	0.2496	0.2582	0.2499	0.2302	0.2003	0.239	6.74	1.00	1.00	7.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	0.50
1,3-Dichloropropane	1	0	Avg	0.4077	0.4105	0.3861	0.4051	0.4100	0.4283	0.4244	-----	-----	0.410	6.54	1.00	1.00	3.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.1610	0.1581	0.1461	0.1567	0.1642	0.1603	0.1494	-----	-----	0.157	6.11	0.999	1.00	4.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	Avg	0.1127	0.1051	0.0935	0.1091	0.1177	0.1158	0.1052	-----	-----	0.108	6.55	0.998	1.00	7.6	0.10 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.2824	0.2688	0.2523	0.2720	0.2844	0.3380	0.3634	-----	-----	0.295	6.54	0.998	1.00	14	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.3073	1.3083	1.2944	1.2847	1.2637	1.2223	1.2005	1.3120	1.3027	1.28	6.21	-1	-1	3.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.7928	0.7852	0.7652	0.7696	0.7702	0.8433	0.8390	0.7277	-----	0.787	6.24	1.00	1.00	4.9	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.3031	0.2974	0.2671	0.3073	0.3301	0.3738	0.3948	-----	-----	0.325	7.03	0.999	1.00	14		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	0.8919	0.9037	0.8438	0.8673	0.8785	0.9692	0.9702	-----	-----	0.904	7.00	1.00	1.00	5.4	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	Avg	0.6286	0.5821	0.4938	0.5954	0.6474	0.6863	0.6585	-----	-----	0.613	7.24	0.999	1.00	10	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	Avg	0.4883	0.4248	0.3782	0.4703	0.5061	0.5230	0.4925	-----	-----	0.469	7.36	0.999	1.00	11	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Avg	0.3214	0.3024	0.2808	0.3214	0.3715	0.4043	0.3962	-----	-----	0.343	7.45	0.999	0.999	14	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	0.7034	0.7537	0.7539	0.6424	0.6614	0.7589	0.8203	0.6819	-----	0.722	7.04	0.998	1.00	8.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5139	0.5568	0.5214	0.4641	0.4846	0.4954	0.4685	-----	-----	0.501	7.66	0.999	1.00	6.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.7266	0.7572	0.7533	0.7006	0.7391	0.7424	0.7222	0.7690	0.7657	0.742	7.61	-1	-1	3.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.6713	1.5912	1.5320	1.5309	1.5849	1.8038	1.8529	-----	-----	1.65	7.32	0.999	1.00	7.9	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	1.0070	1.0181	0.9995	0.9020	0.9186	1.0442	1.0819	1.0204	0.9806	0.997	7.10	0.999	1.00	5.7	0.10	40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.9959	0.9902	0.9806	0.8915	0.9205	1.0734	1.1157	0.9416	-----	0.989	7.32	0.999	1.00	7.6	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2168	0.2128	0.1936	0.2013	0.2026	0.2202	0.2253	-----	-----	0.210	7.69	1.00	1.00	5.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.3161	1.2952	1.2830	1.1877	1.2282	1.3806	1.4241	-----	-----	1.30	8.23	0.999	1.00	6.3	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.2938	1.2510	1.3106	1.1805	1.2005	1.3379	1.3799	-----	-----	1.28	8.28	0.999	1.00	5.7	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.2226	1.2054	1.1651	1.1123	1.1550	1.2906	1.3094	-----	-----	1.21	8.50	0.999	1.00	6.0	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	2.6418	2.6218	2.5873	2.3895	2.4238	2.6888	2.6104	2.4716	-----	2.55	7.51	0.999	0.999	4.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0120	0.0148	0.0159	0.0105	0.0114	0.0110	0.0101	-----	-----	0.0123	7.59	0.998	1.00	18		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	0.9657	0.9396	0.9562	0.8988	0.8928	1.0139	1.0370	-----	-----	0.958	7.69	0.999	1.00	5.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.5914	0.5825	0.5953	0.5422	0.5685	0.6023	0.5960	-----	-----	0.583	7.70	1.00	1.00	3.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	1.6276	1.6139	1.5986	1.4411	1.4323	1.6286	1.6509	-----	-----	1.57	7.81	0.999	1.00	5.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.05
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_1

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	1M131071.D	CAL @ 20 PPB	02/19/20 00:10	2	1M131070.D	CAL @ 5 PPB	02/18/20 23:47
3	1M131069.D	CAL @ 2 PPB	02/18/20 23:23	4	1M131072.D	CAL @ 50 PPB	02/19/20 00:33
5	1M131077.D	CAL @ 100 PPB	02/19/20 02:29	6	1M131075.D	CAL @ 250 PPB	02/19/20 01:43
7	1M131073.D	CAL @ 500 PPB	02/19/20 00:56	8	1M131068.D	CAL @1 PPB	02/18/20 23:00
9	1M131067.D	CAL @ 0.5 PPB	02/18/20 22:37				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.6812	2.6536	2.7872	2.4295	2.5699	2.8162	2.9092	-----	-----	2.69	7.80	0.999	1.00	6.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	1.6253	1.5895	1.6343	1.4277	1.4113	1.5538	1.5622	-----	-----	1.54	7.87	1.00	1.00	5.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	3.0907	3.0588	3.0761	2.7603	2.7230	2.9507	2.8528	2.8026	-----	2.91	7.74	1.00	1.00	5.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.4386	1.4805	1.4446	1.2815	1.2994	1.4002	1.3120	-----	-----	1.38	7.71	0.999	0.999	5.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzen	1	0	Avg	2.2887	2.1824	1.9993	2.0483	1.9256	2.2914	2.3248	1.9901	-----	2.13	7.82	0.999	0.999	7.5		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.5411	0.4726	0.3693	0.4751	0.4948	0.5476	0.5695	-----	-----	0.496	7.83	0.999	1.00	14	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	2.3146	2.2292	2.1929	2.1359	2.1594	2.4527	2.4847	2.1273	-----	2.26	8.02	0.999	1.00	6.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	2.2525	2.1565	2.1063	1.9881	2.0017	2.2679	2.2973	2.0672	-----	2.14	8.04	0.999	1.00	5.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	3.0194	2.8740	2.7990	2.7600	2.7408	3.0561	2.9861	2.6200	-----	2.86	8.14	1.00	1.00	5.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	2.5380	2.3928	2.3565	2.3386	2.3829	2.6940	2.7180	2.2262	-----	2.46	8.21	0.999	1.00	7.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.6863	2.5722	2.5740	2.4363	2.4088	2.6561	2.7148	2.2863	-----	2.54	8.45	0.999	1.00	5.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.4628	1.3439	1.4070	1.3319	1.3587	1.5559	1.6438	-----	-----	1.44	8.43	0.999	1.00	8.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylbe	1	0	Avg	2.2042	2.0409	2.0965	1.9049	2.0211	2.3708	2.4178	-----	-----	2.15	8.89	0.999	0.999	8.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1188	0.1062	0.0896	0.1129	0.1310	0.1379	0.1290	-----	-----	0.118	8.95	0.999	0.999	14	0.05	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	Avg	0.0479	0.0448	0.0356	0.0480	0.0541	0.0562	0.0530	-----	-----	0.0485	9.39	0.999	1.00	14		200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.4636	0.4221	0.4220	0.4397	0.4824	0.5876	0.6222	-----	-----	0.491	9.53	0.998	0.999	17		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzen	1	0	Avg	0.7682	0.7482	0.7491	0.6595	0.7480	0.8825	0.9436	-----	-----	0.786	9.44	0.998	0.999	12	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzen	1	0	Avg	0.7396	0.7146	0.7243	0.6277	0.7207	0.8501	0.8894	-----	-----	0.752	9.74	0.998	0.999	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	1.8362	1.8431	1.8348	1.6431	1.8057	1.9267	1.8302	1.7915	-----	1.81	9.60	0.999	1.00	4.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.05
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** IM131118.D **Instrument:** GCMS I

Cont Calibration Date/Time 2/19/2020 10:08:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.16	55.52	50	20	0.1	0.196	0.218	11.04	
Dichlorodifluoromethane	1	0		2.12	59.86	50	20	0.1	0.192	0.230	19.73	
Chloromethane	1	0		2.33	59.39	50	20	0.1	0.204	0.243	18.78	
Bromomethane	1	0		2.67	49.93	50	20	0.1	0.228	0.228	0.13	
Vinyl Chloride	1	0		2.39	59.18	50	20	0.1	0.273	0.324	18.37	
Chloroethane	1	0		2.75	57.71	50	20	0.1	0.169	0.195	15.41	
Trichlorofluoromethane	1	0		2.97	59.27	50	20	0.1	0.422	0.501	18.54	
Ethyl ether	1	0		3.19	54.27	50	20	0.5	0.144	0.156	8.54	
Furan	1	0		3.22	54.33	50	20	0.5	0.263	0.286	8.66	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.38	62.08	50	20	0.1	0.198	0.246	24.17	C1
Methylene Chloride	1	0		3.76	61.57	50	20	0.1	0.284	0.306	23.14	C1
Acrolein	1	0		3.29	274.03	250	20		0.019	0.020	9.61	
Acrylonitrile	1	0		3.94	54.73	50	20		0.048	0.053	9.46	
Iodomethane	1	0		3.53	59.35	50	20		0.235	0.354	18.70	
Acetone	1	0		3.41	275.32	250	20	0.1	0.037	0.036	10.13	
Carbon Disulfide	1	0		3.59	57.02	50	20	0.1	0.698	0.796	14.03	
t-Butyl Alcohol	1	0		3.82	285.58	250	20		0.016	0.018	14.23	
n-Hexane	1	0		4.19	64.06	50	20		0.244	0.313	28.11	C1
Di-isopropyl-ether	1	0		4.33	54.95	50	20		0.479	0.527	9.90	
1,1-Dichloroethene	1	0		3.39	58.35	50	20	0.1	0.318	0.371	16.71	
Methyl Acetate	1	0		3.67	51.90	50	20	0.1	0.113	0.117	3.81	
Methyl-t-butyl ether	1	0		3.98	54.04	50	20	0.1	0.520	0.562	8.08	
1,1-Dichloroethane	1	0		4.30	56.96	50	20	0.2	0.411	0.468	13.92	
trans-1,2-Dichloroethene	1	0		3.99	57.90	50	20	0.1	0.267	0.310	15.80	
Ethyl-t-butyl ether	1	0		4.57	53.79	50	20	0.5	0.553	0.595	7.57	
cis-1,2-Dichloroethene	1	0		4.68	56.42	50	20	0.1	0.376	0.424	12.84	
Bromochloromethane	1	0		4.82	52.52	50	20		0.168	0.176	5.05	
2,2-Dichloropropane	1	0		4.69	56.40	50	20		0.350	0.395	12.79	
Ethyl acetate	1	0		4.70	51.78	50	20		0.152	0.157	3.56	
1,4-Dioxane	1	0		5.73	2747.20	2500	20		0.002	0.002	9.89	
1,1-Dichloropropene	1	0		5.08	59.25	50	20		0.336	0.398	18.51	
Chloroform	1	0		4.86	53.61	50	20	0.2	0.486	0.521	7.22	
Dibromofluoromethane	1	0	S	4.95	36.33	75	**		0.277	0.336	21.10	
Cyclohexane	1	0		5.03	60.06	50	20	0.1	0.317	0.381	20.12	
1,2-Dichloroethane-d4	1	0	S	5.16	37.10	75	**		0.120	0.149	23.67	
1,2-Dichloroethane	1	0		5.20	54.07	50	20	0.1	0.286	0.310	8.14	
2-Butanone	1	0		4.70	41.19	50	20	0.1	0.158	0.130	17.62	
1,1,1-Trichloroethane	1	0		4.99	57.58	50	20	0.1	0.422	0.486	15.15	
Carbon Tetrachloride	1	0		5.09	59.95	50	20	0.1	0.380	0.455	19.91	
Vinyl Acetate	1	0		4.32	53.14	50	20		0.427	0.454	6.28	
Bromodichloromethane	1	0		5.81	54.62	50	20	0.2	0.262	0.286	9.25	
Methylcyclohexane	1	0		5.66	58.43	50	20	0.1	0.302	0.352	16.86	
Dibromomethane	1	0		5.73	52.38	50	20		0.130	0.136	4.77	
1,2-Dichloropropane	1	0		5.67	52.90	50	20	0.1	0.184	0.195	5.80	
Trichloroethene	1	0		5.55	49.94	50	20	0.2	0.256	0.256	0.13	
Benzene	1	0		5.20	57.75	50	20	0.5	0.938	1.083	15.49	
tert-Amyl methyl ether	1	0		5.24	50.84	50	20		0.506	0.514	1.68	
Chlorobenzene-d5	1	0	I	6.97	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.19	46.33	50	20	0.5	0.354	0.328	7.33	
Methyl methacrylate	1	0		5.69	43.17	50	20	0.5	0.156	0.134	13.66	
Dibromochloromethane	1	0		6.66	49.34	50	20	0.1	0.308	0.304	1.32	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 1M131118.D **Instrument:** GCMS 1

Cont Calibration Date/Time 2/19/2020 10:08:00 P **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.94	46.61	50	20		0.073	0.068	6.79	
cis-1,3-Dichloropropene	1	0		6.04	48.10	50	20	0.2	0.409	0.393	3.79	
trans-1,3-Dichloropropene	1	0		6.32	49.68	50	20	0.1	0.361	0.358	0.65	
Ethyl methacrylate	1	0		6.35	48.24	50	20	0.5	0.163	0.157	3.53	
1,1,2-Trichloroethane	1	0		6.43	47.73	50	20	0.1	0.244	0.233	4.55	
1,2-Dibromoethane	1	0		6.73	49.79	50	20	0.1	0.239	0.238	0.42	
1,3-Dichloropropane	1	0		6.53	46.98	50	20		0.410	0.386	6.04	
4-Methyl-2-Pentanone	1	0		6.11	49.00	50	20	0.1	0.157	0.153	2.00	
2-Hexanone	1	0		6.54	51.10	50	20	0.1	0.109	0.111	2.21	
Tetrachloroethene	1	0		6.53	47.49	50	20	0.2	0.295	0.280	5.03	
Toluene-d8	1	0	S	6.19	30.35	75	**		1.277	1.292	1.17	
Toluene	1	0		6.23	49.34	50	20	0.4	0.787	0.776	1.32	
1,1,1,2-Tetrachloroethane	1	0		7.02	48.45	50	20		0.325	0.315	3.10	
Chlorobenzene	1	0		6.99	48.78	50	20	0.5	0.904	0.881	2.44	
1,4-Dichlorobenzene-d4	1	0	I	8.26	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.23	49.41	50	20	0.5	0.613	0.606	1.18	
n-Amyl acetate	1	0		7.35	51.84	50	20	0.5	0.469	0.486	3.67	
Bromoform	1	0		7.44	48.47	50	20	0.1	0.343	0.332	3.05	
Ethylbenzene	1	0		7.03	45.93	50	20	0.1	0.722	0.663	8.15	
1,1,2,2-Tetrachloroethane	1	0		7.65	49.11	50	20	0.1	0.501	0.492	1.78	
Bromofluorobenzene	1	0	S	7.60	28.83	75	**		0.742	0.713	3.89	
Styrene	1	0		7.31	47.93	50	20	0.3	1.652	1.584	4.15	
m&p-Xylenes	1	0		7.09	93.85	100	20	0.1	0.997	0.936	6.15	
o-Xylene	1	0		7.31	46.83	50	20	0.3	0.989	0.926	6.33	
trans-1,4-Dichloro-2-butene	1	0		7.68	49.59	50	20		0.210	0.209	0.82	
1,3-Dichlorobenzene	1	0		8.22	48.90	50	20	0.6	1.302	1.274	2.19	
1,4-Dichlorobenzene	1	0		8.27	49.02	50	20	0.5	1.279	1.254	1.96	
1,2-Dichlorobenzene	1	0		8.49	50.49	50	20	0.4	1.209	1.221	0.99	
Isopropylbenzene	1	0		7.51	49.14	50	20	0.1	2.554	2.510	1.73	
Cyclohexanone	1	0		7.58	228.97	250	20		0.012	0.011	8.41	
Camphene	1	0		7.68	49.56	50	20		0.958	0.949	0.87	
1,2,3-Trichloropropane	1	0		7.69	47.89	50	20		0.583	0.558	4.21	
2-Chlorotoluene	1	0		7.80	48.04	50	20		1.570	1.509	3.91	
p-Ethyltoluene	1	0		7.79	47.42	50	20		2.692	2.554	5.16	
4-Chlorotoluene	1	0		7.86	48.62	50	20		1.544	1.501	2.77	
n-Propylbenzene	1	0		7.73	49.56	50	20		2.914	2.889	0.87	
Bromobenzene	1	0		7.71	48.02	50	20		1.380	1.325	3.96	
1,3,5-Trimethylbenzene	1	0		7.82	50.19	50	20		2.131	2.139	0.37	
Butyl methacrylate	1	0		7.82	50.46	50	20	0.5	0.496	0.500	0.92	
t-Butylbenzene	1	0		8.01	50.18	50	20		2.262	2.270	0.37	
1,2,4-Trimethylbenzene	1	0		8.04	49.43	50	20		2.142	2.118	1.13	
sec-Butylbenzene	1	0		8.13	51.04	50	20		2.857	2.916	2.07	
4-Isopropyltoluene	1	0		8.20	50.71	50	20		2.456	2.491	1.43	
n-Butylbenzene	1	0		8.44	49.84	50	20		2.542	2.534	0.32	
p-Diethylbenzene	1	0		8.42	48.67	50	20		1.443	1.405	2.67	
1,2,4,5-Tetramethylbenzene	1	0		8.88	49.35	50	20		2.151	2.123	1.29	
1,2-Dibromo-3-Chloropropane	1	0		8.94	54.51	50	20	0.05	0.118	0.129	9.01	
Camphor	1	0		9.38	568.72	500	20		0.049	0.055	13.74	
Hexachlorobutadiene	1	0		9.52	49.40	50	20		0.491	0.486	1.21	
1,2,4-Trichlorobenzene	1	0		9.43	47.34	50	20	0.2	0.786	0.744	5.32	
1,2,3-Trichlorobenzene	1	0		9.73	48.59	50	20		0.752	0.731	2.82	
Naphthalene	1	0		9.59	50.88	50	20		1.814	1.846	1.76	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 1M131153.D **Instrument:** GCMS 1

Cont Calibration Date/Time 2/20/2020 11:26:00 Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.34	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		2.16	59.71	50	20	0.1	0.196	0.235	19.41	
Dichlorodifluoromethane	1	0		2.12	52.81	50	20	0.1	0.192	0.203	5.63	
Chloromethane	1	0		2.32	51.48	50	20	0.1	0.204	0.210	2.96	
Bromomethane	1	0		2.68	48.39	50	20	0.1	0.228	0.221	3.21	
Vinyl Chloride	1	0		2.38	52.09	50	20	0.1	0.273	0.285	4.19	
Chloroethane	1	0		2.75	53.42	50	20	0.1	0.169	0.180	6.84	
Trichlorofluoromethane	1	0		2.97	55.90	50	20	0.1	0.422	0.472	11.80	
Ethyl ether	1	0		3.18	51.20	50	20	0.5	0.144	0.147	2.40	
Furan	1	0		3.23	50.06	50	20	0.5	0.263	0.263	0.11	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.38	57.93	50	20	0.1	0.198	0.230	15.85	
Methylene Chloride	1	0		3.76	58.14	50	20	0.1	0.284	0.289	16.28	
Acrolein	1	0		3.29	263.03	250	20		0.019	0.020	5.21	
Acrylonitrile	1	0		3.95	52.43	50	20		0.048	0.051	4.86	
Iodomethane	1	0		3.52	58.30	50	20		0.235	0.348	16.59	
Acetone	1	0		3.41	266.16	250	20	0.1	0.037	0.035	6.46	
Carbon Disulfide	1	0		3.59	50.84	50	20	0.1	0.698	0.710	1.69	
t-Butyl Alcohol	1	0		3.82	277.84	250	20		0.016	0.017	11.14	
n-Hexane	1	0		4.19	55.89	50	20		0.244	0.273	11.78	
Di-isopropyl-ether	1	0		4.33	50.51	50	20		0.479	0.484	1.02	
1,1-Dichloroethene	1	0		3.38	53.54	50	20	0.1	0.318	0.340	7.08	
Methyl Acetate	1	0		3.67	47.64	50	20	0.1	0.113	0.108	4.72	
Methyl-t-butyl ether	1	0		3.98	52.74	50	20	0.1	0.520	0.549	5.47	
1,1-Dichloroethane	1	0		4.30	53.11	50	20	0.2	0.411	0.436	6.21	
trans-1,2-Dichloroethene	1	0		3.98	56.81	50	20	0.1	0.267	0.304	13.62	
Ethyl-t-butyl ether	1	0		4.57	50.90	50	20	0.5	0.553	0.563	1.80	
cis-1,2-Dichloroethene	1	0		4.68	53.47	50	20	0.1	0.376	0.402	6.95	
Bromochloromethane	1	0		4.82	56.29	50	20		0.168	0.189	12.58	
2,2-Dichloropropane	1	0		4.69	55.67	50	20		0.350	0.390	11.34	
Ethyl acetate	1	0		4.70	54.73	50	20		0.152	0.166	9.46	
1,4-Dioxane	1	0		5.73	2806.37	2500	20		0.002	0.002	12.25	
1,1-Dichloropropene	1	0		5.08	53.59	50	20		0.336	0.360	7.17	
Chloroform	1	0		4.86	51.54	50	20	0.2	0.486	0.501	3.09	
Dibromofluoromethane	1	0	S	4.95	36.71	75	**		0.277	0.339	22.36	
Cyclohexane	1	0		5.03	49.35	50	20	0.1	0.317	0.313	1.31	
1,2-Dichloroethane-d4	1	0	S	5.16	35.01	75	**		0.120	0.140	16.71	
1,2-Dichloroethane	1	0		5.20	52.42	50	20	0.1	0.286	0.300	4.85	
2-Butanone	1	0		4.70	49.12	50	20	0.1	0.158	0.155	1.75	
1,1,1-Trichloroethane	1	0		4.99	53.70	50	20	0.1	0.422	0.453	7.40	
Carbon Tetrachloride	1	0		5.09	54.97	50	20	0.1	0.380	0.418	9.95	
Vinyl Acetate	1	0		4.33	50.75	50	20		0.427	0.433	1.50	
Bromodichloromethane	1	0		5.81	53.21	50	20	0.2	0.262	0.279	6.43	
Methylcyclohexane	1	0		5.66	45.39	50	20	0.1	0.302	0.274	9.23	
Dibromomethane	1	0		5.73	54.20	50	20		0.130	0.141	8.40	
1,2-Dichloropropane	1	0		5.67	48.66	50	20	0.1	0.184	0.179	2.67	
Trichloroethene	1	0		5.54	47.63	50	20	0.2	0.256	0.244	4.73	
Benzene	1	0		5.20	55.24	50	20	0.5	0.938	1.036	10.47	
tert-Amyl methyl ether	1	0		5.24	51.02	50	20		0.506	0.516	2.04	
Chlorobenzene-d5	1	0	I	6.98	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		5.19	43.15	50	20	0.5	0.354	0.305	13.70	
Methyl methacrylate	1	0		5.69	40.74	50	20	0.5	0.156	0.127	18.52	
Dibromochloromethane	1	0		6.66	47.59	50	20	0.1	0.308	0.293	4.81	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** IM131153.D **Instrument:** GCMS 1

Cont Calibration Date/Time 2/20/2020 11:26:00 **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.94	48.42	50	20		0.073	0.071	3.16	
cis-1,3-Dichloropropene	1	0		6.04	47.10	50	20	0.2	0.409	0.385	5.80	
trans-1,3-Dichloropropene	1	0		6.32	48.48	50	20	0.1	0.361	0.350	3.04	
Ethyl methacrylate	1	0		6.35	45.41	50	20	0.5	0.163	0.148	9.19	
1,1,2-Trichloroethane	1	0		6.43	46.96	50	20	0.1	0.244	0.229	6.08	
1,2-Dibromoethane	1	0		6.73	48.08	50	20	0.1	0.239	0.230	3.85	
1,3-Dichloropropane	1	0		6.53	44.68	50	20		0.410	0.367	10.64	
4-Methyl-2-Pentanone	1	0		6.11	46.08	50	20	0.1	0.157	0.144	7.84	
2-Hexanone	1	0		6.54	49.23	50	20	0.1	0.109	0.107	1.54	
Tetrachloroethene	1	0		6.53	41.23	50	20	0.2	0.295	0.243	17.54	
Toluene-d8	1	0	S	6.19	29.86	75	**		1.277	1.271	0.47	
Toluene	1	0		6.23	43.41	50	20	0.4	0.787	0.683	13.18	
1,1,1,2-Tetrachloroethane	1	0		7.02	43.68	50	20		0.325	0.284	12.64	
Chlorobenzene	1	0		6.99	43.42	50	20	0.5	0.904	0.785	13.15	
1,4-Dichlorobenzene-d4	1	0	I	8.26	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.24	47.15	50	20	0.5	0.613	0.578	5.69	
n-Amyl acetate	1	0		7.35	48.40	50	20	0.5	0.469	0.454	3.20	
Bromoform	1	0		7.44	48.46	50	20	0.1	0.343	0.332	3.08	
Ethylbenzene	1	0		7.03	38.37	50	20	0.1	0.722	0.554	23.26	C1
1,1,2,2-Tetrachloroethane	1	0		7.65	47.37	50	20	0.1	0.501	0.474	5.26	
Bromofluorobenzene	1	0	S	7.60	29.96	75	**		0.742	0.741	0.12	
Styrene	1	0		7.32	41.79	50	20	0.3	1.652	1.381	16.43	
m&p-Xylenes	1	0		7.09	78.53	100	20	0.1	0.997	0.783	21.47	C1
o-Xylene	1	0		7.31	39.36	50	20	0.3	0.989	0.778	21.28	C1
trans-1,4-Dichloro-2-butene	1	0		7.68	42.33	50	20		0.210	0.178	15.33	
1,3-Dichlorobenzene	1	0		8.22	42.75	50	20	0.6	1.302	1.113	14.51	
1,4-Dichlorobenzene	1	0		8.27	43.39	50	20	0.5	1.279	1.110	13.21	
1,2-Dichlorobenzene	1	0		8.49	43.24	50	20	0.4	1.209	1.045	13.52	
Isopropylbenzene	1	0		7.51	38.23	50	20	0.1	2.554	1.953	23.53	C1
Cyclohexanone	1	0		7.58	242.83	250	20		0.012	0.012	2.87	
Camphene	1	0		7.68	34.85	50	20		0.958	0.668	30.30	C1
1,2,3-Trichloropropane	1	0		7.69	46.62	50	20		0.583	0.543	6.77	
2-Chlorotoluene	1	0		7.80	39.26	50	20		1.570	1.233	21.47	C1
p-Ethyltoluene	1	0		7.79	39.90	50	20		2.692	2.148	20.21	
4-Chlorotoluene	1	0		7.86	40.42	50	20		1.544	1.248	19.16	
n-Propylbenzene	1	0		7.73	38.51	50	20		2.914	2.245	22.97	C1
Bromobenzene	1	0		7.71	40.09	50	20		1.380	1.106	19.82	
1,3,5-Trimethylbenzene	1	0		7.82	37.32	50	20		2.131	1.591	25.37	C1
Butyl methacrylate	1	0		7.82	42.57	50	20	0.5	0.496	0.422	14.85	
t-Butylbenzene	1	0		8.01	37.74	50	20		2.262	1.708	24.52	C1
1,2,4-Trimethylbenzene	1	0		8.04	39.44	50	20		2.142	1.690	21.13	C1
sec-Butylbenzene	1	0		8.14	38.21	50	20		2.857	2.183	23.58	C1
4-Isopropyltoluene	1	0		8.21	39.61	50	20		2.456	1.946	20.78	C1
n-Butylbenzene	1	0		8.44	40.11	50	20		2.542	2.039	19.78	
p-Diethylbenzene	1	0		8.43	39.97	50	20		1.443	1.154	20.05	
1,2,4,5-Tetramethylbenzene	1	0		8.88	41.17	50	20		2.151	1.771	17.67	
1,2-Dibromo-3-Chloropropane	1	0		8.94	50.93	50	20	0.05	0.118	0.120	1.87	
Camphor	1	0		9.38	545.71	500	20		0.049	0.053	9.14	
Hexachlorobutadiene	1	0		9.52	40.50	50	20		0.491	0.398	19.00	
1,2,4-Trichlorobenzene	1	0		9.43	46.11	50	20	0.2	0.786	0.724	7.78	
1,2,3-Trichlorobenzene	1	0		9.73	44.47	50	20		0.752	0.669	11.06	
Naphthalene	1	0		9.59	44.52	50	20		1.814	1.615	10.96	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

0021406 0113

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M131071.D Method: EPA 8260C

Analysis Date/Time: 02/19/20 00:10

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	172911	5.34	130994	6.97	78561	8.26								
Eval File Area Limit:	86456-345822		65497-261988		39280-157122									
Eval File Rt Limit:	4.84-5.84		6.47-7.47		7.76-8.76									

Data File	Sample#						
1M131067.D	CAL @ 0.5 PPB	220066	5.34	130003	6.97	69997	8.26
1M131068.D	CAL @1 PPB	210524	5.34	125195	6.97	67351	8.26
1M131069.D	CAL @ 2 PPB	214215	5.34	126387	6.97	68955	8.26
1M131070.D	CAL @ 5 PPB	171118	5.34	126773	6.97	70692	8.26
1M131071.D	CAL @ 20 PPB	172911	5.34	130994	6.97	78561	8.26
1M131072.D	CAL @ 50 PPB	221876	5.34	135395	6.97	89130	8.26
1M131073.D	CAL @ 500 PPB	239272	5.34	170995	6.98	112423	8.26
1M131075.D	CAL @ 250 PPB	231841	5.34	162030	6.98	105348	8.26
1M131077.D	CAL @ 100 PPB	230015	5.34	150943	6.97	99367	8.26
1M131081.D	ICV	194634	5.34	141945	6.98	94302	8.26

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0114

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M131118.D Method: EPA 8260C

Analysis Date/Time: 02/19/20 22:08

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	171872	5.34	133070	6.97	87764	8.26								
Eval File Area Limit:	85936-343744		66535-266140		43882-175528									
Eval File Rt Limit:	4.84-5.84		6.47-7.47		7.76-8.76									

Data File	Sample#						
1M131117.D	50 PPB	213536	5.34	132852	6.98	89568	8.26
1M131119.D	BLK	167302	5.34	127616	6.97	67171	8.26
1M131120.D	DAILY BLANK	163966	5.34	124356	6.97	65620	8.26
1M131121.D	MBS84430	168947	5.34	132475	6.98	86428	8.26
1M131122.D	BLK	165419	5.35	123685	6.98	64873	8.26
1M131123.D	AD15697-003	205892	5.35	120603	6.98	65470	8.26
1M131124.D	AD15766-001(5X)	202507	5.34	141328	6.98	112722	8.26
1M131125.D	AD15697-003(MS)	229777	5.34	191648	6.97	117894	8.26
1M131126.D	AD15697-003(MSD)	221932	5.34	168291	6.97	100987	8.26
1M131127.D	BLK	203797	5.34	155621	6.97	85290	8.26
1M131128.D	AD15704-002	185064	5.34	138286	6.97	68274	8.26
1M131129.D	AD15687-012	177242	5.34	132676	6.98	65882	8.26
1M131130.D	AD15704-004	174458	5.34	131768	6.98	66295	8.26
1M131131.D	AD15704-006	177899	5.34	132193	6.98	63642	8.26
1M131132.D	AD15713-002	172592	5.34	127702	6.97	62239	8.26
1M131133.D	AD15713-004	182691	5.34	121772	6.98	51051	8.26
1M131134.D	AD15713-006	162989	5.34	102607	6.98	43759 A	8.26
1M131135.D	AD15713-008	198153	5.34	157892	6.97	93301	8.26
1M131136.D	AD15713-010	192839	5.34	146370	6.97	79011	8.26
1M131137.D	AD15713-012	181143	5.34	140168	6.97	75713	8.26
1M131138.D	AD15714-001	149381	5.34	102367	6.97	42590 A	8.26
1M131139.D	AD15714-002	162368	5.34	114288	6.98	48009	8.26
1M131140.D	AD15715-001	161819	5.34	120725	6.97	75767	8.26
1M131141.D	AD15715-002	171107	5.34	127319	6.97	80228	8.26
1M131142.D	AD15715-003	171760	5.34	126293	6.97	74328	8.26
1M131143.D	AD15715-004	164653	5.34	121534	6.97	74524	8.26
1M131144.D	AD15719-001	11934 A	5.34	9585 A	6.97	4413 A	8.26
1M131145.D	AD15719-002	215992	5.34	131806	6.98	70619	8.26
1M131146.D	AD15719-001	157275	5.34	114853	6.97	51659	8.26
1M131147.D	BLK	168653	5.34	133983	6.97	71695	8.26

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0115

FORM8

Internal Standard Areas

Evaluation Std Data File: 1M131153.D Method: EPA 8260C

Analysis Date/Time: 02/20/20 11:26

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	176616	5.34	139465	6.98	89490	8.26								
Eval File Area Limit:	88308-353232		69732-278930		44745-178980									
Eval File Rt Limit:	4.84-5.84		6.48-7.48		7.76-8.76									

Data File	Sample#						
1M131154.D	BLK	180011	5.34	134051	6.98	71616	8.26
1M131155.D	DAILY BLANK	166903	5.34	129098	6.98	69488	8.26
1M131156.D	AD15713-008	164738	5.34	129084	6.98	69364	8.26
1M131157.D	AD15618-002	212697	5.34	127446	6.97	67544	8.26
1M131158.D	AD15618-004	164232	5.34	127995	6.97	67911	8.26
1M131159.D	AD15816-004	193605	5.34	117513	6.98	63066	8.26
1M131160.D	AD15816-002	158569	5.34	114544	6.97	89388	8.26
1M131161.D	MBS84442	191133	5.34	148318	6.97	95333	8.26
1M131162.D	AD15618-002(MS)	176745	5.34	133405	6.97	75512	8.26
1M131163.D	AD15618-002(MSD)	191932	5.34	148868	6.97	88680	8.26
1M131164.D	AD15751-001	178269	5.34	139690	6.98	75112	8.26
1M131165.D	AD15806-001	209390	5.34	126736	6.98	69713	8.26
1M131166.D	AD15806-006	212401	5.34	128210	6.98	73472	8.26
1M131167.D	AD15806-005	163416	5.34	125372	6.97	68670	8.26
1M131168.D	AD15718-001	155567	5.34	120466	6.97	65381	8.26
1M131169.D	AD15718-002	164888	5.34	128202	6.97	66519	8.26
1M131170.D	AD15718-005	160739	5.34	122197	6.97	65682	8.26
1M131171.D	AD15718-006	157355	5.34	122625	6.98	65311	8.26
1M131172.D	AD15718-007	162041	5.34	130434	6.97	72442	8.26
1M131173.D	AD15718-008	160025	5.34	121512	6.97	64164	8.26
1M131174.D	AD15739-002	199754	5.34	116171	6.97	60663	8.26
1M131175.D	AD15739-004	162166	5.34	126684	6.98	67336	8.26
1M131176.D	AD15739-006	151664	5.34	119727	6.97	65402	8.26
1M131177.D	AD15739-008	219699	5.34	125132	6.97	66897	8.26
1M131178.D	AD15739-010	157396	5.34	123718	6.98	65848	8.26
1M131179.D	AD15739-012	152816	5.34	118632	6.98	64015	8.26
1M131180.D	BLK	153229	5.34	117544	6.97	62518	8.26

I1 =	Fluorobenzene	I4 =	I7 =	625/8270 Internal Standard concentration = 40 mg/L (in final extract)
I2 =	Chlorobenzene-d5	I5 =		624/8260 Internal Standard concentration = 30ug/L
I3 =	1,4-Dichlorobenzene-d4	I6 =		524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Base Neutral/Acid Extractable Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15713-001(3X)
Client Id: TB-101-1 COMP
Data File: 7M105360.D
Analysis Date: 02/24/20 14:14
Date Rec/Extracted: 02/14/20-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 3
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.11	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.11**	**0.32**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.11	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.11**	**0.12**
58-90-2	2,3,4,6-Tetrachlorophenol	0.11	U	207-08-9	Benzo[k]fluoranthene	0.11	U
95-95-4	2,4,5-Trichlorophenol	0.11	U	111-91-1	bis(2-Chloroethoxy)methan	0.11	U
88-06-2	2,4,6-Trichlorophenol	0.11	U	111-44-4	bis(2-Chloroethyl)ether	0.027	U
120-83-2	2,4-Dichlorophenol	0.027	U	108-60-1	bis(2-chloroisopropyl)ether	0.11	U
105-67-9	2,4-Dimethylphenol	0.027	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.11	U
51-28-5	2,4-Dinitrophenol	0.54	U	85-68-7	Butylbenzylphthalate	0.11	U
121-14-2	2,4-Dinitrotoluene	0.11	U	105-60-2	Caprolactam	0.11	U
606-20-2	2,6-Dinitrotoluene	0.11	U	86-74-8	Carbazole	0.11	U
91-58-7	2-Chloronaphthalene	0.11	U	**218-01-9**	**Chrysene**	**0.11**	**0.19**
95-57-8	2-Chlorophenol	0.11	U	53-70-3	Dibenzo[a,h]anthracene	0.11	U
91-57-6	2-Methylnaphthalene	0.11	U	132-64-9	Dibenzofuran	0.027	U
95-48-7	2-Methylphenol	0.027	U	84-66-2	Diethylphthalate	0.11	U
88-74-4	2-Nitroaniline	0.11	U	131-11-3	Dimethylphthalate	0.11	U
88-75-5	2-Nitrophenol	0.11	U	84-74-2	Di-n-butylphthalate	0.027	U
106-44-5	3&4-Methylphenol	0.027	U	117-84-0	Di-n-octylphthalate	0.11	U
91-94-1	3,3'-Dichlorobenzidine	0.11	U	**206-44-0**	**Fluoranthene**	**0.11**	**0.32**
99-09-2	3-Nitroaniline	0.11	U	86-73-7	Fluorene	0.11	U
534-52-1	4,6-Dinitro-2-methylphenol	0.54	U	118-74-1	Hexachlorobenzene	0.11	U
101-55-3	4-Bromophenyl-phenylether	0.11	U	87-68-3	Hexachlorobutadiene	0.11	U
59-50-7	4-Chloro-3-methylphenol	0.11	U	77-47-4	Hexachlorocyclopentadiene	0.11	U
106-47-8	**4-Chloroaniline**	**0.027**	**0.12**	67-72-1	Hexachloroethane	0.11	U
7005-72-3	4-Chlorophenyl-phenylether	0.11	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.11**	**0.12**
100-01-6	4-Nitroaniline	0.11	U	78-59-1	Isophorone	0.11	U
100-02-7	4-Nitrophenol	0.11	U	**91-20-3**	**Naphthalene**	**0.027**	**0.033**
83-32-9	Acenaphthene	0.11	U	98-95-3	Nitrobenzene	0.11	U
208-96-8	Acenaphthylene	0.11	U	621-64-7	N-Nitroso-di-n-propylamine	0.027	U
98-86-2	Acetophenone	0.11	U	86-30-6	n-Nitrosodiphenylamine	0.11	U
120-12-7	Anthracene	0.11	U	87-86-5	Pentachlorophenol	0.54	U
1912-24-9	Atrazine	0.11	U	**85-01-8**	**Phenanthrene**	**0.11**	**0.18**
100-52-7	Benzaldehyde	0.11	U	108-95-2	Phenol	0.11	U
56-55-3	**Benzo[a]anthracene**	**0.11**	**0.19**	**129-00-0**	**Pyrene**	**0.11**	**0.33**
50-32-8	**Benzo[a]pyrene**	**0.11**	**0.22**				

Worksheet #: 546294 *Total Target Concentration* 2.1 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-001(3X)
Client Id: TB-101-1 COMP
Data File: 7M105360.D
Analysis Date: 02/24/20 14:14
Date Rec/Extracted: 02/14/20-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 3
Solids: 92
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	2.9JAB
2	629-59-4	Tetradecane	7.72	0.71J
3	544-76-3	Hexadecane	7.99	0.69J
4	1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-	9.12	0.93J
5	646-31-1	Tetracosane	14.13	0.89J
6	630-04-6	Hentriacontane	14.89	0.84J
7	80-97-7	Dihydrocholesterol	15.07	21J
8	15600-08-5	Cholestan-3-one	15.24	9.3J
9	80-97-7	Dihydrocholesterol	15.28	0.92J
10	566-88-1	5.alpha.-Cholestan-3-one	15.45	0.93J
11	80-97-7	Dihydrocholesterol	15.56	0.79J
12		unknown	15.75	1.1J
13	601-57-0	Cholest-4-en-3-one	15.84	0.65J
14		unknown	16.01	3.5J
15	2097-85-0	Cholestan-3-one, 4,4-dimethyl-, (5.alpha	16.24	1.7J

Worksheet #: 546294 *Total Tentatively Identified Concentration* 47

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

0021406 0119

SampleID : AD15713-001(3X) Operator : AB/JB Qt Meth : 7M_0210.M
Data File: 7M105360.D Sam Mult : 1 Vial# : 18 Qt On : 02/24/20 14:47
Acq On : 02/24/20 14:14 Misc : S,BNA:3 Qt Upd On: 02/11/20 13:21

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-24-20\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.605	96	58886	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.819	152	110394	40.00	ng	0.00
31) Naphthalene-d8	6.824	136	407893	40.00	ng	0.00
50) Acenaphthene-d10	8.245	164	229875	40.00	ng	0.00
77) Phenanthrene-d10	9.703	188	399790	40.00	ng	0.00
91) Chrysene-d12	12.752	240	345080	40.00	ng	0.00
103) Perylene-d12	14.368	264	331097	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.638	112	62692	18.98	ng	0.01
Spiked Amount 100.000			Recovery = 18.98%			
16) Phenol-d5	5.513	99	81957	19.08	ng	0.01
Spiked Amount 100.000			Recovery = 19.08%			
32) Nitrobenzene-d5	6.260	128	16466	9.32	ng	0.00
Spiked Amount 50.000			Recovery = 18.64%			
55) 2-Fluorobiphenyl	7.658	172	75748	9.97	ng	0.00
Spiked Amount 50.000			Recovery = 19.94%			
80) 2,4,6-Tribromophenol	8.986	330	20668	19.90	ng	0.00
Spiked Amount 100.000			Recovery = 19.90%			
94) Terphenyl-d14	11.506	244	62434	11.16	ng	0.00
Spiked Amount 50.000			Recovery = 22.32%			
Target Compounds						Qvalue
41) Naphthalene	6.841	128	7213m	0.6013	ng	
42) 4-Chloroaniline	6.876	127	10546m	2.2323	ng	
86) Phenanthrene	9.726	178	36882	3.3106	ng	99
90) Fluoranthene	11.066	202	70927	5.8824	ng	89
92) Pyrene	11.318	202	68684	6.1051	ng	88
100) Benzo[a]anthracene	12.740	228	37722	3.5505	ng	95
101) Chrysene	12.781	228	35521	3.4808	ng	93
105) Benzo[b]fluoranthene	13.957	252	55522m	5.8593	ng	
107) Benzo[a]pyrene	14.303	252	34672	3.9650	ng	90
108) Indeno[1,2,3-cd]pyrene	15.672	276	21744	2.1595	ng	64
110) Benzo[g,h,i]perylene	16.042	276	17971	2.1191	ng	71
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.819		728539	40.00	ng	--
2) Naphthalene-d8	6.824		1159900	40.00	ng	--
3) Acenaphthene-d10	8.245		974859	40.00	ng	--
4) Phenanthrene-d10	9.703		1124050	40.00	ng	--
5) Chrysene-d12	12.752		1265110	40.00	ng	--
6) Perylene-d12	14.368		1163420	40.00	ng	--
Library Search Compounds						
1) 123-42-2	4.290		987949	54.24	ng	50
2) 629-59-4	7.720		316371	12.98	ng	94
3) 544-76-3	7.990		308903	12.67	ng	70
4) 1921-70-6	9.120		482580	17.17	ng	87
5) 646-31-1	14.130		475520	16.35	ng	95
6) 630-04-6	14.890		449866	15.47	ng	96
7) 80-97-7	15.070		11440279	393.33	ng	83
8) 15600-08-5	15.240		5001542	171.96	ng	78
9) 80-97-7	15.280		492978	16.95	ng	78
10) 566-88-1	15.450		495323	17.03	ng	90
11) 80-97-7	15.560		422346	14.52	ng	58
12) UNKNOWN	15.750		605060	20.80	ng	--
13) 601-57-0	15.840		346267	11.91	ng	91
14) UNKNOWN	16.010		1887176	64.88	ng	--
15) 2097-85-0	16.240		919782	31.62	ng	60

(#) = qualifier out of range (m) = manual integration (+) = signals summed

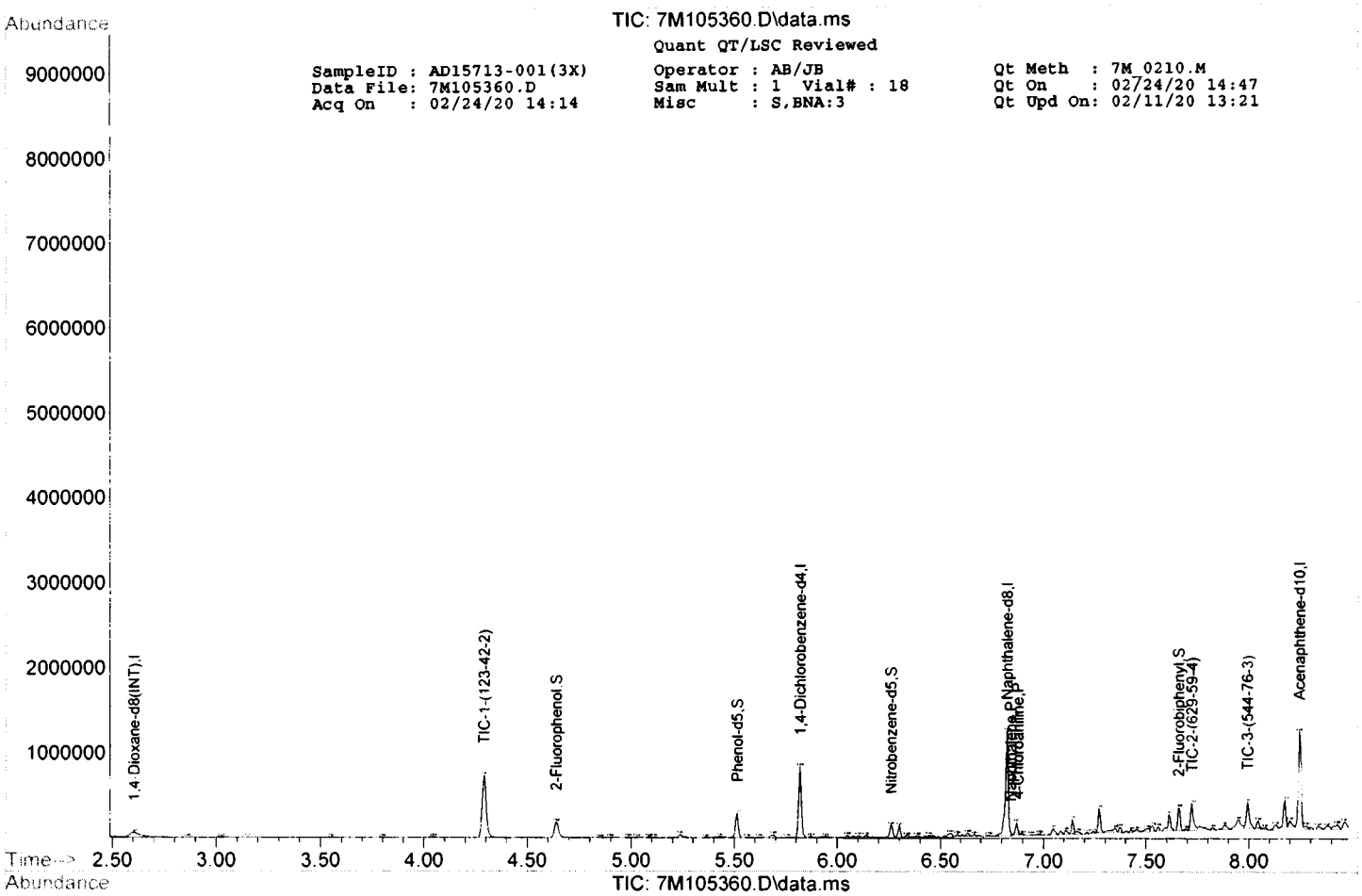
TIC: 7M105360.D\data.ms

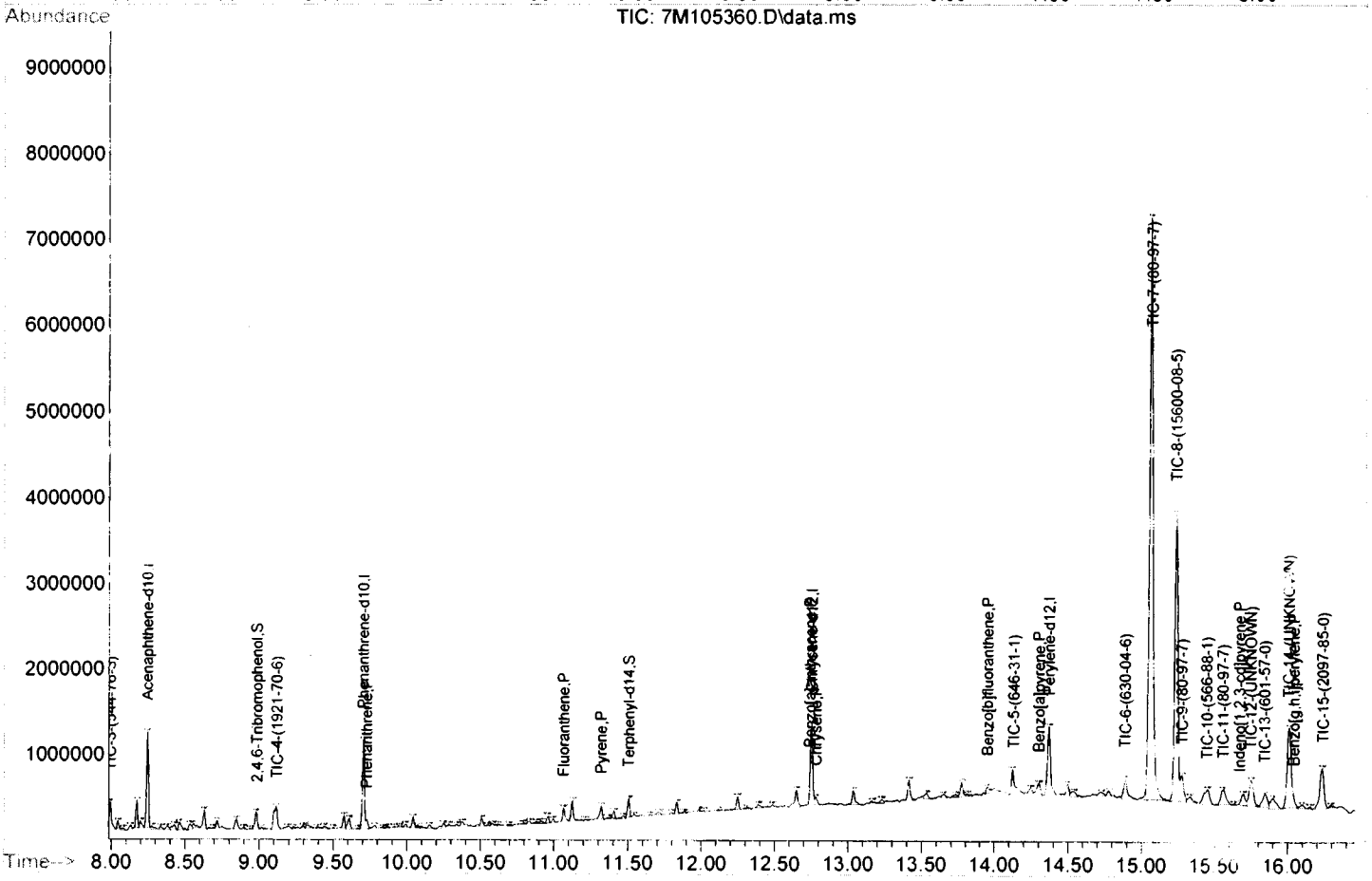
Quant QT/LSC Reviewed

SampleID : AD15713-001(3X)
Data File: 7M105360.D
Acq On : 02/24/20 14:14

Operator : AB/JB
Sam Mult : 1 Vial# : 18
Misc : S,BNA:3

Qt Meth : 7M_0210.M
Qt On : 02/24/20 14:47
Qt Upd On: 02/11/20 13:21





Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15713-003(3X)
Client Id: TB-101-2 COMP
Data File: 7M105353.D
Analysis Date: 02/24/20 11:31
Date Rec/Extracted: 02/14/20-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 1ml
Dilution: 3
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.22	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.22**	**0.69**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.22	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.22**	**0.26**
58-90-2	2,3,4,6-Tetrachlorophenol	0.22	U	207-08-9	Benzo[k]fluoranthene	0.22	U
95-95-4	2,4,5-Trichlorophenol	0.22	U	111-91-1	bis(2-Chloroethoxy)methan	0.22	U
88-06-2	2,4,6-Trichlorophenol	0.22	U	111-44-4	bis(2-Chloroethyl)ether	0.054	U
120-83-2	2,4-Dichlorophenol	0.054	U	108-60-1	bis(2-chloroisopropyl)ether	0.22	U
105-67-9	2,4-Dimethylphenol	0.054	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.22	U
51-28-5	2,4-Dinitrophenol	1.1	U	85-68-7	Butylbenzylphthalate	0.22	U
121-14-2	2,4-Dinitrotoluene	0.22	U	105-60-2	Caprolactam	0.22	U
606-20-2	2,6-Dinitrotoluene	0.22	U	86-74-8	Carbazole	0.22	U
91-58-7	2-Chloronaphthalene	0.22	U	**218-01-9**	**Chrysene**	**0.22**	0.51
95-57-8	2-Chlorophenol	0.22	U	53-70-3	Dibenzo[a,h]anthracene	0.22	U
91-57-6	2-Methylnaphthalene	0.22	U	132-64-9	Dibenzofuran	0.054	U
95-48-7	2-Methylphenol	0.054	U	84-66-2	Diethylphthalate	0.22	U
88-74-4	2-Nitroaniline	0.22	U	131-11-3	Dimethylphthalate	0.22	U
88-75-5	2-Nitrophenol	0.22	U	84-74-2	Di-n-butylphthalate	0.054	U
106-44-5	3&4-Methylphenol	0.054	U	117-84-0	Di-n-octylphthalate	0.22	U
91-94-1	3,3'-Dichlorobenzidine	0.22	U	**206-44-0**	**Fluoranthene**	**0.22**	**0.88**
99-09-2	3-Nitroaniline	0.22	U	86-73-7	Fluorene	0.22	U
534-52-1	4,6-Dinitro-2-methylphenol	1.1	U	118-74-1	Hexachlorobenzene	0.22	U
101-55-3	4-Bromophenyl-phenylether	0.22	U	87-68-3	Hexachlorobutadiene	0.22	U
59-50-7	4-Chloro-3-methylphenol	0.22	U	77-47-4	Hexachlorocyclopentadiene	0.22	U
106-47-8	**4-Chloroaniline**	**0.054**	**0.093**	67-72-1	Hexachloroethane	0.22	U
7005-72-3	4-Chlorophenyl-phenylether	0.22	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.22**	**0.24**
100-01-6	4-Nitroaniline	0.22	U	78-59-1	Isophorone	0.22	U
100-02-7	4-Nitrophenol	0.22	U	**91-20-3**	**Naphthalene**	**0.054**	**0.058**
83-32-9	Acenaphthene	0.22	U	98-95-3	Nitrobenzene	0.22	U
208-96-8	Acenaphthylene	0.22	U	621-64-7	N-Nitroso-di-n-propylamine	0.054	U
98-86-2	Acetophenone	0.22	U	86-30-6	n-Nitrosodiphenylamine	0.22	U
120-12-7	Anthracene	0.22	U	87-86-5	Pentachlorophenol	1.1	U
1912-24-9	Atrazine	0.22	U	**85-01-8**	**Phenanthrene**	**0.22**	**0.57**
100-52-7	Benzaldehyde	0.22	U	108-95-2	Phenol	0.22	U
56-55-3	**Benzo[a]anthracene**	**0.22**	**0.54**	**129-00-0**	**Pyrene**	**0.22**	**0.87**
50-32-8	**Benzo[a]pyrene**	**0.22**	**0.50**				

Worksheet #: 546294 *Total Target Concentration* 5.2 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-003(3X)
Client Id: TB-101-2 COMP
Data File: 7M105353.D
Analysis Date: 02/24/20 11:31
Date Rec/Extracted: 02/14/20-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 1ml
Dilution: 3
Solids: 93
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	3.1 JAB
2	629-59-4	Tetradecane	7.72	0.82 J
3	629-78-7	Heptadecane	9.10	0.86 J
4	1241-94-7	Phosphoric acid, 2-ethylhexyl diphenyl e	12.39	1.1 J
5	630-02-4	Octacosane	13.41	0.74 J
6	630-02-4	Octacosane	14.13	1.3 J
7	646-31-1	Tetracosane	14.89	1.1 J
8	80-97-7	Dihydrocholesterol	15.06	18 J
9	15798-13-7	Methyl communate	15.23	7.3 J
10	87538-30-5	(12R,13R,14R)-8,12-13,14-Diepoxy-15-l	15.43	0.97 J
11		unknown	15.55	0.78 J
12		unknown	15.75	0.98 J
13		unknown	16.01	3.7 J
14		unknown	16.24	1.4 J

Worksheet #: 546294

Total Tentatively Identified Concentration 42

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

Sample ID : AD15713-003(3X) Operator : AB/JB Qt Meth : 7M_0210.M
Data File: 7M105353.D Sam Mult : 1 Vial# : 11 Qt On : 02/24/20 12:19
Acq On : 02/24/20 11:31 Misc : S,BNA:6 Qt Upd On: 02/11/20 13:21

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-24-20\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	63011	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.819	152	119393	40.00	ng	0.00
31) Naphthalene-d8	6.824	136	440691	40.00	ng	0.00
50) Acenaphthene-d10	8.245	164	249205	40.00	ng	0.00
77) Phenanthrene-d10	9.703	188	430067	40.00	ng	0.00
91) Chrysene-d12	12.752	240	368821	40.00	ng	0.00
103) Perylene-d12	14.368	264	371916	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.638	112	34939	9.89	ng	0.01
Spiked Amount 100.000			Recovery	=	9.89%	
16) Phenol-d5	5.513	99	45524	9.91	ng	0.01
Spiked Amount 100.000			Recovery	=	9.91%	
32) Nitrobenzene-d5	6.260	128	9232	4.84	ng	0.00
Spiked Amount 50.000			Recovery	=	9.68%	
55) 2-Fluorobiphenyl	7.658	172	39747	4.82	ng	0.00
Spiked Amount 50.000			Recovery	=	9.64%	
80) 2,4,6-Tribromophenol	8.986	330	11154	9.98	ng	0.00
Spiked Amount 100.000			Recovery	=	9.98%	
94) Terphenyl-d14	11.506	244	34582	5.78	ng	0.00
Spiked Amount 50.000			Recovery	=	11.56%	
Target Compounds						Qvalue
41) Naphthalene	6.841	128	7042m	0.5434	ng	
42) 4-Chloroaniline	6.876	127	4424m	0.8648	ng	
86) Phenanthrene	9.726	178	63477	5.2968	ng	95
90) Fluoranthene	11.066	202	105780	8.1553	ng	89
92) Pyrene	11.318	202	96764	8.0474	ng	89
100) Benzo[a]anthracene	12.740	228	56622	4.9863	ng	98
101) Chrysene	12.781	228	51290	4.7025	ng	98
105) Benzo[b]fluoranthene	13.956	252	68047m	6.3929	ng	
107) Benzo[a]pyrene	14.303	252	45756	4.6583	ng	85
108) Indeno[1,2,3-cd]pyrene	15.666	276	25020	2.2122	ng	72
110) Benzo[g,h,i]perylene	16.036	276	22728	2.3859	ng	92
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.819		774551	40.00	ng	--
2) Naphthalene-d8	6.824		1126340	40.00	ng	--
3) Acenaphthene-d10	8.245		1061750	40.00	ng	--
4) Phenanthrene-d10	9.703		1286230	40.00	ng	--
5) Chrysene-d12	12.752		1285940	40.00	ng	--
6) Perylene-d12	14.368		1201350	40.00	ng	--
Library Search Compounds						
1) 123-42-2	4.290		562419	29.04	ng	56
2) 629-59-4	7.720		201482	7.59	ng	91
3) 629-78-7	9.100		256789	7.99	ng	96
4) 1241-94-7	12.390		325833	10.14	ng	86
5) 630-02-4	13.410		220677	6.86	ng	94
6) 630-02-4	14.130		367899	12.25	ng	93
7) 646-31-1	14.890		300148	9.99	ng	90
8) 80-97-7	15.060		4934333	164.29	ng	89
9) 15798-13-7	15.230		2048324	68.20	ng	50
10) 87538-30-5	15.430		269683	8.98	ng	50
11) UNKNOWN	15.550		217779	7.25	ng	--
12) UNKNOWN	15.750		273981	9.12	ng	--
13) UNKNOWN	16.010		1031625	34.35	ng	--
14) UNKNOWN	16.240		382282	12.73	ng	--

(#) = qualifier out of range (m) = manual integration (+) = signals summed

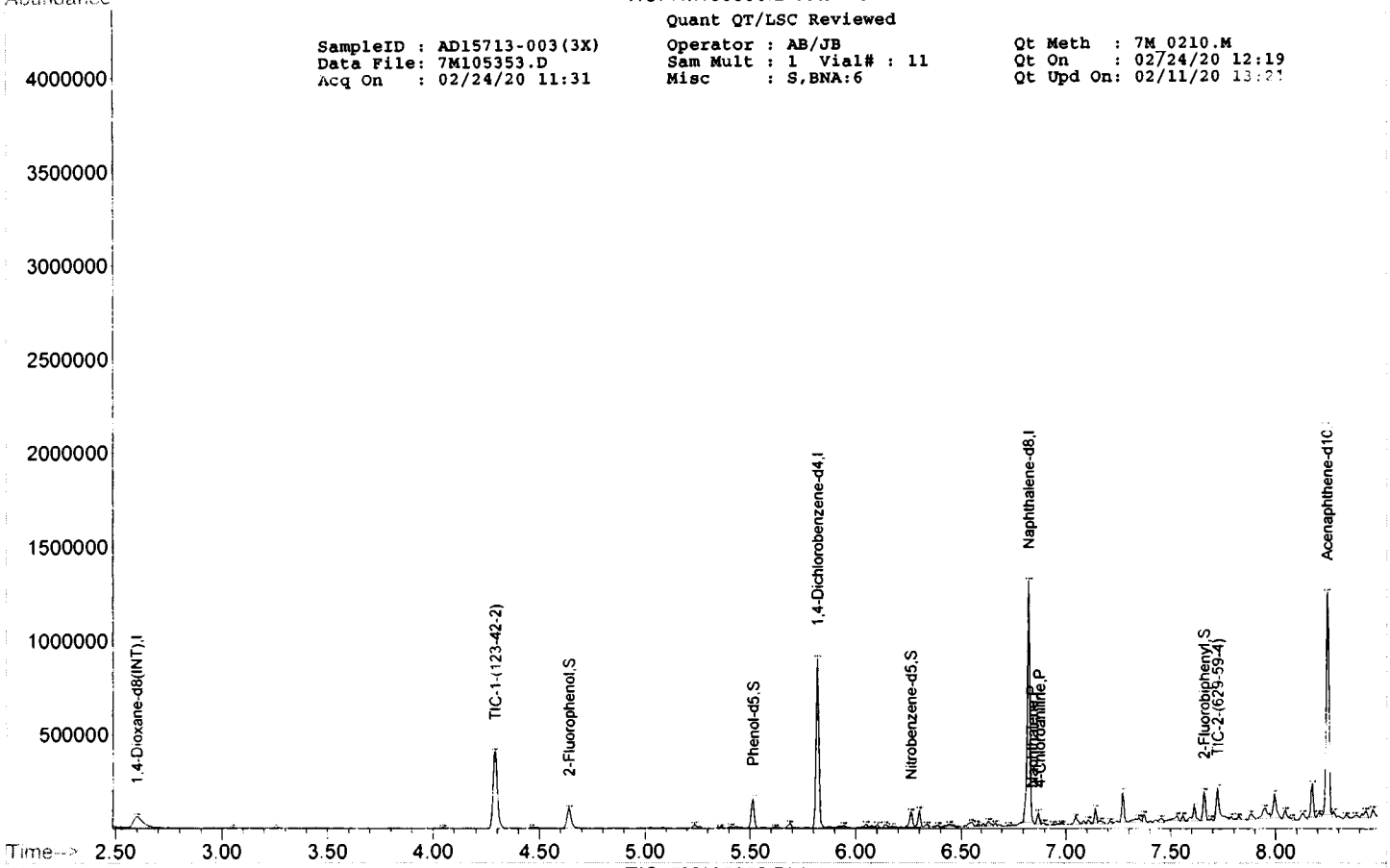
TIC: 7M105353.D\data.ms

Quant QT/LSC Reviewed

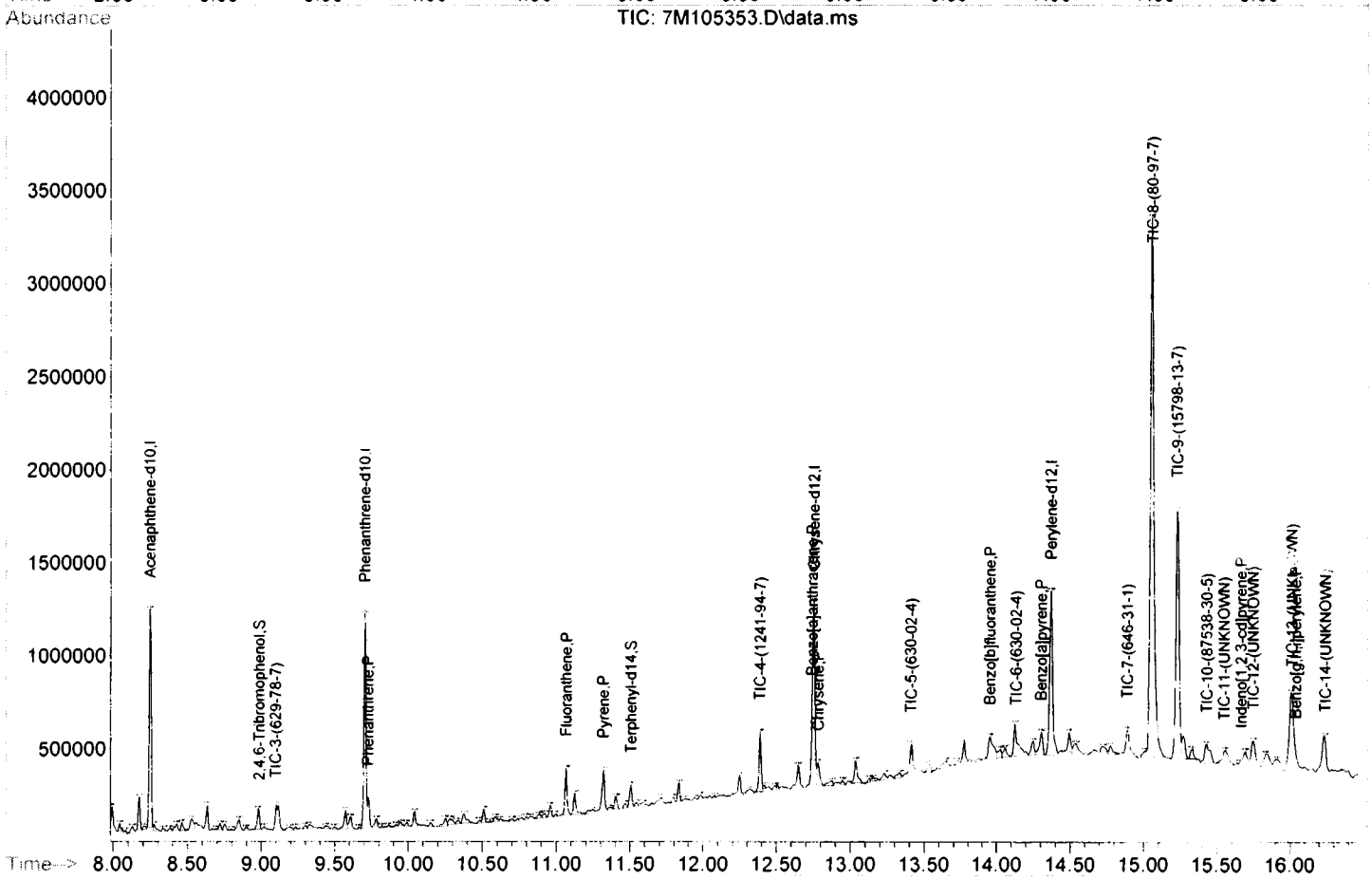
SampleID : AD15713-003(3X)
Data File: 7M105353.D
Acq On : 02/24/20 11:31

Operator : AB/JB
Sam Mult : 1 Vial# : 11
Misc : S,BNA:6

Qt Meth : 7M_0210.M
Qt On : 02/24/20 12:19
Qt Upd On: 02/11/20 13:21



TIC: 7M105353.D\data.ms



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15713-005
Client Id: TB-101-3 COMP
Data File: 7M105361.D
Analysis Date: 02/24/20 14:37
Date Rec/Extracted: 02/14/20-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 87

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.038	U	**205-99-2**	**Benzo[b]fluoranthene**	**0.038**	**0.53**
95-94-3	1,2,4,5-Tetrachlorobenzene	0.038	U	**191-24-2**	**Benzo[g,h,i]perylene**	**0.038**	**0.16**
58-90-2	2,3,4,6-Tetrachlorophenol	0.038	U	**207-08-9**	**Benzo[k]fluoranthene**	**0.038**	**0.18**
95-95-4	2,4,5-Trichlorophenol	0.038	U	111-91-1	bis(2-Chloroethoxy)methan	0.038	U
88-06-2	2,4,6-Trichlorophenol	0.038	U	111-44-4	bis(2-Chloroethyl)ether	0.0096	U
120-83-2	2,4-Dichlorophenol	0.0096	U	108-60-1	bis(2-chloroisopropyl)ether	0.038	U
105-67-9	2,4-Dimethylphenol	0.0096	U	**117-81-7**	**bis(2-Ethylhexyl)phthalate**	**0.038**	0.15
51-28-5	2,4-Dinitrophenol	0.19	U	85-68-7	Butylbenzylphthalate	0.038	U
121-14-2	2,4-Dinitrotoluene	0.038	U	105-60-2	Caprolactam	0.038	U
606-20-2	2,6-Dinitrotoluene	0.038	U	**86-74-8**	**Carbazole**	**0.038**	**0.055**
91-58-7	2-Chloronaphthalene	0.038	U	**218-01-9**	**Chrysene**	**0.038**	**0.38**
95-57-8	2-Chlorophenol	0.038	U	**53-70-3**	**Dibenzo[a,h]anthracene**	**0.038**	**0.047**
91-57-6	**2-Methylnaphthalene**	**0.038**	**0.093**	**132-64-9**	**Dibenzofuran**	**0.0096**	**0.049**
95-48-7	2-Methylphenol	0.0096	U	**84-66-2**	**Diethylphthalate**	**0.038**	**0.050**
88-74-4	2-Nitroaniline	0.038	U	131-11-3	Dimethylphthalate	0.038	U
88-75-5	2-Nitrophenol	0.038	U	84-74-2	Di-n-butylphthalate	0.0096	U
106-44-5	3&4-Methylphenol	0.0096	U	117-84-0	Di-n-octylphthalate	0.038	U
91-94-1	3,3'-Dichlorobenzidine	0.038	U	**206-44-0**	**Fluoranthene**	**0.038**	0.66
99-09-2	3-Nitroaniline	0.038	U	**86-73-7**	**Fluorene**	**0.038**	**0.12**
534-52-1	4,6-Dinitro-2-methylphenol	0.19	U	118-74-1	Hexachlorobenzene	0.038	U
101-55-3	4-Bromophenyl-phenylether	0.038	U	87-68-3	Hexachlorobutadiene	0.038	U
59-50-7	4-Chloro-3-methylphenol	0.038	U	77-47-4	Hexachlorocyclopentadiene	0.038	U
106-47-8	**4-Chloroaniline**	**0.0096**	**0.20**	67-72-1	Hexachloroethane	0.038	U
7005-72-3	4-Chlorophenyl-phenylether	0.038	U	**193-39-5**	**Indeno[1,2,3-cd]pyrene**	**0.038**	**0.14**
100-01-6	4-Nitroaniline	0.038	U	78-59-1	Isophorone	0.038	U
100-02-7	4-Nitrophenol	0.038	U	**91-20-3**	**Naphthalene**	**0.0096**	**0.087**
83-32-9	**Acenaphthene**	**0.038**	**0.11**	98-95-3	Nitrobenzene	0.038	U
208-96-8	Acenaphthylene	0.038	U	621-64-7	N-Nitroso-di-n-propylamine	0.0096	U
98-86-2	Acetophenone	0.038	U	86-30-6	n-Nitrosodiphenylamine	0.038	U
120-12-7	**Anthracene**	**0.038**	**0.12**	87-86-5	Pentachlorophenol	0.19	U
1912-24-9	Atrazine	0.038	U	**85-01-8**	**Phenanthrene**	**0.038**	**0.53**
100-52-7	Benzaldehyde	0.038	U	108-95-2	Phenol	0.038	U
56-55-3	**Benzo[a]anthracene**	**0.038**	**0.42**	**129-00-0**	**Pyrene**	**0.038**	**0.62**
50-32-8	**Benzo[a]pyrene**	**0.038**	**0.38**				

Worksheet #: 546294 *Total Target Concentration* 5.1 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-005
Client Id: TB-101-3 COMP
Data File: 7M105361.D
Analysis Date: 02/24/20 14:37
Date Rec/Extracted: 02/14/20-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 87
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.30	2.8 JAB
2	571-58-4	Naphthalene, 1,4-dimethyl-	7.95	0.81 J
3	54833-48-6	Heptadecane, 2,6,10,15-tetramethyl-	7.99	0.94 J
4	112-18-5	1-Dodecanamine, N,N-dimethyl-	8.20	0.80 J
5	1921-70-6	Pentadecane, 2,6,10,14-tetramethyl-	9.12	1.6 J
6	638-36-8	Hexadecane, 2,6,10,14-tetramethyl-	9.61	0.78 J
7	57-10-3	Hexadecanoic acid	10.31	0.91 J
8	76319-77-2	10-Methoxybenz[a]azulen-1,4-dione	11.13	1.4 J
9	80-97-7	Dihydrocholesterol	15.07	4.4 J
10	15600-08-5	Cholestan-3-one	15.25	6.1 J
11	80-97-7	Dihydrocholesterol	15.28	0.77 J
12	566-88-1	5.alpha.-Cholestan-3-one	15.46	0.94 J
13		unknown	15.77	0.96 J
14	2089-02-3	Cholestane, 3-ethoxy-, (3.beta.,5.alpha.	16.02	1.8 J
15		unknown	16.27	2.5 J

Worksheet #: 546294

Total Tentatively Identified Concentration 28

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : AD15713-005 Operator : AB/JB Qt Meth : 7M_0210.M
Data File: 7M105361.D Sam Mult : 1 Vial# : 19 Qt On : 02/24/20 14:58
Acq On : 02/24/20 14:37 Misc : S,BNA Qt Upd On: 02/11/20 13:21

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-24-20\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	50818	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.819	152	96057	40.00	ng	0.00
31) Naphthalene-d8	6.823	136	361174	40.00	ng	0.00
50) Acenaphthene-d10	8.245	164	198588	40.00	ng	0.00
77) Phenanthrene-d10	9.708	188	354532	40.00	ng	0.00
91) Chrysene-d12	12.758	240	315930	40.00	ng	0.00
103) Perylene-d12	14.373	264	291523	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.643	112	176085	61.78	ng	0.02
Spiked Amount 100.000			Recovery = 61.78%			
16) Phenol-d5	5.513	99	231289	62.40	ng	0.01
Spiked Amount 100.000			Recovery = 62.40%			
32) Nitrobenzene-d5	6.265	128	47392	30.31	ng	0.00
Spiked Amount 50.000			Recovery = 60.62%			
55) 2-Fluorobiphenyl	7.658	172	200309	30.51	ng	0.00
Spiked Amount 50.000			Recovery = 61.02%			
80) 2,4,6-Tribromophenol	8.986	330	59209	64.27	ng	0.00
Spiked Amount 100.000			Recovery = 64.27%			
94) Terphenyl-d14	11.512	244	175138	34.18	ng	0.00
Spiked Amount 50.000			Recovery = 68.36%			
Target Compounds						Qvalue
41) Naphthalene	6.841	128	48366m	4.5537	ng	
42) 4-Chloroaniline	6.876	127	43507m	10.5457	ng	
46) 2-Methylnaphthalene	7.376	142	33026	4.8415	ng	99
65) Acenaphthene	8.275	153	34341m	5.5608	ng	
68) Dibenzofuran	8.433	168	22763m	2.5750	ng	
72) Fluorene	8.751	166	42602	6.0100	ng	92
74) Diethylphthalate	8.615	149	19054	2.6289	ng	94
86) Phenanthrene	9.732	178	275422	27.8788	ng	99
87) Anthracene	9.785	178	64395m	6.2784	ng	
88) Carbazole	9.949	167	26603	2.8920	ng	96
90) Fluoranthene	11.083	202	367541	34.3734	ng	87
92) Pyrene	11.330	202	331587	32.1933	ng	83
100) Benzo[a]anthracene	12.746	228	212654	21.8623	ng	98
101) Chrysene	12.787	228	186449	19.9564	ng	98
102) bis(2-Ethylhexyl)phtha...	12.799	149	55099	8.0578	ng	97
105) Benzo[b]fluoranthene	13.962	252	228743m	27.4163	ng	
106) Benzo[k]fluoranthene	13.992	252	77232m	9.1729	ng	
107) Benzo[a]pyrene	14.315	252	154652	20.0866	ng	86
108) Indeno[1,2,3-cd]pyrene	15.684	276	66202	7.4674	ng	80
109) Dibenzo[a,h]anthracene	15.701	278	17591m	2.4393	ng	
110) Benzo[g,h,i]perylene	16.060	276	62219	8.3327	ng	93
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.819		718088	40.00	ng	--
2) Naphthalene-d8	6.823		1112650	40.00	ng	--
3) Acenaphthene-d10	8.245		1089130	40.00	ng	--
4) Phenanthrene-d10	9.708		957864	40.00	ng	--
5) Chrysene-d12	12.752		1613780	40.00	ng	--
6) Perylene-d12	14.373		1168600	40.00	ng	--
Library Search Compounds						
1) 123-42-2	4.300		2611251	145.46	ng	56
2) 571-58-4	7.950		1148718	42.19	ng	94
3) 54833-48-6	7.990		1333954	48.99	ng	72
4) 112-18-5	8.200		1140312	41.88	ng	80
5) 1921-70-6	9.120		2000384	83.54	ng	94
6) 638-36-8	9.610		975245	40.73	ng	91
7) 57-10-3	10.310		1141213	47.66	ng	98
8) 76319-77-2	11.130		1791363	74.81	ng	90
9) 80-97-7	15.070		6750181	231.05	ng	89
10) 15600-08-5	15.250		9253810	316.75	ng	92
11) 80-97-7	15.280		1167959	39.98	ng	92
12) 566-88-1	15.460		1439108	49.26	ng	96
13) UNKNOWN	15.770		1467672	50.24	ng	--
14) 2089-02-3	16.020		2739132	93.76	ng	78
15) UNKNOWN	16.270		3821806	130.82	ng	--

(#) = qualifier out of range (m) = manual integration (+) = signals summed

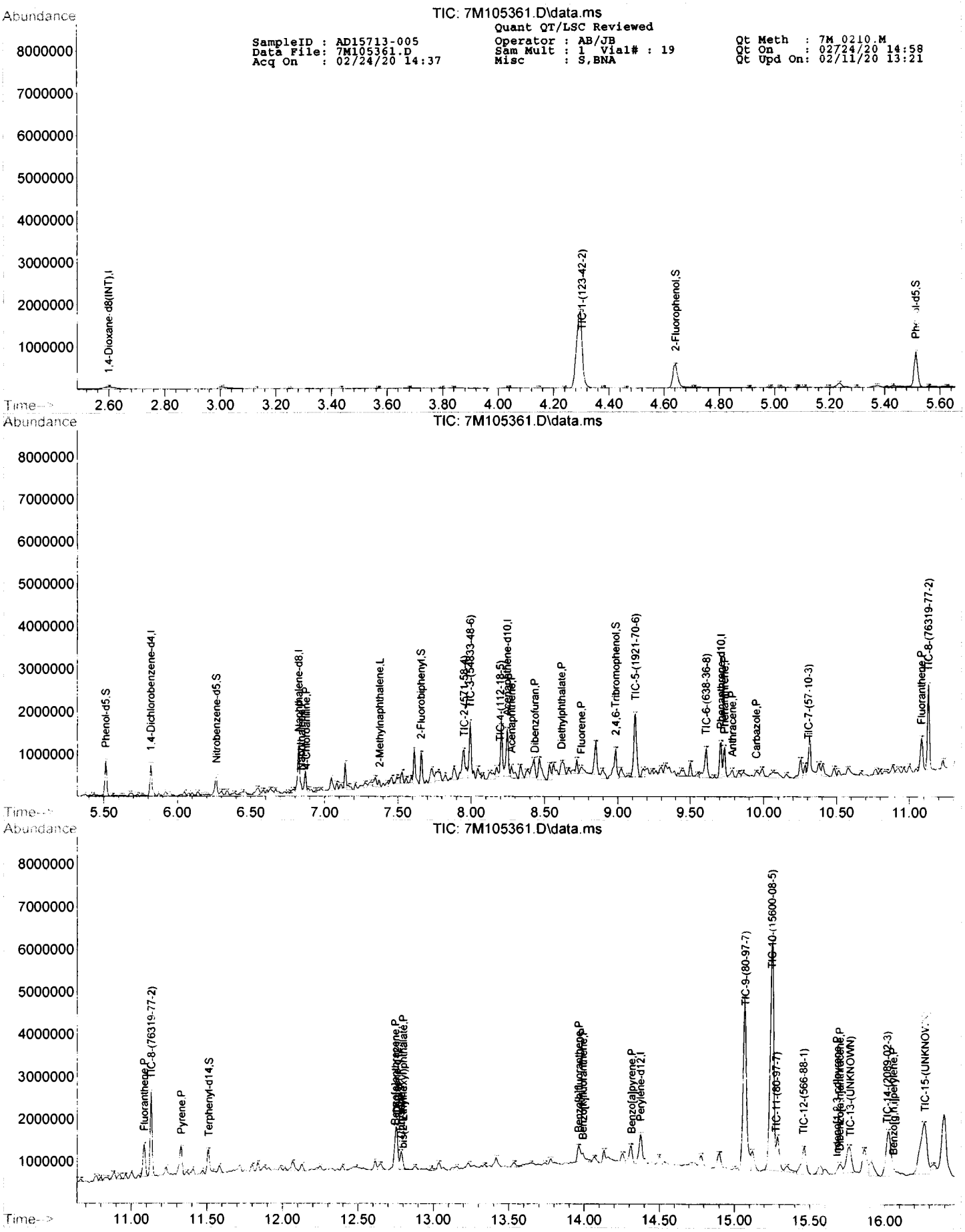
TIC: 7M105361.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD15713-005
Data File: 7M105361.D
Acq On : 02/24/20 14:37

Operator : AB/JB
Sam Mult : 1 Vial# : 19
Misc : S,BNA

Qt Meth : 7M 0210.M
Qt On : 02/24/20 14:58
Qt Upd On: 02/11/20 13:21



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15713-007
Client Id: TB-101-4 COMP
Data File: 5M112177.D
Analysis Date: 02/24/20 13:59
Date Rec/Extracted: 02/14/20-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.039	U	205-99-2	Benzo[b]fluoranthene	0.039	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.039	U	191-24-2	Benzo[g,h,i]perylene	0.039	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.039	U	207-08-9	Benzo[k]fluoranthene	0.039	U
95-95-4	2,4,5-Trichlorophenol	0.039	U	111-91-1	bis(2-Chloroethoxy)methan	0.039	U
88-06-2	2,4,6-Trichlorophenol	0.039	U	111-44-4	bis(2-Chloroethyl)ether	0.0097	U
120-83-2	2,4-Dichlorophenol	0.0097	U	108-60-1	bis(2-chloroisopropyl)ether	0.039	U
105-67-9	2,4-Dimethylphenol	0.0097	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.039	U
51-28-5	2,4-Dinitrophenol	0.19	U	85-68-7	Butylbenzylphthalate	0.039	U
121-14-2	2,4-Dinitrotoluene	0.039	U	105-60-2	Caprolactam	0.039	U
606-20-2	2,6-Dinitrotoluene	0.039	U	86-74-8	Carbazole	0.039	U
91-58-7	2-Chloronaphthalene	0.039	U	218-01-9	Chrysene	0.039	U
95-57-8	2-Chlorophenol	0.039	U	53-70-3	Dibenzo[a,h]anthracene	0.039	U
91-57-6	2-Methylnaphthalene	0.039	U	132-64-9	Dibenzofuran	0.0097	U
95-48-7	2-Methylphenol	0.0097	U	**84-66-2**	**Diethylphthalate**	**0.039**	**0.039**
88-74-4	2-Nitroaniline	0.039	U	131-11-3	Dimethylphthalate	0.039	U
88-75-5	2-Nitrophenol	0.039	U	84-74-2	Di-n-butylphthalate	0.0097	U
106-44-5	3&4-Methylphenol	0.0097	U	117-84-0	Di-n-octylphthalate	0.039	U
91-94-1	3,3'-Dichlorobenzidine	0.039	U	206-44-0	Fluoranthene	0.039	U
99-09-2	3-Nitroaniline	0.039	U	86-73-7	Fluorene	0.039	U
534-52-1	4,6-Dinitro-2-methylphenol	0.19	U	118-74-1	Hexachlorobenzene	0.039	U
101-55-3	4-Bromophenyl-phenylether	0.039	U	87-68-3	Hexachlorobutadiene	0.039	U
59-50-7	4-Chloro-3-methylphenol	0.039	U	77-47-4	Hexachlorocyclopentadiene	0.039	U
106-47-8	4-Chloroaniline	0.0097	U	67-72-1	Hexachloroethane	0.039	U
7005-72-3	4-Chlorophenyl-phenylether	0.039	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.039	U
100-01-6	4-Nitroaniline	0.039	U	78-59-1	Isophorone	0.039	U
100-02-7	4-Nitrophenol	0.039	U	91-20-3	Naphthalene	0.0097	U
83-32-9	Acenaphthene	0.039	U	98-95-3	Nitrobenzene	0.039	U
208-96-8	Acenaphthylene	0.039	U	621-64-7	N-Nitroso-di-n-propylamine	0.0097	U
98-86-2	Acetophenone	0.039	U	86-30-6	n-Nitrosodiphenylamine	0.039	U
120-12-7	Anthracene	0.039	U	87-86-5	Pentachlorophenol	0.19	U
1912-24-9	Atrazine	0.039	U	85-01-8	Phenanthrene	0.039	U
100-52-7	Benzaldehyde	0.039	U	108-95-2	Phenol	0.039	U
56-55-3	Benzo[a]anthracene	0.039	U	129-00-0	Pyrene	0.039	U
50-32-8	Benzo[a]pyrene	0.039	U				

Worksheet #: 546294

Total Target Concentration 0.039

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-007
Client Id: TB-101-4 COMP
Data File: 5M112177.D
Analysis Date: 02/24/20 13:59
Date Rec/Extracted: 02/14/20-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 86
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.22	2.7JAB
2	5131-66-8	2-Propanol, 1-butoxy-	5.17	0.18JB
3		unknown	5.61	0.079J
4		unknown	8.46	0.32J
5	76319-77-2	10-Methoxybenz[a]azulen-1,4-dione	11.05	0.20J
6		unknown	14.96	0.11J
7	566-51-8	CHOLESTAN-4-ONE	15.14	0.20J
8		unknown	16.13	0.089J

Worksheet #: 546294

Total Tentatively Identified Concentration 3.9

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

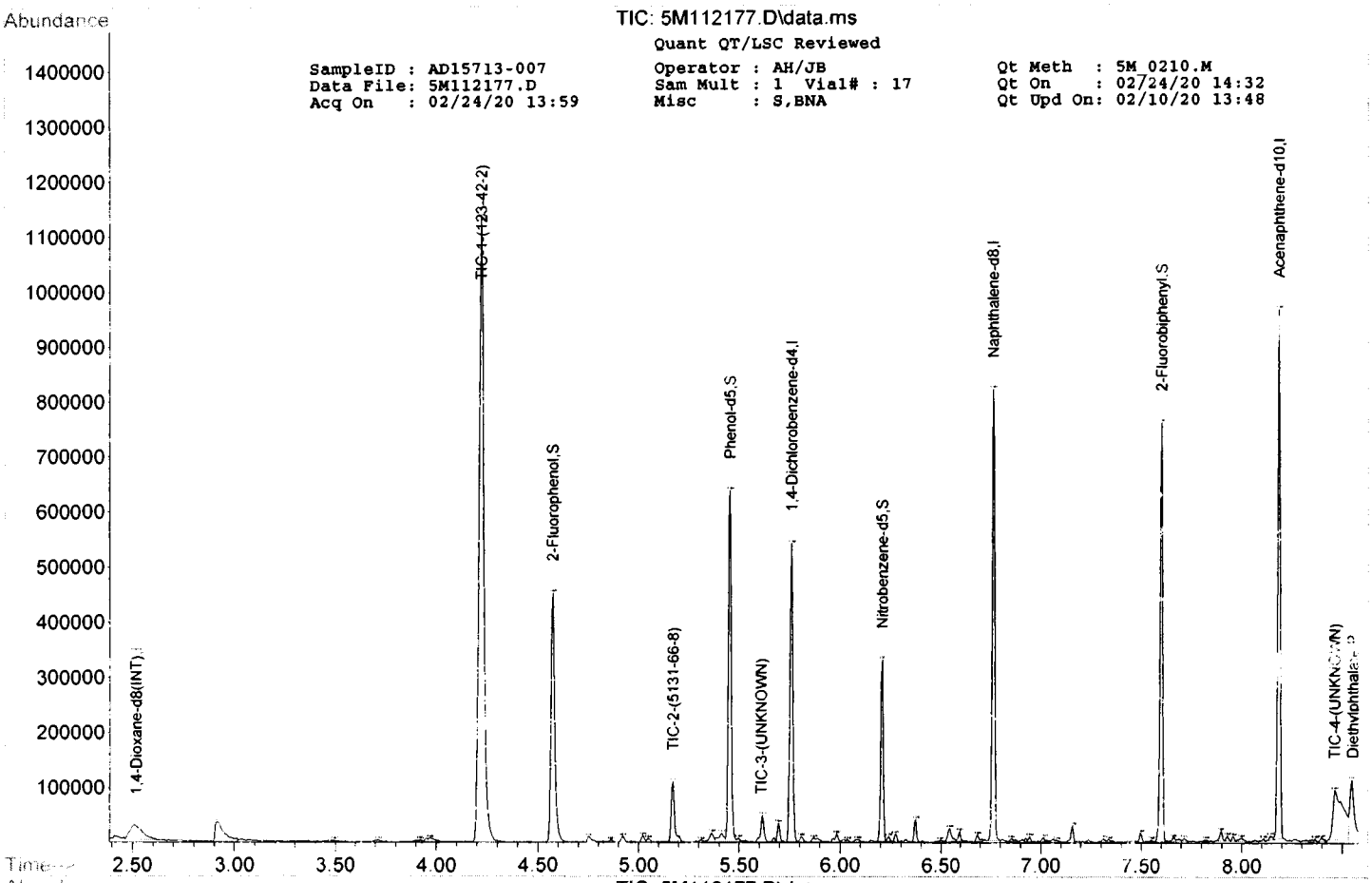
Quantitation Report (QT/LSC Reviewed)

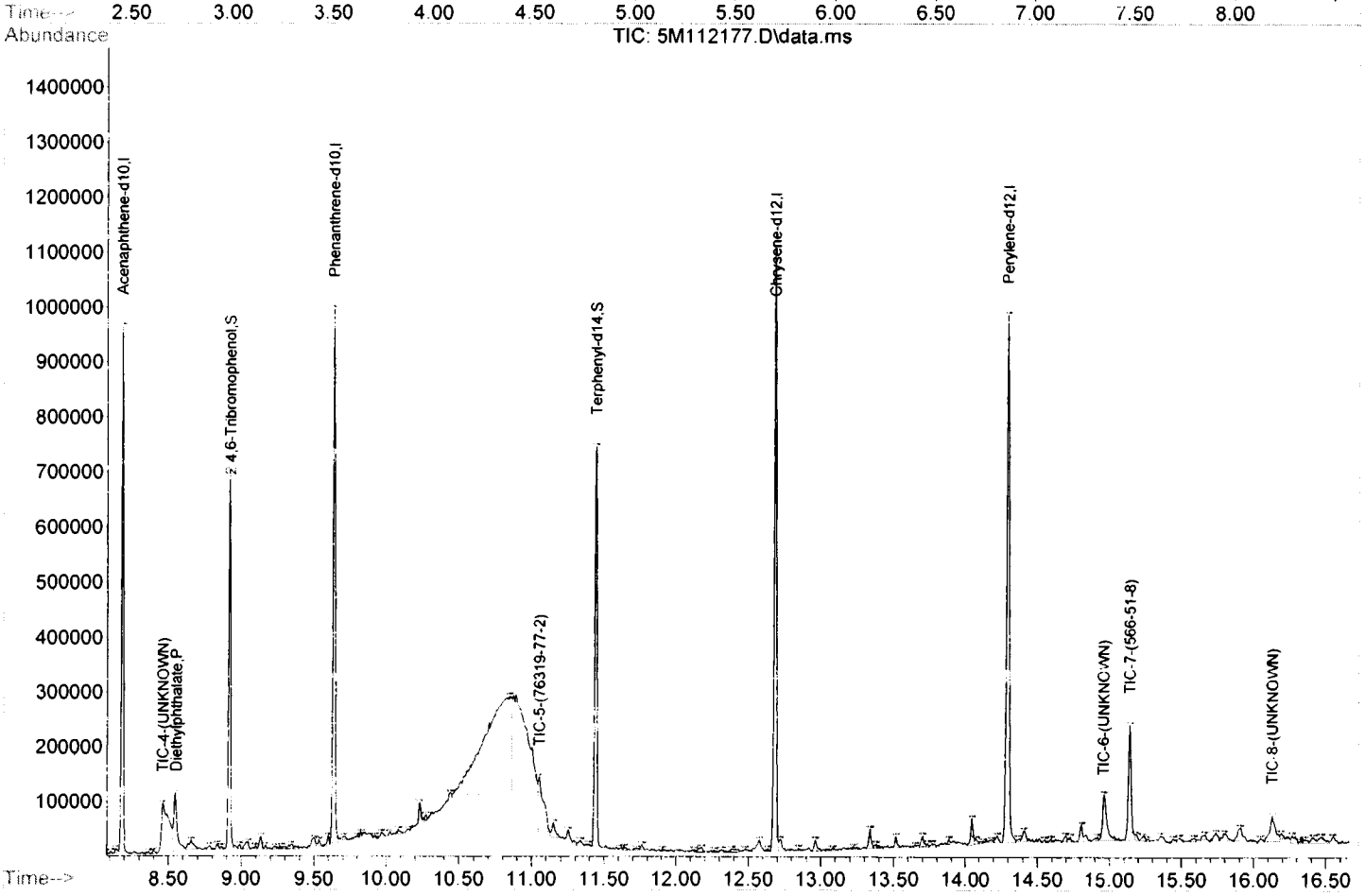
SampleID : AD15713-007 Operator : AH/JB Qt Meth : 5M_0210.M
Data File: 5M112177.D Sam Mult : 1 Vial# : 17 Qt On : 02/24/20 14:32
Acq On : 02/24/20 13:59 Misc : S,BNA Qt Upd On: 02/10/20 13:48

Data Path : G:\GcMsData\2020\GCMS_5\Data\02-24-20\
Qt Path : G:\GCMSDATA\2020\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.515	96	43151	40.00 ng	0.00
21) 1,4-Dichlorobenzene-d4	5.758	152	75173	40.00 ng	0.00
31) Naphthalene-d8	6.763	136	277688	40.00 ng	0.00
50) Acenaphthene-d10	8.184	164	179170	40.00 ng	0.00
77) Phenanthrene-d10	9.637	188	360876	40.00 ng	0.00
91) Chrysene-d12	12.682	240	413104	40.00 ng	0.00
103) Perylene-d12	14.295	264	409834	40.00 ng	0.00
System Monitoring Compounds					
11) 2-Fluorophenol	4.572	112	142747	64.13 ng	0.02
Spiked Amount 100.000			Recovery = 64.13%		
16) Phenol-d5	5.454	99	189305	64.76 ng	0.01
Spiked Amount 100.000			Recovery = 64.76%		
32) Nitrobenzene-d5	6.207	128	32739	29.48 ng	0.00
Spiked Amount 50.000			Recovery = 58.96%		
55) 2-Fluorobiphenyl	7.601	172	188833	30.06 ng	0.00
Spiked Amount 50.000			Recovery = 60.12%		
80) 2,4,6-Tribromophenol	8.921	330	71713	70.89 ng	0.00
Spiked Amount 100.000			Recovery = 70.89%		
94) Terphenyl-d14	11.442	244	221573	35.64 ng	0.00
Spiked Amount 50.000			Recovery = 71.28%		
Target Compounds					Qvalue
74) Diethylphthalate	8.552	149	12568	2.0269 ng	97
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.758		522955	40.00 ng	--
2) Naphthalene-d8	6.763		668722	40.00 ng	--
3) Acenaphthene-d10	8.184		798758	40.00 ng	--
4) Phenanthrene-d10	9.637		943523	40.00 ng	--
5) Chrysene-d12	12.682		1168550	40.00 ng	--
6) Perylene-d12	14.295		1133270	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.220		1818619	139.10 ng	56
2) 5131-66-8	5.170		120016	9.18 ng	74
3) UNKNOWN	5.610		53417	4.09 ng	--
4) UNKNOWN	8.460		327343	16.39 ng	--
5) 76319-77-2	11.050		246325	10.44 ng	78
6) UNKNOWN	14.960		167087	5.90 ng	--
7) 566-51-8	15.140		292421	10.32 ng	76
8) UNKNOWN	16.130		130089	4.59 ng	--

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M112177.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD15713-007
Data File: 5M112177.D
Acq On : 02/24/20 13:59
Operator : AH/JB
Sam Mult : 1 Vial# : 17
Misc : S,BNA
Qt Meth : 5M_0210.M
Qt On : 02/24/20 14:32
Qt Upd On: 02/10/20 13:48
Abundance
Time-->
1,4-Dioxane-d8(INT,I
TIC-1-(123-42-2)
2-Fluorophenol,S
TIC-2-(5131-66-8)
Phenol-d5,S
TIC-3-(UNKNOWN)
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
TIC-4-(UNKNOWN)
Diethylphthalate,P


TIC: 5M112177.D\data.ms
Abundance
Time-->
Acenaphthene-d10,I
TIC-4-(UNKNOWN)
Diethylphthalate,P
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
TIC-5-(76319-77-2)
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
TIC-6-(UNKNOWN)
TIC-7-(566-51-8)
TIC-8-(UNKNOWN)

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15713-009
Client Id: TB-101-5 COMP
Data File: 5M112178.D
Analysis Date: 02/24/20 14:22
Date Rec/Extracted: 02/14/20-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.039	U	205-99-2	Benzo[b]fluoranthene	0.039	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.039	U	191-24-2	Benzo[g,h,i]perylene	0.039	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.039	U	207-08-9	Benzo[k]fluoranthene	0.039	U
95-95-4	2,4,5-Trichlorophenol	0.039	U	111-91-1	bis(2-Chloroethoxy)methan	0.039	U
88-06-2	2,4,6-Trichlorophenol	0.039	U	111-44-4	bis(2-Chloroethyl)ether	0.0098	U
120-83-2	2,4-Dichlorophenol	0.0098	U	108-60-1	bis(2-chloroisopropyl)ether	0.039	U
105-67-9	2,4-Dimethylphenol	0.0098	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.039	U
51-28-5	2,4-Dinitrophenol	0.20	U	85-68-7	Butylbenzylphthalate	0.039	U
121-14-2	2,4-Dinitrotoluene	0.039	U	105-60-2	Caprolactam	0.039	U
606-20-2	2,6-Dinitrotoluene	0.039	U	86-74-8	Carbazole	0.039	U
91-58-7	2-Chloronaphthalene	0.039	U	218-01-9	Chrysene	0.039	U
95-57-8	2-Chlorophenol	0.039	U	53-70-3	Dibenzo[a,h]anthracene	0.039	U
91-57-6	2-Methylnaphthalene	0.039	U	132-64-9	Dibenzofuran	0.0098	U
95-48-7	2-Methylphenol	0.0098	U	84-66-2	Diethylphthalate	0.039	U
88-74-4	2-Nitroaniline	0.039	U	131-11-3	Dimethylphthalate	0.039	U
88-75-5	2-Nitrophenol	0.039	U	84-74-2	Di-n-butylphthalate	0.0098	U
106-44-5	3&4-Methylphenol	0.0098	U	117-84-0	Di-n-octylphthalate	0.039	U
91-94-1	3,3'-Dichlorobenzidine	0.039	U	**206-44-0**	**Fluoranthene**	**0.039**	**0.053**
99-09-2	3-Nitroaniline	0.039	U	86-73-7	Fluorene	0.039	U
534-52-1	4,6-Dinitro-2-methylphenol	0.20	U	118-74-1	Hexachlorobenzene	0.039	U
101-55-3	4-Bromophenyl-phenylether	0.039	U	87-68-3	Hexachlorobutadiene	0.039	U
59-50-7	4-Chloro-3-methylphenol	0.039	U	77-47-4	Hexachlorocyclopentadiene	0.039	U
106-47-8	4-Chloroaniline	0.0098	U	67-72-1	Hexachloroethane	0.039	U
7005-72-3	4-Chlorophenyl-phenylether	0.039	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.039	U
100-01-6	4-Nitroaniline	0.039	U	78-59-1	Isophorone	0.039	U
100-02-7	4-Nitrophenol	0.039	U	91-20-3	Naphthalene	0.0098	U
83-32-9	Acenaphthene	0.039	U	98-95-3	Nitrobenzene	0.039	U
208-96-8	Acenaphthylene	0.039	U	621-64-7	N-Nitroso-di-n-propylamine	0.0098	U
98-86-2	Acetophenone	0.039	U	86-30-6	n-Nitrosodiphenylamine	0.039	U
120-12-7	Anthracene	0.039	U	87-86-5	Pentachlorophenol	0.20	U
1912-24-9	Atrazine	0.039	U	85-01-8	Phenanthrene	0.039	U
100-52-7	Benzaldehyde	0.039	U	108-95-2	Phenol	0.039	U
56-55-3	Benzo[a]anthracene	0.039	U	**129-00-0**	**Pyrene**	**0.039**	**0.045**
50-32-8	Benzo[a]pyrene	0.039	U				

Worksheet #: 546294

Total Target Concentration 0.098

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-009
Client Id: TB-101-5 COMP
Data File: 5M112178.D
Analysis Date: 02/24/20 14:22
Date Rec/Extracted: 02/14/20-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 85
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.22	2.5JAB
2	5131-66-8	2-Propanol, 1-butoxy-	5.17	0.16JB
3	540-97-6	Cyclohexasiloxane, dodecamethyl-	7.16	0.084J
4		unknown	8.47	0.085J
5		unknown	11.05	0.18J
6	80-97-7	Dihydrocholesterol	14.96	0.35J
7	566-88-1	5.alpha.-Cholestan-3-one	15.14	0.54J
8		unknown	15.90	0.16J
9	83-46-5	5.ALPHA.-STIGMAST-3-ONE	16.13	0.23J

Worksheet #: 546294

Total Tentatively Identified Concentration 4.3

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

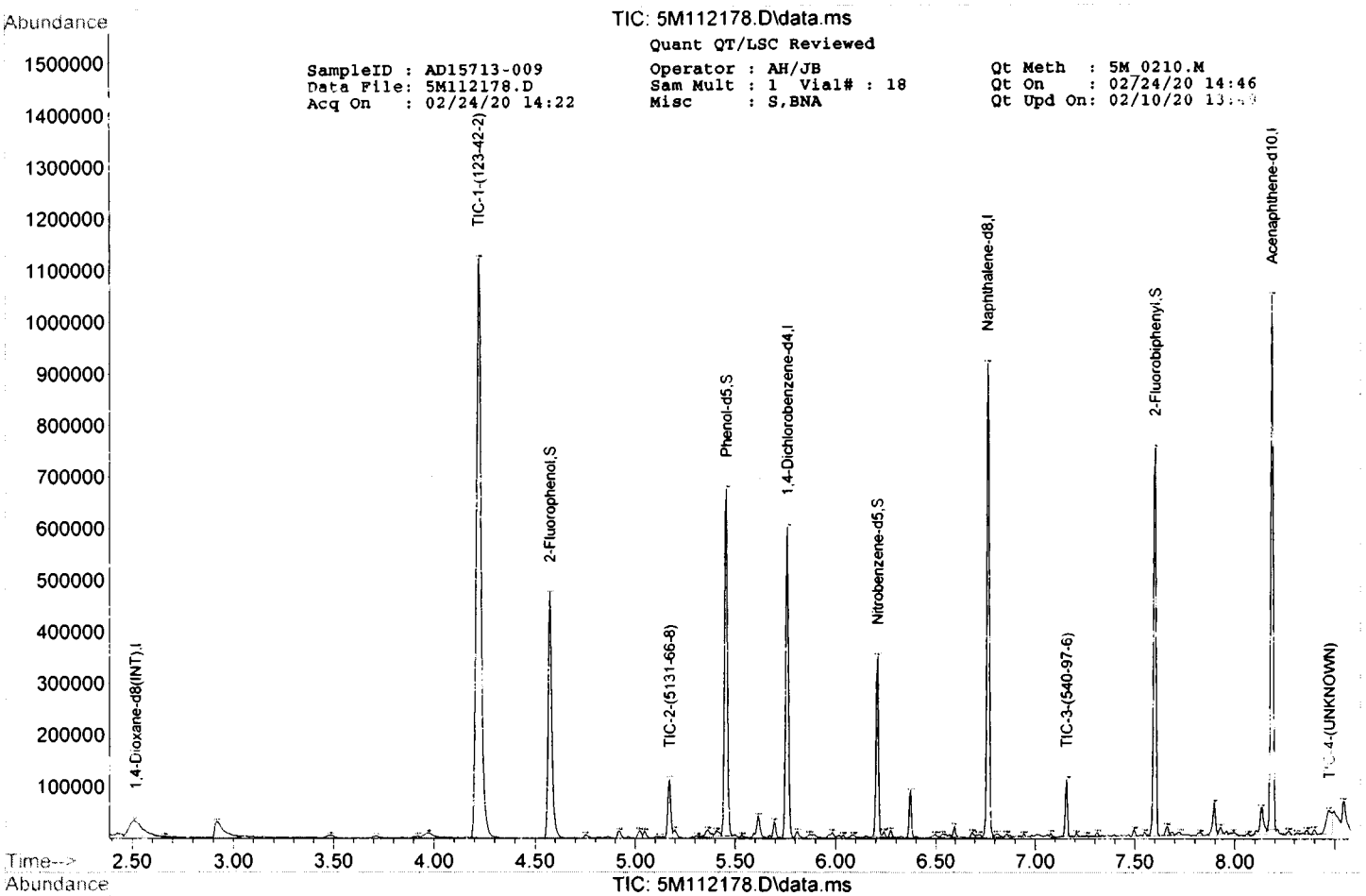
0021406 0135

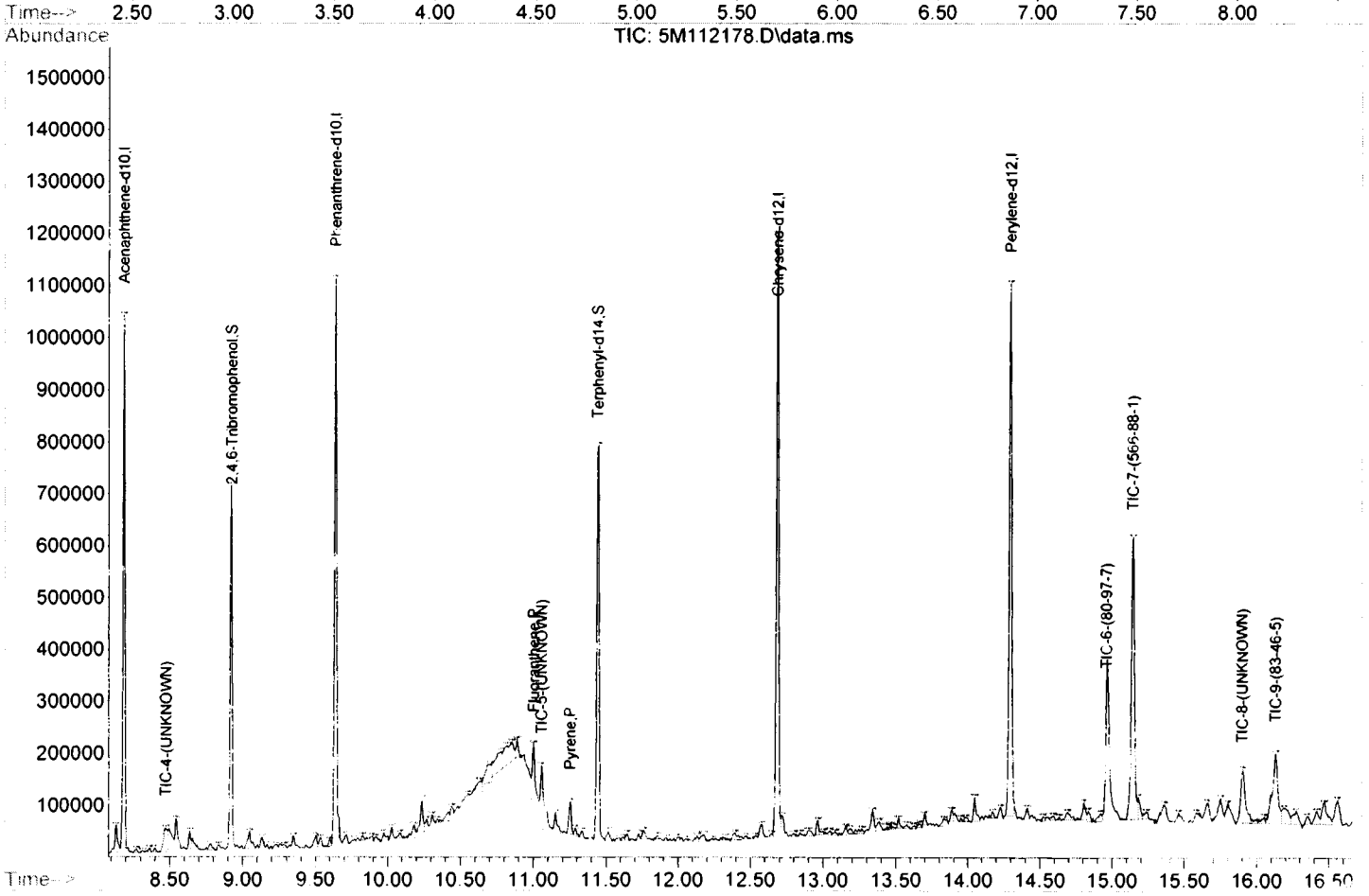
SampleID : AD15713-009 Operator : AH/JB Qt Meth : 5M_0210.M
Data File: 5M112178.D Sam Mult : 1 Vial# : 18 Qt On : 02/24/20 14:46
Acq On : 02/24/20 14:22 Misc : S,BNA Qt Upd On: 02/10/20 13:48

Data Path : G:\GcMsData\2020\GCMS_5\Data\02-24-20\
Qt Path : G:\GCMSDATA\2020\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.515	96	50382	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.758	152	81791	40.00	ng	0.00
31) Naphthalene-d8	6.763	136	309447	40.00	ng	0.00
50) Acenaphthene-d10	8.184	164	196905	40.00	ng	0.00
77) Phenanthrene-d10	9.637	188	397015	40.00	ng	0.00
91) Chrysene-d12	12.682	240	445341	40.00	ng	0.00
103) Perylene-d12	14.295	264	438673	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.572	112	145412	55.95	ng	0.02
Spiked Amount 100.000			Recovery = 55.95%			
16) Phenol-d5	5.454	99	194885	57.10	ng	0.01
Spiked Amount 100.000			Recovery = 57.10%			
32) Nitrobenzene-d5	6.207	128	36410	29.42	ng	0.00
Spiked Amount 50.000			Recovery = 58.84%			
55) 2-Fluorobiphenyl	7.601	172	197200	28.57	ng	0.00
Spiked Amount 50.000			Recovery = 57.14%			
80) 2,4,6-Tribromophenol	8.921	330	74448	66.90	ng	0.00
Spiked Amount 100.000			Recovery = 66.90%			
94) Terphenyl-d14	11.437	244	232176	34.64	ng	0.00
Spiked Amount 50.000			Recovery = 69.28%			
Target Compounds						Qvalue
90) Fluoranthene	10.999	202	34223	2.7090	ng	82
92) Pyrene	11.250	202	28441	2.2990	ng	83
Library Search Internal Standards TIC Results						
1) 1,4-Dichlorobenzene-d4	5.758		574580	40.00	ng	--
2) Naphthalene-d8	6.763		736913	40.00	ng	--
3) Acenaphthene-d10	8.184		882895	40.00	ng	--
4) Phenanthrene-d10	9.637		1068990	40.00	ng	--
5) Chrysene-d12	12.682		1304540	40.00	ng	--
6) Perylene-d12	14.295		1214820	40.00	ng	--
Library Search Compounds						
1) 123-42-2	4.220		1824159	126.99	ng	74
2) 5131-66-8	5.170		118715	8.26	ng	72
3) 540-97-6	7.160		78522	4.26	ng	87
4) UNKNOWN	8.470		96044	4.35	ng	--
5) UNKNOWN	11.050		243625	9.12	ng	--
6) 80-97-7	14.960		540513	17.80	ng	78
7) 566-88-1	15.140		841604	27.71	ng	90
8) UNKNOWN	15.900		244740	8.06	ng	--
9) 83-46-5	16.130		353540	11.64	ng	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M112178.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD15713-009
Data File: 5M112178.D
Acq On : 02/24/20 14:22
Operator : AH/JB
Sam Mult : 1 Vial# : 18
Misc : S,BNA
Qt Meth : 5M_0210.M
Qt On : 02/24/20 14:46
Qt Upd On: 02/10/20 13:
Abundance
Time-->
1,4-Dioxane-d8(INT),I
TIC-1-(123-42-2)
2-Fluorophenol,S
TIC-2-(5131-66-8)
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
TIC-3-(540-97-6)
2-Fluorobiphenyl,S
Acenaphthene-d10,I
TIC-4-(UNKNOWN)


TIC: 5M112178.D\data.ms
Abundance
Time-->
Acenaphthene-d10,I
TIC-4-(UNKNOWN)
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Fluoranthene,P
TIC-5-(UNKNOWN)
Pyrene,P
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
TIC-6-(80-97-7)
TIC-7-(566-88-1)
TIC-8-(UNKNOWN)
TIC-9-(83-46-5)

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15713-011
Client Id: TB-101-6 COMP
Data File: 9M98431.D
Analysis Date: 02/23/20 15:29
Date Rec/Extracted: 02/14/20-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.041	U	205-99-2	Benzo[b]fluoranthene	0.041	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.041	U	191-24-2	Benzo[g,h,i]perylene	0.041	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.041	U	207-08-9	Benzo[k]fluoranthene	0.041	U
95-95-4	2,4,5-Trichlorophenol	0.041	U	111-91-1	bis(2-Chloroethoxy)methan	0.041	U
88-06-2	2,4,6-Trichlorophenol	0.041	U	111-44-4	bis(2-Chloroethyl)ether	0.010	U
120-83-2	2,4-Dichlorophenol	0.010	U	108-60-1	bis(2-chloroisopropyl)ether	0.041	U
105-67-9	2,4-Dimethylphenol	0.010	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.041	U
51-28-5	2,4-Dinitrophenol	0.20	U	85-68-7	Butylbenzylphthalate	0.041	U
121-14-2	2,4-Dinitrotoluene	0.041	U	105-60-2	Caprolactam	0.041	U
606-20-2	2,6-Dinitrotoluene	0.041	U	86-74-8	Carbazole	0.041	U
91-58-7	2-Chloronaphthalene	0.041	U	218-01-9	Chrysene	0.041	U
95-57-8	2-Chlorophenol	0.041	U	53-70-3	Dibenzo[a,h]anthracene	0.041	U
91-57-6	2-Methylnaphthalene	0.041	U	132-64-9	Dibenzofuran	0.010	U
95-48-7	2-Methylphenol	0.010	U	84-66-2	Diethylphthalate	0.041	U
88-74-4	2-Nitroaniline	0.041	U	131-11-3	Dimethylphthalate	0.041	U
88-75-5	2-Nitrophenol	0.041	U	84-74-2	Di-n-butylphthalate	0.010	U
106-44-5	3&4-Methylphenol	0.010	U	117-84-0	Di-n-octylphthalate	0.041	U
91-94-1	3,3'-Dichlorobenzidine	0.041	U	206-44-0	Fluoranthene	0.041	U
99-09-2	3-Nitroaniline	0.041	U	86-73-7	Fluorene	0.041	U
534-52-1	4,6-Dinitro-2-methylphenol	0.20	U	118-74-1	Hexachlorobenzene	0.041	U
101-55-3	4-Bromophenyl-phenylether	0.041	U	87-68-3	Hexachlorobutadiene	0.041	U
59-50-7	4-Chloro-3-methylphenol	0.041	U	77-47-4	Hexachlorocyclopentadiene	0.041	U
106-47-8	4-Chloroaniline	0.010	U	67-72-1	Hexachloroethane	0.041	U
7005-72-3	4-Chlorophenyl-phenylether	0.041	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.041	U
100-01-6	4-Nitroaniline	0.041	U	78-59-1	Isophorone	0.041	U
100-02-7	4-Nitrophenol	0.041	U	91-20-3	Naphthalene	0.010	U
83-32-9	Acenaphthene	0.041	U	98-95-3	Nitrobenzene	0.041	U
208-96-8	Acenaphthylene	0.041	U	621-64-7	N-Nitroso-di-n-propylamine	0.010	U
98-86-2	Acetophenone	0.041	U	86-30-6	n-Nitrosodiphenylamine	0.041	U
120-12-7	Anthracene	0.041	U	87-86-5	Pentachlorophenol	0.20	U
1912-24-9	Atrazine	0.041	U	85-01-8	Phenanthrene	0.041	U
100-52-7	Benzaldehyde	0.041	U	108-95-2	Phenol	0.041	U
56-55-3	Benzo[a]anthracene	0.041	U	129-00-0	Pyrene	0.041	U
50-32-8	Benzo[a]pyrene	0.041	U				

Worksheet #: 546294 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15713-011
Client Id: TB-101-6 COMP
Data File: 9M98431.D
Analysis Date: 02/23/20 15:29
Date Rec/Extracted: 02/14/20-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 82
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.34	3.5JAB
2	5131-66-8	2-Propanol, 1-butoxy-	5.27	0.15JB
3	526-73-8	Benzene, 1,2,3-trimethyl-	5.72	0.11J

Worksheet #: 546294

Total Tentatively Identified Concentration 3.8

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

0021406 0139

SampleID : AD15713-011 Operator : AH/JB Qt Meth : 9M_0213.M
Data File: 9M98431.D Sam Mult : 1 Vial# : 10 Qt On : 02/24/20 07:17
Acq On : 02/23/20 15:29 Misc : S,BNA Qt Upd On: 02/17/20 12:46

Data Path : G:\GcMsData\2020\GCMS_9\Data\02-23-20\
Qt Path : G:\GCMSDATA\2020\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.643	96	54569	40.00 ng	0.00
21) 1,4-Dichlorobenzene-d4	5.860	152	103815	40.00 ng	0.00
31) Naphthalene-d8	6.866	136	395269	40.00 ng	0.00
50) Acenaphthene-d10	8.295	164	223306	40.00 ng	-0.01
77) Phenanthrene-d10	9.760	188	392753	40.00 ng	-0.01
91) Chrysene-d12	12.819	240	351145	40.00 ng	-0.01
103) Perylene-d12	14.448	264	342176	40.00 ng	-0.01
System Monitoring Compounds					
11) 2-Fluorophenol	4.672	112	227609	73.64 ng	0.00
Spiked Amount 100.000			Recovery = 73.64%		
16) Phenol-d5	5.543	99	288747	74.14 ng	0.00
Spiked Amount 100.000			Recovery = 74.14%		
32) Nitrobenzene-d5	6.307	128	57181	34.88 ng	0.00
Spiked Amount 50.000			Recovery = 69.76%		
55) 2-Fluorobiphenyl	7.707	172	270773	35.41 ng	0.00
Spiked Amount 50.000			Recovery = 70.82%		
80) 2,4,6-Tribromophenol	9.036	330	70279	80.90 ng	-0.01
Spiked Amount 100.000			Recovery = 80.90%		
94) Terphenyl-d14	11.572	244	238758	41.56 ng	0.00
Spiked Amount 50.000			Recovery = 83.12%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.860		585808	40.00 ng	--
2) Naphthalene-d8	6.866		819727	40.00 ng	--
3) Acenaphthene-d10	8.295		926879	40.00 ng	--
4) Phenanthrene-d10	9.760		993664	40.00 ng	--
5) Chrysene-d12	12.819		1059410	40.00 ng	--
6) Perylene-d12	14.448		1030200	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.340		2527727	172.60 ng	59
2) 5131-66-8	5.270		110063	7.52 ng	90
3) 526-73-8	5.720		81242	5.55 ng	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

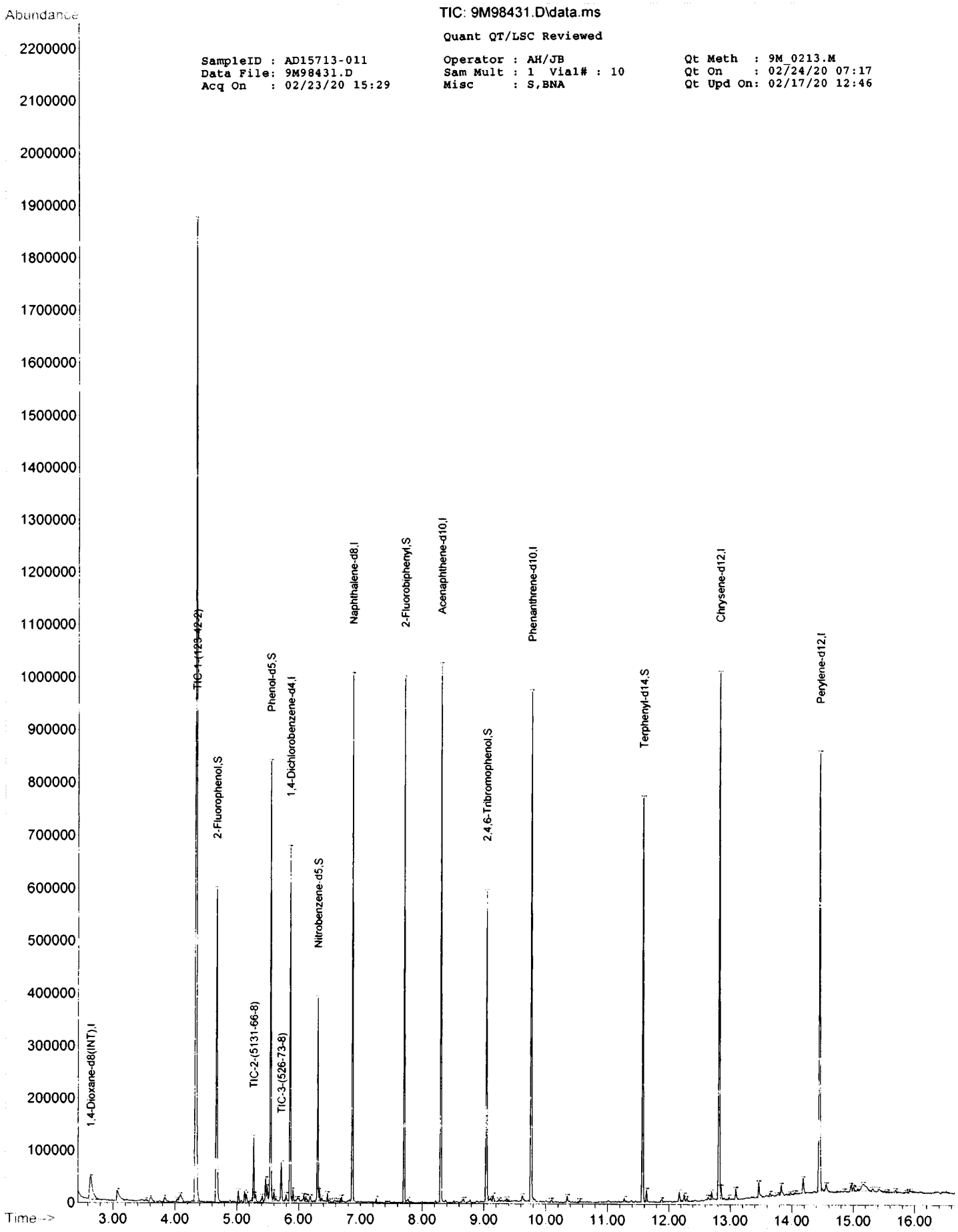
TIC: 9M98431.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD15713-011
Data File: 9M98431.D
Acq On : 02/23/20 15:29

Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : S,BNA

Qt Meth : 9M_0213.M
Qt On : 02/24/20 07:17
Qt Upd On: 02/17/20 12:46



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB82174
Client Id:
Data File: 5M112182.D
Analysis Date: 02/24/20 15:55
Date Rec/Extracted: NA-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	131-11-3	Dimethylphthalate	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.0083	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.0083	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 546294 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB82174
Client Id:
Data File: 5M112182.D
Analysis Date: 02/24/20 15:55
Date Rec/Extracted: NA-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.22	3.1 JA
2	5131-66-8	2-Propanol, 1-butoxy-	5.17	0.16 J
3	108-67-8	Benzene, 1,3,5-trimethyl-	5.61	0.071 J

Worksheet #: 546294

Total Tentatively Identified Concentration 3.3

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : SMB82174 Operator : AH/JB Qt Meth : 5M_0210.M
Data File: 5M112182.D Sam Mult : 1 Vial# : 22 Qt On : 02/25/20 11:[illegible]
Acq On : 02/24/20 15:55 Misc : S,BNA Qt Upd On: 02/10/20 13:48

Data Path : G:\GcMsData\2020\GCMS_5\Data\02-24-20\
Qt Path : G:\GCMSDATA\2020\GCMS_5\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.499	96	40251	40.00 ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.758	152	68554	40.00 ng	0.00
31) Naphthalene-d8	6.763	136	253072	40.00 ng	0.00
50) Acenaphthene-d10	8.184	164	164173	40.00 ng	0.00
77) Phenanthrene-d10	9.637	188	319736	40.00 ng	0.00
91) Chrysene-d12	12.682	240	360110	40.00 ng	0.00
103) Perylene-d12	14.295	264	347650	40.00 ng	0.00
System Monitoring Compounds					
11) 2-Fluorophenol	4.572	112	158040	76.12 ng	0.02
Spiked Amount 100.000			Recovery = 76.12%		
16) Phenol-d5	5.448	99	204090	74.85 ng	0.00
Spiked Amount 100.000			Recovery = 74.85%		
32) Nitrobenzene-d5	6.207	128	41196	40.70 ng	0.00
Spiked Amount 50.000			Recovery = 81.40%		
55) 2-Fluorobiphenyl	7.601	172	220594	38.33 ng	0.00
Spiked Amount 50.000			Recovery = 76.66%		
80) 2,4,6-Tribromophenol	8.921	330	69055	77.05 ng	0.00
Spiked Amount 100.000			Recovery = 77.05%		
94) Terphenyl-d14	11.437	244	247739	45.71 ng	0.00
Spiked Amount 50.000			Recovery = 91.42%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.758		467202	40.00 ng	--
2) Naphthalene-d8	6.763		597620	40.00 ng	--
3) Acenaphthene-d10	8.184		716084	40.00 ng	--
4) Phenanthrene-d10	9.637		824783	40.00 ng	--
5) Chrysene-d12	12.682		990648	40.00 ng	--
6) Perylene-d12	14.295		932923	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.220		2159446	184.88 ng	56
2) 5131-66-8	5.170		109909	9.41 ng	90
3) 108-67-8	5.610		49591	4.25 ng	52

(#) = qualifier out of range (m) = manual integration (+) = signals summed

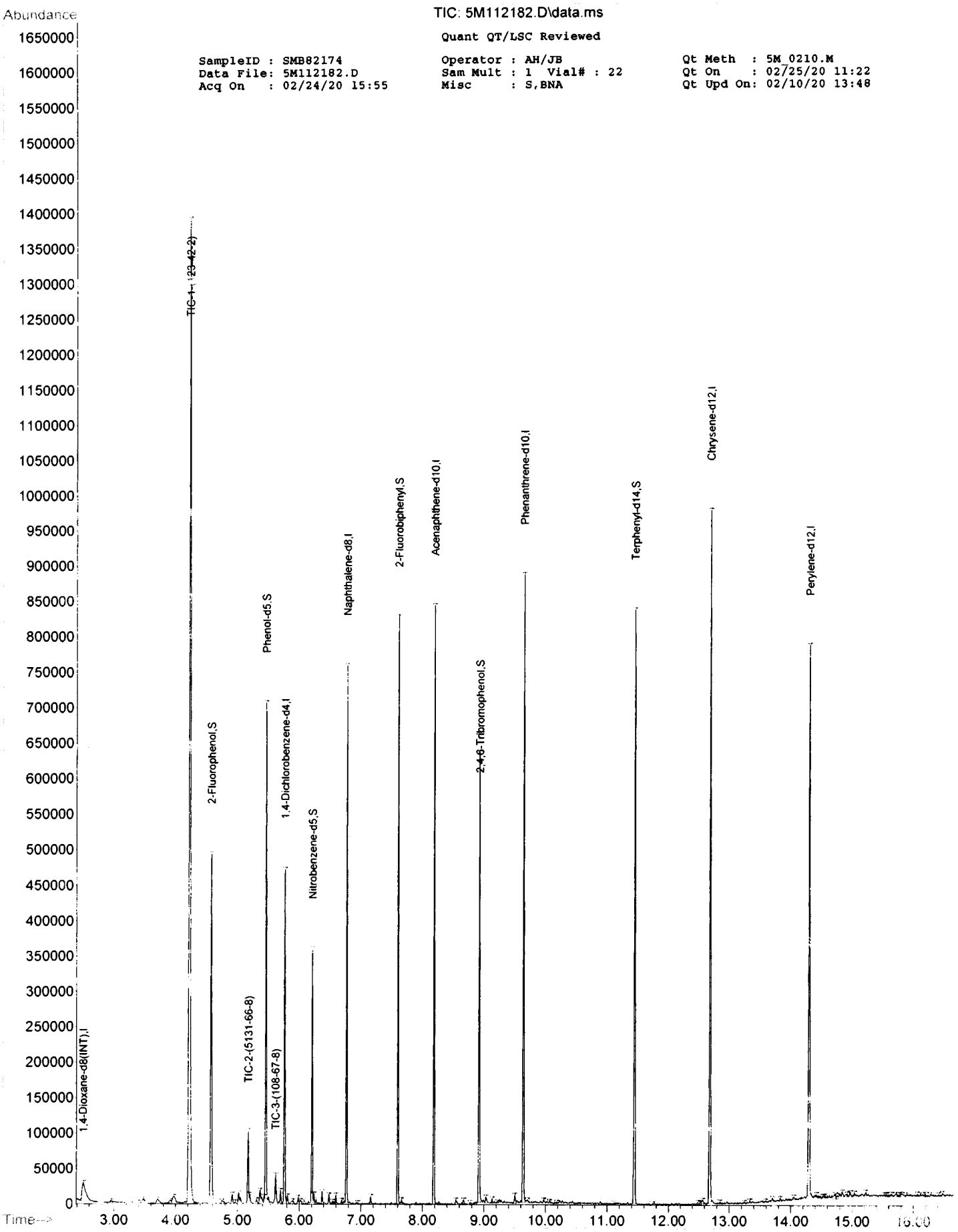
TIC: 5M112182.D\data.ms

Quant QT/LSC Reviewed

SampleID : SMB82174
Data File: 5M112182.D
Acq On : 02/24/20 15:55

Operator : AH/JB
Sam Mult : 1 Vial# : 22
Misc : S,BNA

Qt Meth : 5M_0210.M
Qt On : 02/25/20 11:22
Qt Upd On: 02/10/20 13:48



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB82174
Client Id:
Data File: 7M105325.D
Analysis Date: 02/23/20 13:25
Date Rec/Extracted: NA-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	131-11-3	Dimethylphthalate	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.0083	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.0083	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 546294 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB82174
Client Id:
Data File: 7M105325.D
Analysis Date: 02/23/20 13:25
Date Rec/Extracted: NA-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	4.1 JA
2	5131-66-8	2-Propanol, 1-butoxy-	5.23	0.22 J
3	95-63-6	Benzene, 1,2,4-trimethyl-	5.68	0.068 J

Worksheet #: 546294 *Total Tentatively Identified Concentration* 4.4

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : SMB82174 Operator : AB/JB Qt Meth : 7M_0210.M
Data File: 7M105325.D Sam Mult : 1 Vial# : 5 Qt On : 02/24/20 07:14
Acq On : 02/23/20 13:25 Misc : S,BNA Qt Upd On: 02/11/20 13:21

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-23-20\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.587	96	44039	40.00 ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.819	152	79128	40.00 ng	0.00
31) Naphthalene-d8	6.823	136	299137	40.00 ng	0.00
50) Acenaphthene-d10	8.245	164	174874	40.00 ng	0.00
77) Phenanthrene-d10	9.702	188	320847	40.00 ng	0.00
91) Chrysene-d12	12.752	240	310128	40.00 ng	0.00
103) Perylene-d12	14.368	264	309149	40.00 ng	0.00
System Monitoring Compounds					
11) 2-Fluorophenol	4.644	112	197057	79.79 ng	0.02
Spiked Amount 100.000			Recovery = 79.79%		
16) Phenol-d5	5.513	99	255761	79.62 ng	0.01
Spiked Amount 100.000			Recovery = 79.62%		
32) Nitrobenzene-d5	6.265	128	50246	38.80 ng	0.00
Spiked Amount 50.000			Recovery = 77.60%		
55) 2-Fluorobiphenyl	7.658	172	233961	40.46 ng	0.00
Spiked Amount 50.000			Recovery = 80.92%		
80) 2,4,6-Tribromophenol	8.986	330	66816	80.14 ng	0.00
Spiked Amount 100.000			Recovery = 80.14%		
94) Terphenyl-d14	11.506	244	214530	42.65 ng	0.00
Spiked Amount 50.000			Recovery = 85.30%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.819		512394	40.00 ng	--
2) Naphthalene-d8	6.823		670819	40.00 ng	--
3) Acenaphthene-d10	8.245		764476	40.00 ng	--
4) Phenanthrene-d10	9.702		835474	40.00 ng	--
5) Chrysene-d12	12.752		900137	40.00 ng	--
6) Perylene-d12	14.368		887079	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.290		3176520	247.97 ng	50
2) 5131-66-8	5.230		169066	13.20 ng	90
3) 95-63-6	5.680		52263	4.08 ng	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

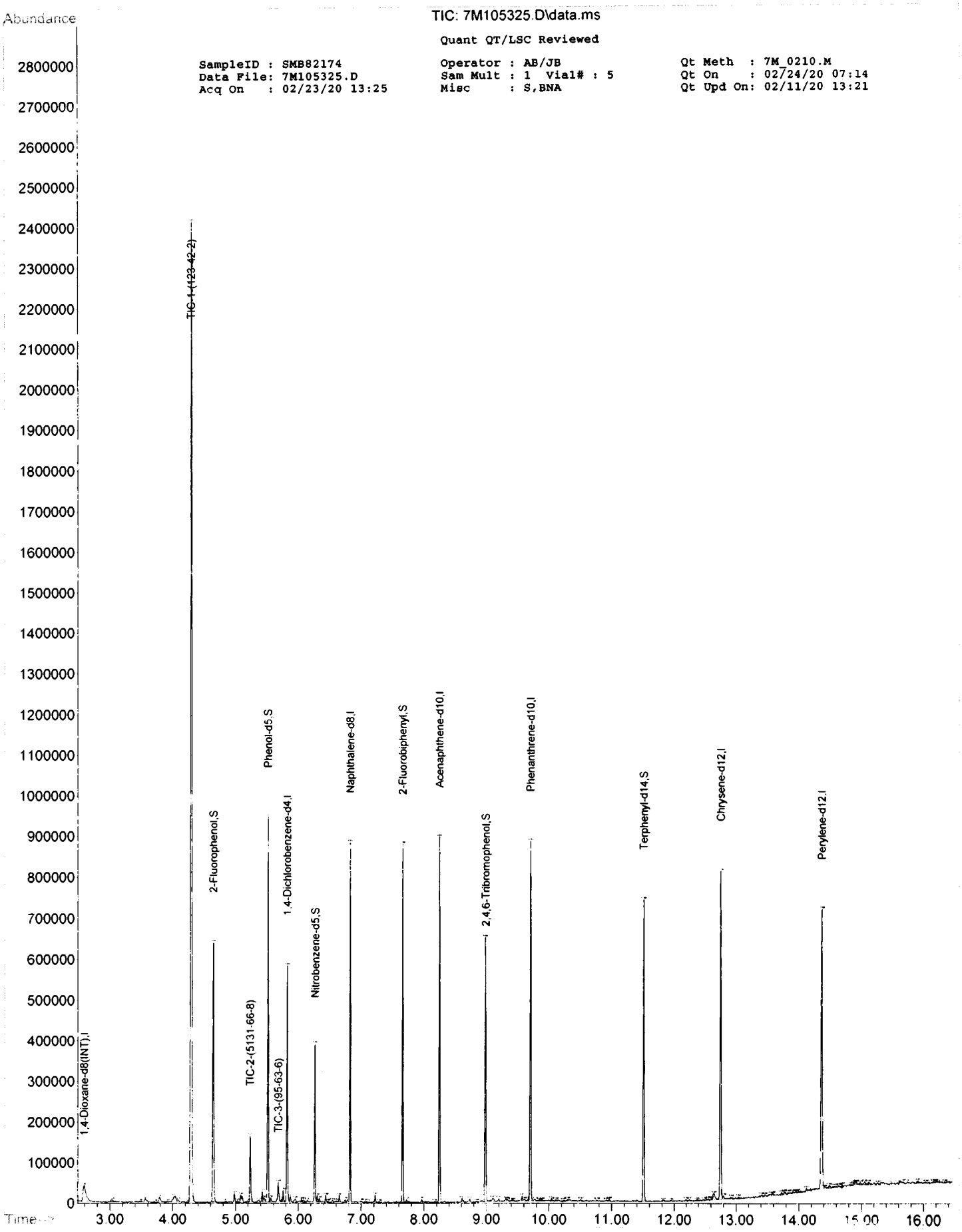
TIC: 7M105325.D\data.ms

Quant QT/LSC Reviewed

SampleID : SMB82174
Data File: 7M105325.D
Acq On : 02/23/20 13:25

Operator : AB/JB
Sam Mult : 1 Vial# : 5
Misc : S,BNA

Qt Meth : 7M_0210.M
Qt On : 02/24/20 07:14
Qt Upd On: 02/11/20 13:21



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB82174
Client Id:
Data File: 9M98428.D
Analysis Date: 02/23/20 14:16
Date Rec/Extracted: NA-02/21/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	131-11-3	Dimethylphthalate	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.0083	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.0083	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 546296 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and g-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB82174
Client Id:
Data File: 9M98428.D
Analysis Date: 02/23/20 14:16
Date Rec/Extracted: NA-02/21/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.33	3.2JA
2	5131-66-8	2-Propanol, 1-butoxy-	5.27	0.17J

Worksheet #: 546296

Total Tentatively Identified Concentration 3.4

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : SMB82174
Data File: 9M98428.D
Acq On : 02/23/20 14:16

Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : S,BNA

Qt Meth : 9M_0213.M
Qt On : 02/24/20 07:17
Qt Upd On: 02/17/20 12:46

Data Path : G:\GcMsData\2020\GCMS_9\Data\02-23-20\
Qt Path : G:\GCMSDATA\2020\GCMS_9\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.637	96	60495	40.00 ng	0.00
21) 1,4-Dichlorobenzene-d4	5.860	152	116037	40.00 ng	0.00
31) Naphthalene-d8	6.866	136	434622	40.00 ng	0.00
50) Acenaphthene-d10	8.295	164	243380	40.00 ng	-0.01
77) Phenanthrene-d10	9.760	188	442080	40.00 ng	-0.01
91) Chrysene-d12	12.818	240	392202	40.00 ng	-0.01
103) Perylene-d12	14.448	264	368351	40.00 ng	-0.01
System Monitoring Compounds					
11) 2-Fluorophenol	4.672	112	273610	79.85 ng	0.00
Spiked Amount 100.000			Recovery = 79.85%		
16) Phenol-d5	5.542	99	349133	80.86 ng	0.00
Spiked Amount 100.000			Recovery = 80.86%		
32) Nitrobenzene-d5	6.307	128	70799	39.27 ng	0.00
Spiked Amount 50.000			Recovery = 78.54%		
55) 2-Fluorobiphenyl	7.707	172	334890	40.19 ng	0.00
Spiked Amount 50.000			Recovery = 80.38%		
80) 2,4,6-Tribromophenol	9.036	330	77482	79.23 ng	-0.01
Spiked Amount 100.000			Recovery = 79.23%		
94) Terphenyl-d14	11.572	244	282026	43.96 ng	0.00
Spiked Amount 50.000			Recovery = 87.92%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.860		647140	40.00 ng	--
2) Naphthalene-d8	6.866		884820	40.00 ng	--
3) Acenaphthene-d10	8.295		1007450	40.00 ng	--
4) Phenanthrene-d10	9.760		1098590	40.00 ng	--
5) Chrysene-d12	12.819		1136750	40.00 ng	--
6) Perylene-d12	14.448		1086960	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.330		3130006	193.47 ng	59
2) 5131-66-8	5.270		163897	10.13 ng	64

(#) = qualifier out of range (m) = manual integration (+) = signals summed

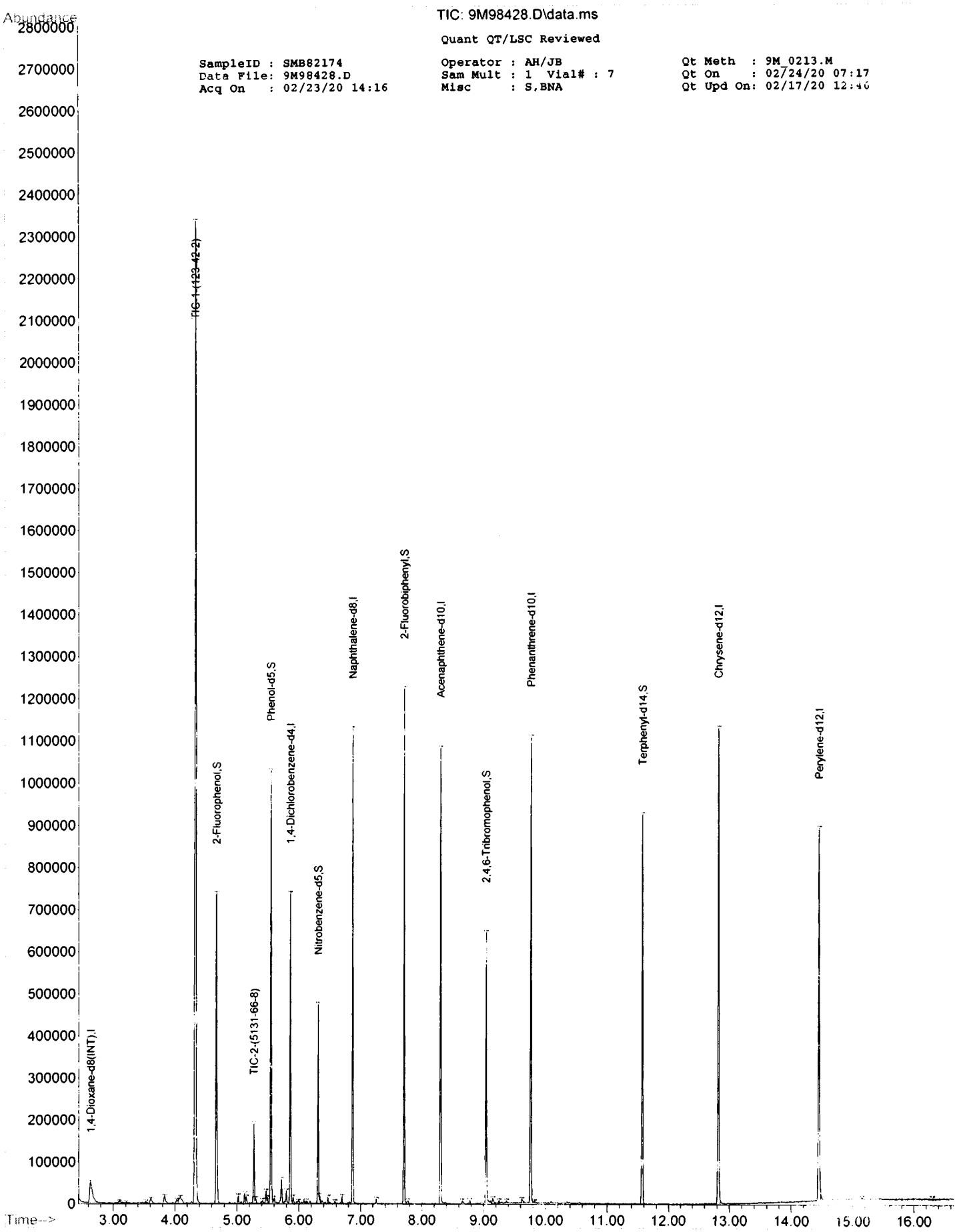
TIC: 9M98428.D\data.ms

Quant QT/LSC Reviewed

SampleID : SMB82174
Data File: 9M98428.D
Acq On : 02/23/20 14:16

Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : S,BNA

Qt Meth : 9M_0213.M
Qt On : 02/24/20 07:17
Qt Upd On: 02/17/20 12:46



FORM2

Surrogate Recovery

Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
5M112182.D	SMB82174	S	02/24/20 15:55	1		76	75	81	77	77	91
7M105325.D	SMB82174	S	02/23/20 13:25	1		80	80	78	81	80	85
9M98428.D	SMB82174	S	02/23/20 14:16	1		80	81	79	80	79	88
7M105360.D	AD15713-001(3X)	S	02/24/20 14:14	3		57	57	56	60	60	67
7M105353.D	AD15713-003(3X)	S	02/24/20 11:31	6		59	59	58	58	60	69
7M105361.D	AD15713-005	S	02/24/20 14:37	1		62	62	61	61	64	68
5M112177.D	AD15713-007	S	02/24/20 13:59	1		64	65	59	60	71	71
5M112178.D	AD15713-009	S	02/24/20 14:22	1		56	57	59	57*	67	69
9M98431.D	AD15713-011	S	02/23/20 15:29	1		74	74	70	71	81	83
10M79393.D	SMB82174(MS)	S	02/23/20 14:36	1		83	83	86	86	88	93
9M98463.D	AD15713-011(MS)	S	02/24/20 15:43	1		82	83	81	80	97	87
9M98464.D	AD15713-011(MSD)	S	02/24/20 16:07	1		83	85	82	81	100	90

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270D

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82174

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M79393.D	SMB82174(MS)	2/23/2020 2:36:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	37.1486	0	50	74	1	150
N-Nitrosodimethylamine	1	34.0048	0	50	68	50	130
Benzaldehyde	1	40.8022	0	50	82	20	220
Aniline	1	16.9898	0	50	34	20	150
Pentachloroethane	1	39.7847	0	50	80	50	130
bis(2-Chloroethyl)ether	1	41.3026	0	50	83	50	130
Phenol	1	74.7948	0	100	75	20	150
2-Chlorophenol	1	75.9693	0	100	76	50	130
N-Decane	1	32.4264	0	50	65	20	130
1,3-Dichlorobenzene	1	34.8256	0	50	70	60	130
1,4-Dichlorobenzene	1	38.121	0	50	76	60	130
1,2-Dichlorobenzene	1	38.5585	0	50	77	50	130
Benzyl alcohol	1	41.7075	0	50	83	20	130
bis(2-chloroisopropyl)ether	1	38.1807	0	50	76	40	130
2-Methylphenol	1	83.0102	0	100	83	50	130
Acetophenone	1	46.6879	0	50	93	50	130
Hexachloroethane	1	36.3646	0	50	73	50	130
N-Nitroso-di-n-propylamine	1	42.1219	0	50	84	40	130
3&4-Methylphenol	1	90.5065	0	100	91	70	130
Nitrobenzene	1	40.9708	0	50	82	70	130
Isophorone	1	38.492	0	50	77	60	130
2-Nitrophenol	1	82.2553	0	100	82	70	130
2,4-Dimethylphenol	1	80.1869	0	100	80	40	130
Benzoic Acid	1	71.4817	0	100	71	20	130
bis(2-Chloroethoxy)methane	1	41.5297	0	50	83	60	130
2,4-Dichlorophenol	1	81.3082	0	100	81	70	130
1,2,4-Trichlorobenzene	1	37.7174	0	50	75	50	130
Naphthalene	1	37.6903	0	50	75	50	130
4-Chloroaniline	1	18.6973	0	50	37	10	150
Hexachlorobutadiene	1	37.1635	0	50	74	60	130
Caprolactam	1	46.6353	0	50	93	50	130
4-Chloro-3-methylphenol	1	86.2839	0	100	86	50	130
2-Methylnaphthalene	1	41.2101	0	50	82	70	130
1-Methylnaphthalene	1	45.7177	0	50	91	70	130
1,1'-Biphenyl	1	45.1533	0	50	90	60	130
1,2,4,5-Tetrachlorobenzene	1	40.5046	0	50	81	70	130
Hexachlorocyclopentadiene	1	36.6557	0	50	73	20	160
2,4,6-Trichlorophenol	1	83.5478	0	100	84	70	130
2,4,5-Trichlorophenol	1	83.5525	0	100	84	70	130
2-Chloronaphthalene	1	40.8303	0	50	82	70	130
1,4-Dimethylnaphthalene	1	45.543	0	50	91	70	130
Diphenyl Ether	1	44.7497	0	50	89	70	130
2-Nitroaniline	1	44.4614	0	50	89	50	130
Coumarin	1	44.7792	0	50	90	70	130
Acenaphthylene	1	42.475	0	50	85	70	130
Dimethylphthalate	1	40.7079	0	50	81	70	130
2,6-Dinitrotoluene	1	40.4382	0	50	81	70	130
Acenaphthene	1	42.3482	0	50	85	50	130
3-Nitroaniline	1	27.0834	0	50	54	10	130
2,4-Dinitrophenol	1	72.2445	0	100	72	20	150
Dibenzofuran	1	40.6003	0	50	81	70	130
2,4-Dinitrotoluene	1	41.6591	0	50	83	40	130
4-Nitrophenol	1	92.3068	0	100	92	20	150
2,3,4,6-Tetrachlorophenol	1	78.2679	0	100	78	70	130
Fluorene	1	41.6434	0	50	83	50	130
4-Chlorophenyl-phenylether	1	38.8908	0	50	78	70	130
Diethylphthalate	1	40.3787	0	50	81	70	130
4-Nitroaniline	1	37.4785	0	50	75	50	130
Atrazine	1	42.0315	0	50	84	50	130
4,6-Dinitro-2-methylphenol	1	81.0036	0	100	81	40	130
n-Nitrosodiphenylamine	1	34.9528	0	50	70	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82174

Method: 8270D | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	43.173	0	50	86	70	130
4-Bromophenyl-phenylether	**1**	**40.3496**	**0**	**50**	**81**	**70**	**130**
Hexachlorobenzene	**1**	**38.2719**	**0**	**50**	**77**	**70**	**130**
N-Octadecane	1	53.8957	0	50	108	70	130
Pentachlorophenol	**1**	**85.0016**	**0**	**100**	**85**	**40**	**130**
Phenanthrene	**1**	**42.2306**	**0**	**50**	**84**	**70**	**130**
Anthracene	**1**	**40.9113**	**0**	**50**	**82**	**70**	**130**
Carbazole	**1**	**44.8548**	**0**	**50**	**90**	**70**	**130**
Di-n-butylphthalate	**1**	**43.6959**	**0**	**50**	**87**	**70**	**130**
Fluoranthene	**1**	**42.3986**	**0**	**50**	**85**	**70**	**130**
Pyrene	**1**	**44.3686**	**0**	**50**	**89**	**50**	**130**
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	**1**	**44.4556**	**0**	**50**	**89**	**50**	**130**
3,3'-Dichlorobenzidine	**1**	**18.9907**	**0**	**50**	**38**	**10**	**130**
Benzo[a]anthracene	**1**	**41.9415**	**0**	**50**	**84**	**70**	**130**
Chrysene	**1**	**33.6724**	**0**	**50**	**67**	**60**	**130**
bis(2-Ethylhexyl)phthalate	**1**	**45.8543**	**0**	**50**	**92**	**70**	**130**
Di-n-octylphthalate	**1**	**43.5061**	**0**	**50**	**87**	**70**	**130**
Benzo[b]fluoranthene	**1**	**41.978**	**0**	**50**	**84**	**70**	**130**
Benzo[k]fluoranthene	**1**	**44.5969**	**0**	**50**	**89**	**70**	**130**
Benzo[a]pyrene	**1**	**42.4537**	**0**	**50**	**85**	**70**	**130**
Indeno[1,2,3-cd]pyrene	**1**	**38.8095**	**0**	**50**	**78**	**70**	**130**
Dibenzo[a,h]anthracene	**1**	**37.9315**	**0**	**50**	**76**	**60**	**130**
Benzo[g,h,i]perylene	**1**	**39.2813**	**0**	**50**	**79**	**70**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82174

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M98463.D	AD15713-011(MS)	2/24/2020 3:43:00 PM
Non Spike(If applicable):	9M98431.D	AD15713-011	2/23/2020 3:29:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	31.5409	0	50	63	1	150
N-Nitrosodimethylamine	1	33.9585	0	50	68	50	130
Benzaldehyde	1	34.8785	0	50	70	20	220
Aniline	1	24.5374	0	50	49	20	150
Pentachloroethane	1	42.3409	0	50	85	50	130
bis(2-Chloroethyl)ether	1	41.9692	0	50	84	50	130
Phenol	1	78.7887	0	100	79	20	150
2-Chlorophenol	1	82.8554	0	100	83	50	130
N-Decane	1	28.4053	0	50	57	20	130
1,3-Dichlorobenzene	1	37.773	0	50	76	60	130
1,4-Dichlorobenzene	1	36.4394	0	50	73	60	130
1,2-Dichlorobenzene	1	36.8915	0	50	74	50	130
Benzyl alcohol	1	39.5518	0	50	79	20	130
bis(2-chloroisopropyl)ether	1	30.9664	0	50	62	40	130
2-Methylphenol	1	81.3955	0	100	81	50	130
Acetophenone	1	42.9192	0	50	86	50	130
Hexachloroethane	1	34.4488	0	50	69	50	130
N-Nitroso-di-n-propylamine	1	39.438	7.2444	50	64	40	130
3&4-Methylphenol	1	91.8859	0	100	92	70	130
Nitrobenzene	1	37.9441	0	50	76	70	130
Isophorone	1	34.6018	16.911	50	35*	60	130
2-Nitrophenol	1	91.1958	0	100	91	70	130
2,4-Dimethylphenol	1	84.6146	0	100	85	40	130
Benzoic Acid	1	86.3223	0	100	86	20	130
bis(2-Chloroethoxy)methane	1	37.9218	0	50	76	60	130
2,4-Dichlorophenol	1	80.254	0	100	80	70	130
1,2,4-Trichlorobenzene	1	38.6229	0	50	77	50	130
Naphthalene	1	41.4504	0	50	83	50	130
4-Chloroaniline	1	25.398	0	50	51	10	150
Hexachlorobutadiene	1	38.3333	0	50	77	60	130
Caprolactam	1	43.0774	0	50	86	50	130
4-Chloro-3-methylphenol	1	81.8568	0	100	82	50	130
2-Methylnaphthalene	1	39.6116	0	50	79	70	130
1-Methylnaphthalene	1	44.6566	0	50	89	70	130
1,1'-Biphenyl	1	43.9757	0	50	88	60	130
1,2,4,5-Tetrachlorobenzene	1	44.1866	0	50	88	70	130
Hexachlorocyclopentadiene	1	21.6392	0	50	43	20	160
2,4,6-Trichlorophenol	1	88.7121	0	100	89	70	130
2,4,5-Trichlorophenol	1	89.5278	0	100	90	70	130
2-Chloronaphthalene	1	40.5459	0	50	81	70	130
1,4-Dimethylnaphthalene	1	46.4647	0	50	93	70	130
Diphenyl Ether	1	45.7619	0	50	92	70	130
2-Nitroaniline	1	44.8879	0	50	90	50	130
Coumarin	1	45.9264	0	50	92	70	130
Acenaphthylene	1	41.7507	0	50	84	70	130
Dimethylphthalate	1	41.5079	0	50	83	70	130
2,6-Dinitrotoluene	1	45.8321	0	50	92	70	130
Acenaphthene	1	41.9458	0	50	84	50	130
3-Nitroaniline	1	36.7336	0	50	73	70	130
2,4-Dinitrophenol	1	51.5868	0	100	52	20	150
Dibenzofuran	1	44.259	0	50	89	70	130
2,4-Dinitrotoluene	1	43.3352	14.6022	50	57	40	130
4-Nitrophenol	1	86.5777	0	100	87	20	150
2,3,4,6-Tetrachlorophenol	1	84.2274	0	100	84	70	130
Fluorene	1	42.6857	0	50	85	50	130
4-Chlorophenyl-phenylether	1	41.7065	0	50	83	70	130
Diethylphthalate	1	40.8362	0	50	82	70	130
4-Nitroaniline	1	42.5332	0	50	85	50	130
Atrazine	1	43.9224	0	50	88	50	130
4,6-Dinitro-2-methylphenol	1	55.805	0	100	56	40	130
n-Nitrosodiphenylamine	1	35.7246	0	50	71	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82174

Method: 8270D Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	37.2384	0	50	74	70	130
4-Bromophenyl-phenylether	**1**	**43.3541**	**0**	**50**	**87**	**70**	**130**
Hexachlorobenzene	**1**	**41.863**	**0**	**50**	**84**	**70**	**130**
N-Octadecane	1	46.5878	0	50	93	70	130
Pentachlorophenol	**1**	**98.9049**	**0**	**100**	**99**	**40**	**130**
Phenanthrene	**1**	**42.8605**	**0**	**50**	**86**	**70**	**130**
Anthracene	**1**	**41.6414**	**0**	**50**	**83**	**70**	**130**
Carbazole	**1**	**45.6159**	**0**	**50**	**91**	**70**	**130**
Di-n-butylphthalate	**1**	**42.4443**	**0**	**50**	**85**	**70**	**130**
Fluoranthene	**1**	**42.3771**	**0**	**50**	**85**	**70**	**130**
Pyrene	**1**	**43.5242**	**0**	**50**	**87**	**50**	**130**
Benzidine	1	2.6519	0	50	5.3	1	130
Butylbenzylphthalate	**1**	**44.4137**	**0**	**50**	**89**	**50**	**130**
3,3'-Dichlorobenzidine	**1**	**36.5674**	**0**	**50**	**73**	**10**	**130**
Benzo[a]anthracene	**1**	**41.9654**	**0**	**50**	**84**	**70**	**130**
Chrysene	**1**	**34.7057**	**0**	**50**	**69**	**60**	**130**
bis(2-Ethylhexyl)phthalate	**1**	**45.8498**	**0**	**50**	**92**	**70**	**130**
Di-n-octylphthalate	**1**	**45.8817**	**0**	**50**	**92**	**70**	**130**
Benzo[b]fluoranthene	**1**	**46.1564**	**0**	**50**	**92**	**70**	**130**
Benzo[k]fluoranthene	**1**	**45.5743**	**0**	**50**	**91**	**70**	**130**
Benzo[a]pyrene	**1**	**45.0328**	**0**	**50**	**90**	**70**	**130**
Indeno[1,2,3-cd]pyrene	**1**	**42.0055**	**0**	**50**	**84**	**70**	**130**
Dibenzo[a,h]anthracene	**1**	**41.7538**	**0**	**50**	**84**	**60**	**130**
Benzo[g,h,i]perylene	**1**	**42.1796**	**0**	**50**	**84**	**70**	**130**

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82174

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M98464.D	AD15713-011(MSD)	2/24/2020 4:07:00 PM
Non Spike(If applicable):	9M98431.D	AD15713-011	2/23/2020 3:29:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	35.5595	0	50	71	1	150
N-Nitrosodimethylamine	1	36.7559	0	50	74	50	130
Benzaldehyde	1	39.636	0	50	79	20	220
Aniline	1	32.53	0	50	65	20	150
Pentachloroethane	1	45.1774	0	50	90	50	130
bis(2-Chloroethyl)ether	1	43.8253	0	50	88	50	130
Phenol	1	81.1724	0	100	81	20	150
2-Chlorophenol	1	83.8379	0	100	84	50	130
N-Decane	1	31.8479	0	50	64	20	130
1,3-Dichlorobenzene	1	40.575	0	50	81	60	130
1,4-Dichlorobenzene	1	38.3084	0	50	77	60	130
1,2-Dichlorobenzene	1	38.9674	0	50	78	50	130
Benzyl alcohol	1	41.1761	0	50	82	20	130
bis(2-chloroisopropyl)ether	1	32.4541	0	50	65	40	130
2-Methylphenol	1	81.6004	0	100	82	50	130
Acetophenone	1	43.8803	0	50	88	50	130
Hexachloroethane	1	36.1332	0	50	72	50	130
N-Nitroso-di-n-propylamine	1	40.8385	7.2444	50	67	40	130
3&4-Methylphenol	1	92.3178	0	100	92	70	130
Nitrobenzene	1	39.7047	0	50	79	70	130
Isophorone	1	36.304	16.911	50	39*	60	130
2-Nitrophenol	1	92.7336	0	100	93	70	130
2,4-Dimethylphenol	1	86.7834	0	100	87	40	130
Benzoic Acid	1	87.4533	0	100	87	20	130
bis(2-Chloroethoxy)methane	1	39.4925	0	50	79	60	130
2,4-Dichlorophenol	1	81.7333	0	100	82	70	130
1,2,4-Trichlorobenzene	1	40.0674	0	50	80	50	130
Naphthalene	1	43.6854	0	50	87	50	130
4-Chloroaniline	1	33.6549	0	50	67	10	150
Hexachlorobutadiene	1	40.2083	0	50	80	60	130
Caprolactam	1	44.5321	0	50	89	50	130
4-Chloro-3-methylphenol	1	83.9898	0	100	84	50	130
2-Methylnaphthalene	1	41.1537	0	50	82	70	130
1-Methylnaphthalene	1	45.8934	0	50	92	70	130
1,1'-Biphenyl	1	45.5732	0	50	91	60	130
1,2,4,5-Tetrachlorobenzene	1	46.016	0	50	92	70	130
Hexachlorocyclopentadiene	1	19.1273	0	50	38	20	160
2,4,6-Trichlorophenol	1	90.5519	0	100	91	70	130
2,4,5-Trichlorophenol	1	90.111	0	100	90	70	130
2-Chloronaphthalene	1	41.5201	0	50	83	70	130
1,4-Dimethylnaphthalene	1	47.7382	0	50	95	70	130
Diphenyl Ether	1	46.9524	0	50	94	70	130
2-Nitroaniline	1	47.1398	0	50	94	50	130
Coumarin	1	47.1299	0	50	94	70	130
Acenaphthylene	1	43.012	0	50	86	70	130
Dimethylphthalate	1	43.0994	0	50	86	70	130
2,6-Dinitrotoluene	1	46.6962	0	50	93	70	130
Acenaphthene	1	43.5129	0	50	87	50	130
3-Nitroaniline	1	43.3441	0	50	87	70	130
2,4-Dinitrophenol	1	51.9382	0	100	52	20	150
Dibenzofuran	1	45.9518	0	50	92	70	130
2,4-Dinitrotoluene	1	44.7942	14.6022	50	60	40	130
4-Nitrophenol	1	87.7547	0	100	88	20	150
2,3,4,6-Tetrachlorophenol	1	87.3446	0	100	87	70	130
Fluorene	1	44.2499	0	50	88	50	130
4-Chlorophenyl-phenylether	1	42.2602	0	50	85	70	130
Diethylphthalate	1	41.9801	0	50	84	70	130
4-Nitroaniline	1	44.9194	0	50	90	50	130
Atrazine	1	45.2062	0	50	90	50	130
4,6-Dinitro-2-methylphenol	1	58.6838	0	100	59	40	130
n-Nitrosodiphenylamine	1	36.5909	0	50	73	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82174

Method: 8270D | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	38.3975	0	50	77	70	130
4-Bromophenyl-phenylether	**1**	**44.493**	**0**	**50**	**89**	**70**	**130**
Hexachlorobenzene	**1**	**43.3961**	**0**	**50**	**87**	**70**	**130**
N-Octadecane	1	47.6251	0	50	95	70	130
Pentachlorophenol	**1**	**100.9559**	**0**	**100**	**101**	**40**	**130**
Phenanthrene	**1**	**44.077**	**0**	**50**	**88**	**70**	**130**
Anthracene	**1**	**42.7719**	**0**	**50**	**86**	**70**	**130**
Carbazole	**1**	**47.4729**	**0**	**50**	**95**	**70**	**130**
Di-n-butylphthalate	**1**	**43.8171**	**0**	**50**	**88**	**70**	**130**
Fluoranthene	**1**	**43.9889**	**0**	**50**	**88**	**70**	**130**
Pyrene	**1**	**45.7693**	**0**	**50**	**92**	**50**	**130**
Benzidine	1	4.7907	0	50	9.6	1	130
Butylbenzylphthalate	**1**	**45.7156**	**0**	**50**	**91**	**50**	**130**
3,3'-Dichlorobenzidine	**1**	**44.7727**	**0**	**50**	**90**	**10**	**130**
Benzo[a]anthracene	**1**	**43.9112**	**0**	**50**	**88**	**70**	**130**
Chrysene	**1**	**35.8342**	**0**	**50**	**72**	**60**	**130**
bis(2-Ethylhexyl)phthalate	**1**	**48.1778**	**0**	**50**	**96**	**70**	**130**
Di-n-octylphthalate	**1**	**46.4954**	**0**	**50**	**93**	**70**	**130**
Benzo[b]fluoranthene	**1**	**48.9942**	**0**	**50**	**98**	**70**	**130**
Benzo[k]fluoranthene	**1**	**46.2886**	**0**	**50**	**93**	**70**	**130**
Benzo[a]pyrene	**1**	**45.9512**	**0**	**50**	**92**	**70**	**130**
Indeno[1,2,3-cd]pyrene	**1**	**42.7785**	**0**	**50**	**86**	**70**	**130**
Dibenzo[a,h]anthracene	**1**	**42.3795**	**0**	**50**	**85**	**60**	**130**
Benzo[g,h,i]perylene	**1**	**42.7294**	**0**	**50**	**85**	**70**	**130**

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Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB82174

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M98464.D	AD15713-011(MSD)	2/24/2020 4:07:00 PM
Duplicate(If applicable):	9M98463.D	AD15713-011(MS)	2/24/2020 3:43:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	35.5595	31.5409	12	30
N-Nitrosodimethylamine	1	36.7559	33.9585	7.9	30
Benzaldehyde	**1**	**39.636**	**34.8785**	**13**	**30**
Aniline	1	32.53	24.5374	28	30
Pentachloroethane	1	45.1774	42.3409	6.5	30
bis(2-Chloroethyl)ether	**1**	**43.8253**	**41.9692**	**4.3**	**30**
Phenol	**1**	**81.1724**	**78.7887**	**3**	**40**
2-Chlorophenol	**1**	**83.8379**	**82.8554**	**1.2**	**40**
N-Decane	1	31.8479	28.4053	11	30
1,3-Dichlorobenzene	1	40.575	37.773	7.2	30
1,4-Dichlorobenzene	1	38.3084	36.4394	5	40
1,2-Dichlorobenzene	1	38.9674	36.8915	5.5	30
Benzyl alcohol	1	41.1761	39.5518	4	30
bis(2-chloroisopropyl)ether	**1**	**32.4541**	**30.9664**	**4.7**	**30**
2-Methylphenol	**1**	**81.6004**	**81.3955**	**0.25**	**40**
Acetophenone	**1**	**43.8803**	**42.9192**	**2.2**	**30**
Hexachloroethane	**1**	**36.1332**	**34.4488**	**4.8**	**30**
N-Nitroso-di-n-propylamine	**1**	**40.8385**	**39.438**	**3.5**	**40**
3&4-Methylphenol	**1**	**92.3178**	**91.8859**	**0.47**	**30**
Nitrobenzene	**1**	**39.7047**	**37.9441**	**4.5**	**30**
Isophorone	**1**	**36.304**	**34.6018**	**4.8**	**30**
2-Nitrophenol	**1**	**92.7336**	**91.1958**	**1.7**	**30**
2,4-Dimethylphenol	**1**	**86.7834**	**84.6146**	**2.5**	**40**
Benzoic Acid	1	87.4533	86.3223	1.3	30
bis(2-Chloroethoxy)methane	**1**	**39.4925**	**37.9218**	**4.1**	**30**
2,4-Dichlorophenol	**1**	**81.7333**	**80.254**	**1.8**	**30**
1,2,4-Trichlorobenzene	1	40.0674	38.6229	3.7	40
Naphthalene	**1**	**43.6854**	**41.4504**	**5.3**	**40**
4-Chloroaniline	**1**	**33.6549**	**25.398**	**28**	**30**
Hexachlorobutadiene	**1**	**40.2083**	**38.3333**	**4.8**	**30**
Caprolactam	**1**	**44.5321**	**43.0774**	**3.3**	**30**
4-Chloro-3-methylphenol	**1**	**83.9898**	**81.8568**	**2.6**	**40**
2-Methylnaphthalene	**1**	**41.1537**	**39.6116**	**3.8**	**30**
1-Methylnaphthalene	1	45.8934	44.6566	2.7	30
1,1'-Biphenyl	**1**	**45.5732**	**43.9757**	**3.6**	**30**
1,2,4,5-Tetrachlorobenzene	**1**	**46.016**	**44.1866**	**4.1**	**30**
Hexachlorocyclopentadiene	**1**	**19.1273**	**21.6392**	**12**	**30**
2,4,6-Trichlorophenol	**1**	**90.5519**	**88.7121**	**2.1**	**30**
2,4,5-Trichlorophenol	**1**	**90.111**	**89.5278**	**0.65**	**30**
2-Chloronaphthalene	**1**	**41.5201**	**40.5459**	**2.4**	**30**
1,4-Dimethylnaphthalene	1	47.7382	46.4647	2.7	30
Diphenyl Ether	1	46.9524	45.7619	2.6	30
2-Nitroaniline	**1**	**47.1398**	**44.8879**	**4.9**	**30**
Coumarin	1	47.1299	45.9264	2.6	30
Acenaphthylene	**1**	**43.012**	**41.7507**	**3**	**30**
Dimethylphthalate	**1**	**43.0994**	**41.5079**	**3.8**	**30**
2,6-Dinitrotoluene	**1**	**46.6962**	**45.8321**	**1.9**	**30**
Acenaphthene	**1**	**43.5129**	**41.9458**	**3.7**	**40**
3-Nitroaniline	**1**	**43.3441**	**36.7336**	**17**	**30**
2,4-Dinitrophenol	**1**	**51.9382**	**51.5868**	**0.68**	**30**
Dibenzofuran	**1**	**45.9518**	**44.259**	**3.8**	**30**
2,4-Dinitrotoluene	**1**	**44.7942**	**43.3352**	**3.3**	**40**
4-Nitrophenol	**1**	**87.7547**	**86.5777**	**1.4**	**40**
2,3,4,6-Tetrachlorophenol	**1**	**87.3446**	**84.2274**	**3.6**	**30**
Fluorene	**1**	**44.2499**	**42.6857**	**3.6**	**40**
4-Chlorophenyl-phenylether	**1**	**42.2602**	**41.7065**	**1.3**	**30**
Diethylphthalate	**1**	**41.9801**	**40.8362**	**2.8**	**30**
4-Nitroaniline	**1**	**44.9194**	**42.5332**	**5.5**	**30**
Atrazine	**1**	**45.2062**	**43.9224**	**2.9**	**30**
4,6-Dinitro-2-methylphenol	**1**	**58.6838**	**55.805**	**5**	**30**
n-Nitrosodiphenylamine	**1**	**36.5909**	**35.7246**	**2.4**	**30**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB82174

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,2-Diphenylhydrazine	1	38.3975	37.2384	3.1	30
4-Bromophenyl-phenylether	**1**	**44.493**	**43.3541**	**2.6**	**30**
Hexachlorobenzene	**1**	**43.3961**	**41.863**	**3.6**	**30**
N-Octadecane	1	47.6251	46.5878	2.2	30
Pentachlorophenol	**1**	**100.9559**	**98.9049**	**2.1**	**40**
Phenanthrene	**1**	**44.077**	**42.8605**	**2.8**	**30**
Anthracene	**1**	**42.7719**	**41.6414**	**2.7**	**30**
Carbazole	**1**	**47.4729**	**45.6159**	**4**	**30**
Di-n-butylphthalate	**1**	**43.8171**	**42.4443**	**3.2**	**30**
Fluoranthene	**1**	**43.9889**	**42.3771**	**3.7**	**30**
Pyrene	**1**	**45.7693**	**43.5242**	**5**	**40**
Benzidine	1	4.7907	2.6519	57*	30
Butylbenzylphthalate	**1**	**45.7156**	**44.4137**	**2.9**	**40**
3,3'-Dichlorobenzidine	**1**	**44.7727**	**36.5674**	**20**	**30**
Benzo[a]anthracene	**1**	**43.9112**	**41.9654**	**4.5**	**30**
Chrysene	**1**	**35.8342**	**34.7057**	**3.2**	**30**
bis(2-Ethylhexyl)phthalate	**1**	**48.1778**	**45.8498**	**5**	**30**
Di-n-octylphthalate	**1**	**46.4954**	**45.8817**	**1.3**	**30**
Benzo[b]fluoranthene	**1**	**48.9942**	**46.1564**	**6**	**30**
Benzo[k]fluoranthene	**1**	**46.2886**	**45.5743**	**1.6**	**30**
Benzo[a]pyrene	**1**	**45.9512**	**45.0328**	**2**	**30**
Indeno[1,2,3-cd]pyrene	**1**	**42.7785**	**42.0055**	**1.8**	**30**
Dibenzo[a,h]anthracene	**1**	**42.3795**	**41.7538**	**1.5**	**30**
Benzo[g,h,i]perylene	**1**	**42.7294**	**42.1796**	**1.3**	**30**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB82174
Blank Data File: 7M105325.D
Matrix: Soil

Blank Analysis Date: 02/23/20 13:25
Blank Extraction Date: 02/21/20
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD15713-001(3X)	7M105360.D	02/24/20 14:14
AD15713-003(3X)	7M105353.D	02/24/20 11:31
AD15713-005	7M105361.D	02/24/20 14:37

FORM 4
Blank Summary

Blank Number: SMB82174
Blank Data File: 9M98428.D
Matrix: Soil

Blank Analysis Date: 02/23/20 14:16
Blank Extraction Date: 02/21/20
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD15713-011	9M98431.D	02/23/20 15:29
AD15713-011(MSD	9M98464.D	02/24/20 16:07
AD15713-011(MS)	9M98463.D	02/24/20 15:43
SMB82174(MS)	10M79393.D	02/23/20 14:36

FORM 4
Blank Summary

Blank Number: SMB82174
Blank Data File: 5M112182.D
Matrix: Soil

Blank Analysis Date: 02/24/20 15:55
Blank Extraction Date: 02/21/20
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD15713-007	5M112177.D	02/24/20 13:59
AD15713-009	5M112178.D	02/24/20 14:22

Form 5

Tune Name: CAL DFTPP **Data File:** 5M111929.D
Instrument: GCMS 5 **Analysis Date:** 02/10/20 09:39
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.925 to 9.931 min

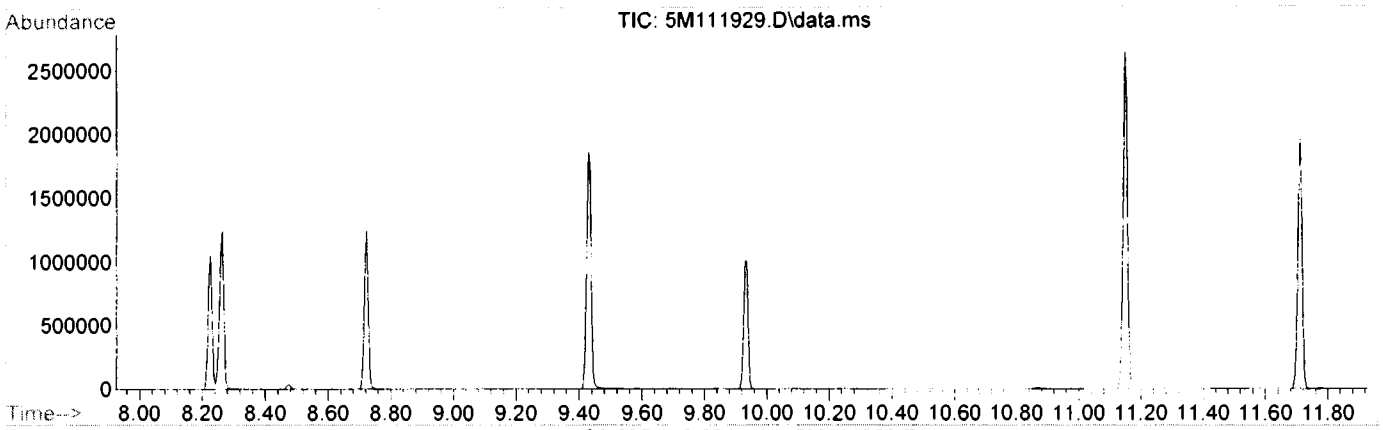
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	36.1	29516	PASS
68	69	0.00	2	0.6	239	PASS
69	198	0.00	100	45.1	36836	PASS
70	69	0.00	2	0.3	117	PASS
127	198	40	60	47.1	38524	PASS
197	198	0.00	1	0.2	141	PASS
198	198	100	100	100.0	81716	PASS
199	198	5	9	6.9	5603	PASS
275	198	10	30	23.2	18980	PASS
365	198	1	100	3.0	2452	PASS
441	443	0.01	100	80.4	6481	PASS
442	198	40	100	50.6	41343	PASS
443	442	17	23	19.5	8057	PASS

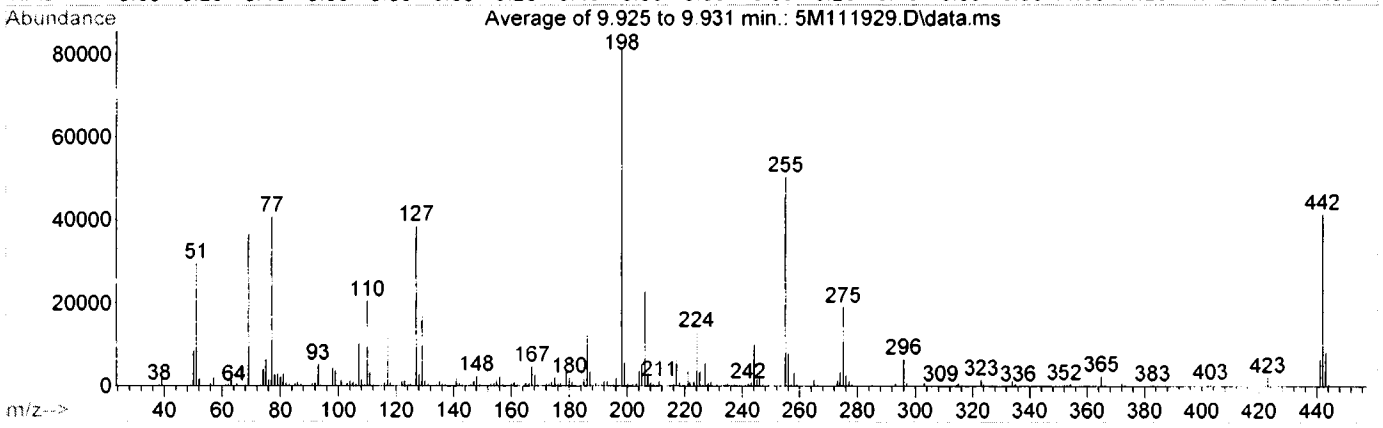
Data File	Sample Number	Analysis Date:
5M111930.D	CAL BNA@2PPM	02/10/20 10:08
5M111931.D	CAL BNA@10PPM	02/10/20 10:31
5M111932.D	CAL BNA@196PP	02/10/20 11:02
5M111933.D	CAL BNA@160PP	02/10/20 11:25
5M111934.D	CAL BNA@120PP	02/10/20 11:48
5M111935.D	CAL BNA@80PPM	02/10/20 12:11
5M111936.D	CAL BNA@20PPM	02/10/20 12:35
5M111937.D	CAL BNA@0.5PP	02/10/20 12:58
5M111938.D	CAL BNA@50PPM	02/10/20 13:21
5M111939.D	ICV BNA@50PPM	02/10/20 13:45
5M111940.D	AD15343-001(T)	02/10/20 14:08
5M111941.D	WMB82078(MS)	02/10/20 14:31
5M111942.D	AD15343-001(30X)	02/10/20 14:55
5M111943.D	AD15343-001(3000	02/10/20 15:22

Data Path : G:\GcMsData\2020\GCMS_5\Data\02-10-20\
Data File : 5M111929.D
Acq On : 10 Feb 2020 9:39
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_5\MethodQt\5M_0108.M
Title : @GCMS_5,mg,625,8270
Last Update : Wed Jan 08 13:24:49 2020





JP

Spectrum Information: Average of 9.925 to 9.931 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	29516	PASS
68	69	0.00	2	0.6	239	PASS
69	198	0.00	100	45.1	36836	PASS
70	69	0.00	2	0.3	117	PASS
127	198	40	60	47.1	38524	PASS
197	198	0.00	1	0.2	141	PASS
198	198	100	100	100.0	81716	PASS
199	198	5	9	6.9	5603	PASS
275	198	10	30	23.2	18980	PASS
365	198	1	100	3.0	2452	PASS
441	443	0.01	100	80.4	6481	PASS
442	198	40	100	50.6	41343	PASS
443	442	17	23	19.5	8057	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 10M79165.D
Instrument: GCMS 10 **Analysis Date:** 02/10/20 09:38
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.964 to 9.969 min

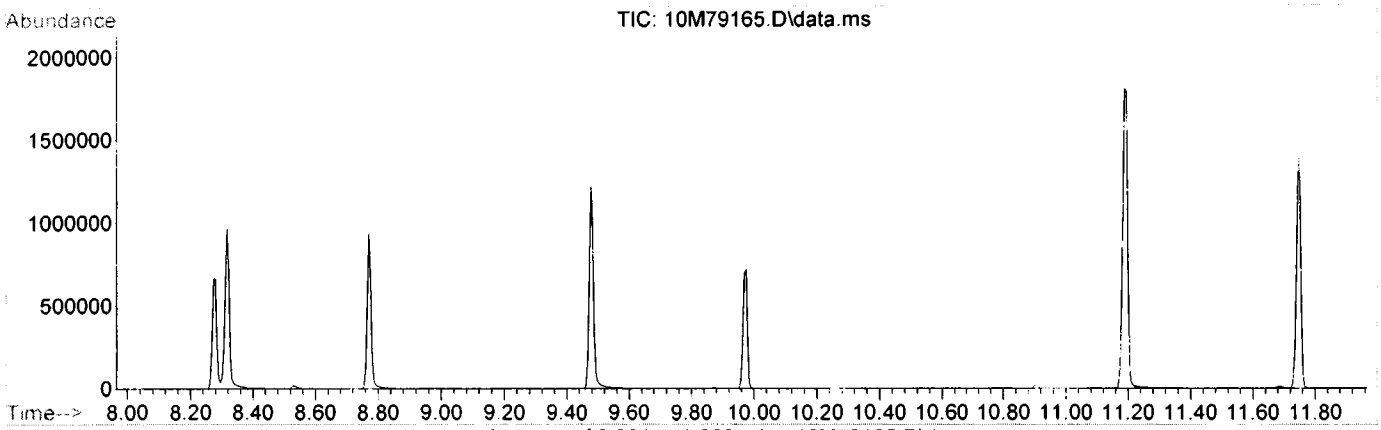
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.7	25508	PASS
68	69	0.00	2	1.0	270	PASS
69	198	0.00	100	48.5	25912	PASS
70	69	0.00	2	0.4	112	PASS
127	198	40	60	57.0	30452	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53464	PASS
199	198	5	9	6.9	3682	PASS
275	198	10	30	24.4	13037	PASS
365	198	1	100	3.1	1677	PASS
441	443	0.01	100	73.5	5664	PASS
442	198	40	100	72.0	38508	PASS
443	442	17	23	20.0	7711	PASS

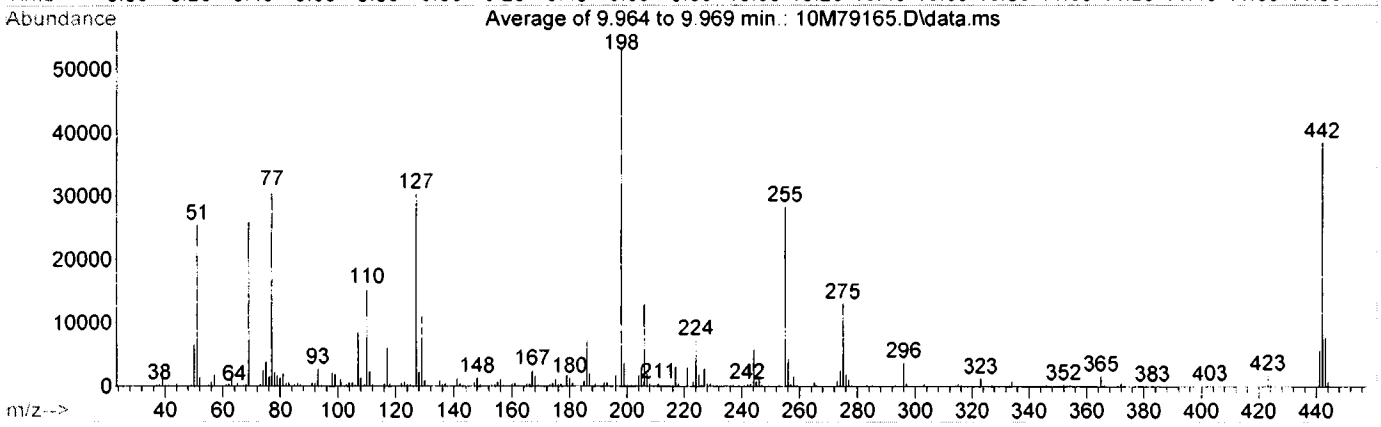
Data File	Sample Number	Analysis Date:
10M79166.D	CAL BNA@10PPM	02/10/20 10:05
10M79167.D	CAL BNA@2PPM	02/10/20 10:27
10M79168.D	CAL BNA@196PP	02/10/20 11:26
10M79169.D	CAL BNA@160PP	02/10/20 11:48
10M79170.D	CAL BNA@2PPM	02/10/20 12:10
10M79171.D	CAL BNA@120PP	02/10/20 12:33
10M79172.D	CAL BNA@80PPM	02/10/20 12:55
10M79173.D	CAL BNA@20PPM	02/10/20 13:18
10M79174.D	CAL BNA@0.5PP	02/10/20 13:41
10M79175.D	CAL BNA@50PPM	02/10/20 14:03
10M79176.D	ICV BNA@50PPM	02/10/20 14:25
10M79177.D	WMB82078	02/10/20 14:48
10M79178.D	SMB82066(MS)	02/10/20 15:10
10M79179.D	SMB82067(MS)	02/10/20 15:33
10M79180.D	MBS-1	02/10/20 15:55
10M79181.D	MBS-2	02/10/20 16:18
10M79182.D	MBS-3	02/10/20 16:40
10M79183.D	MBS-4	02/10/20 17:03
10M79184.D	MBS-5	02/10/20 17:25
10M79185.D	MB	02/10/20 17:48

Data Path : G:\GcMsData\2020\GCMS_10\Data\02-10-20\
Data File : 10M79165.D
Acq On : 10 Feb 2020 9:38
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_10\METHODQT\10M_0108.M
Title : @GCMS_10,mg,625,8270
Last Update : Wed Jan 08 11:54:25 2020





Spectrum Information: Average of 9.964 to 9.969 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.7	25508	PASS
68	69	0.00	2	1.0	270	PASS
69	198	0.00	100	48.5	25912	PASS
70	69	0.00	2	0.4	112	PASS
127	198	40	60	57.0	30452	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53464	PASS
199	198	5	9	6.9	3682	PASS
275	198	10	30	24.4	13037	PASS
365	198	1	100	3.1	1677	PASS
441	443	0.01	100	73.5	5664	PASS
442	198	40	100	72.0	38508	PASS
443	442	17	23	20.0	7711	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M105107.D
Analysis Date: 02/10/20 10:59
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.008 to 10.014 min

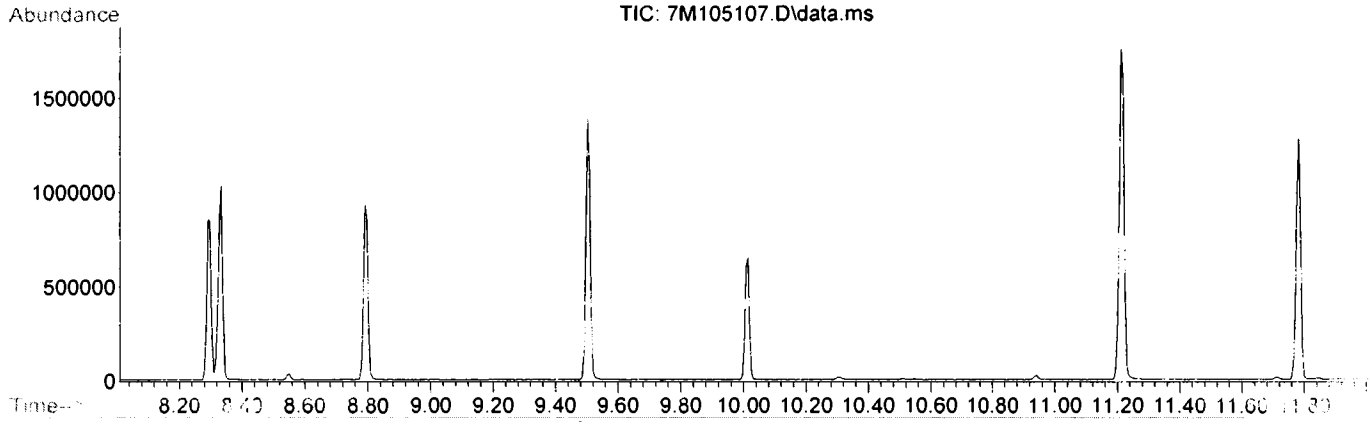
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	46.2	31352	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	33540	PASS
70	69	0.00	2	1.0	329	PASS
127	198	40	60	53.0	35964	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	67864	PASS
199	198	5	9	7.1	4798	PASS
275	198	10	30	24.5	16616	PASS
365	198	1	100	2.8	1872	PASS
441	443	0.01	100	70.2	5732	PASS
442	198	40	100	59.9	40680	PASS
443	442	17	23	20.1	8165	PASS

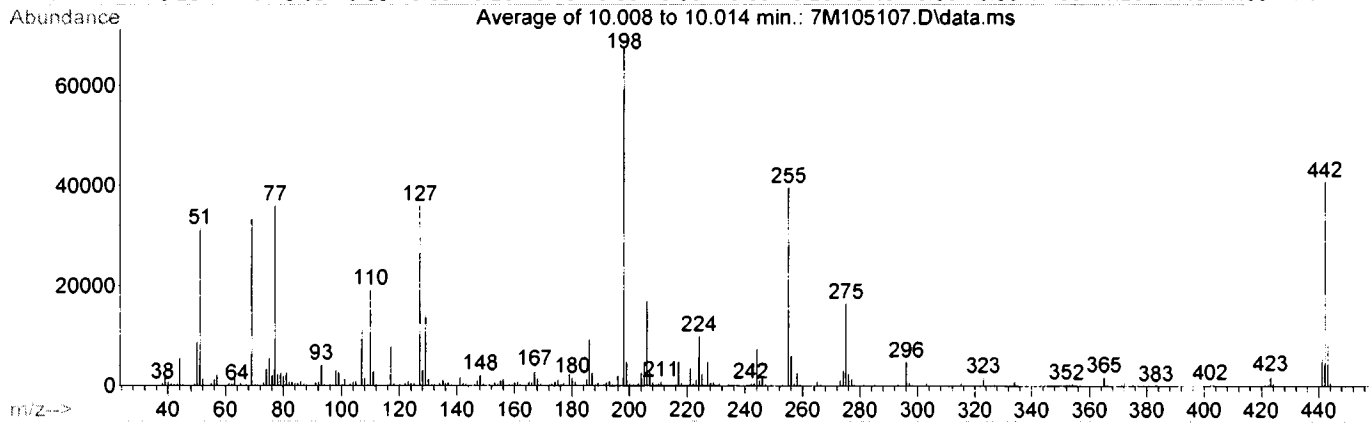
Data File	Sample Number	Analysis Date:
7M105108.D	CAL BNA@2PPM	02/10/20 11:23
7M105109.D	CAL BNA@10PPM	02/10/20 11:46
7M105110.D	CAL BNA@196PP	02/10/20 12:09
7M105111.D	CAL BNA@160PP	02/10/20 12:32
7M105112.D	CAL BNA@120PP	02/10/20 12:55
7M105113.D	CAL BNA@80PPM	02/10/20 13:21
7M105114.D	CAL BNA@20PPM	02/10/20 13:44
7M105115.D	CAL BNA@0.5PP	02/10/20 14:07
7M105116.D	CAL BNA@50PPM	02/10/20 14:31
7M105117.D	ICV BNA@50PPM	02/10/20 14:57

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-10-20\
Data File : 7M105107.D
Acq On : 10 Feb 2020 10:59
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0113.M
Title : @GCMS_7,mg,625,8270
Last Update : Tue Jan 14 11:13:26 2020





Spectrum Information: Average of 10.008 to 10.014 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.2	31352	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	33540	PASS
70	69	0.00	2	1.0	329	PASS
127	198	40	60	53.0	35964	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	67864	PASS
199	198	5	9	7.1	4798	PASS
275	198	10	30	24.5	16616	PASS
365	198	1	100	2.8	1872	PASS
441	443	0.01	100	70.2	5732	PASS
442	198	40	100	59.9	40680	PASS
443	442	17	23	20.1	8165	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 9M98292.D
Instrument: GCMS 9 **Analysis Date:** 02/13/20 08:23
Method: EPA 8270D
Tune Scan/Time Range: Average of 10.054 to 10.072 min

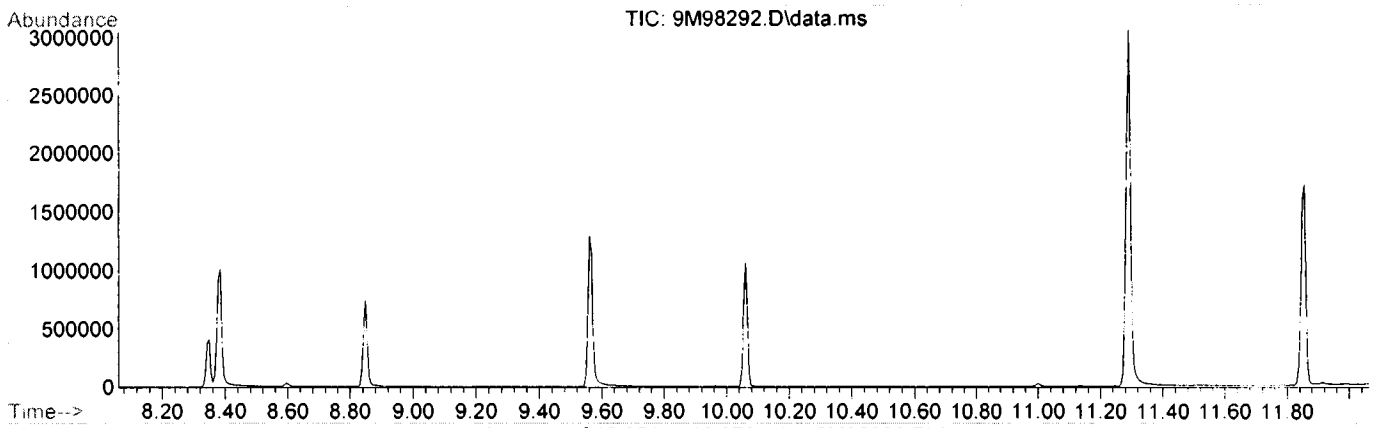
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	33.3	23256	PASS
68	69	0.00	2	0.2	56	PASS
69	198	0.00	100	37.8	26378	PASS
70	69	0.00	2	1.1	299	PASS
127	198	40	60	51.5	35924	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	69806	PASS
199	198	5	9	6.7	4695	PASS
275	198	10	30	24.3	16949	PASS
365	198	1	100	3.3	2321	PASS
441	443	0.01	100	46.3	5539	PASS
442	198	40	100	91.2	63642	PASS
443	442	17	23	18.8	11966	PASS

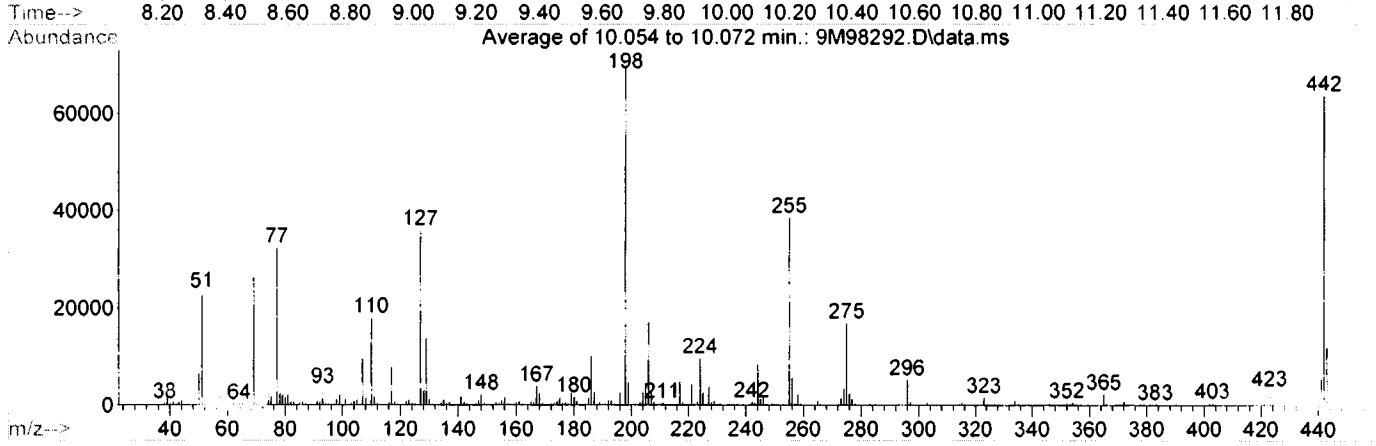
Data File	Sample Number	Analysis Date:
9M98293.D	CAL BNA@50PPM	02/13/20 08:49
9M98294.D	CAL BNA@196PP	02/13/20 09:17
9M98295.D	CAL BNA@160PP	02/13/20 09:41
9M98296.D	CAL BNA@120PP	02/13/20 10:05
9M98297.D	CAL BNA@80PPM	02/13/20 10:29
9M98298.D	CAL BNA@10PPM	02/13/20 10:53
9M98299.D	CAL BNA@2PPM	02/13/20 11:17
9M98300.D	CAL BNA@20PPM	02/13/20 11:41
9M98301.D	CAL BNA@0.5PP	02/13/20 12:05
9M98302.D	CAL BNA@50PPM	02/13/20 12:30
9M98303.D	ICV BNA@50PPM	02/13/20 12:54

Data Path : G:\GcMsData\2020\GCMS_9\Data\02-13-20\
Data File : 9M98292.D
Acq On : 13 Feb 2020 8:23
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_9\METHODQT\9M_0108.M
Title : @GCMS_9,mg,625,8270
Last Update : Wed Jan 08 12:21:31 2020





Spectrum Information: Average of 10.054 to 10.072 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.3	23256	PASS
68	69	0.00	2	0.2	56	PASS
69	198	0.00	100	37.8	26378	PASS
70	69	0.00	2	1.1	299	PASS
127	198	40	60	51.5	35924	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	69806	PASS
199	198	5	9	6.7	4695	PASS
275	198	10	30	24.3	16949	PASS
365	198	1	100	3.3	2321	PASS
441	443	0.01	100	46.3	5539	PASS
442	198	40	100	91.2	63642	PASS
443	442	17	23	18.8	11966	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M98422.D
Analysis Date: 02/23/20 11:27
Method: EPA 8270D

Tune Scan/Time Range: Scan 1294

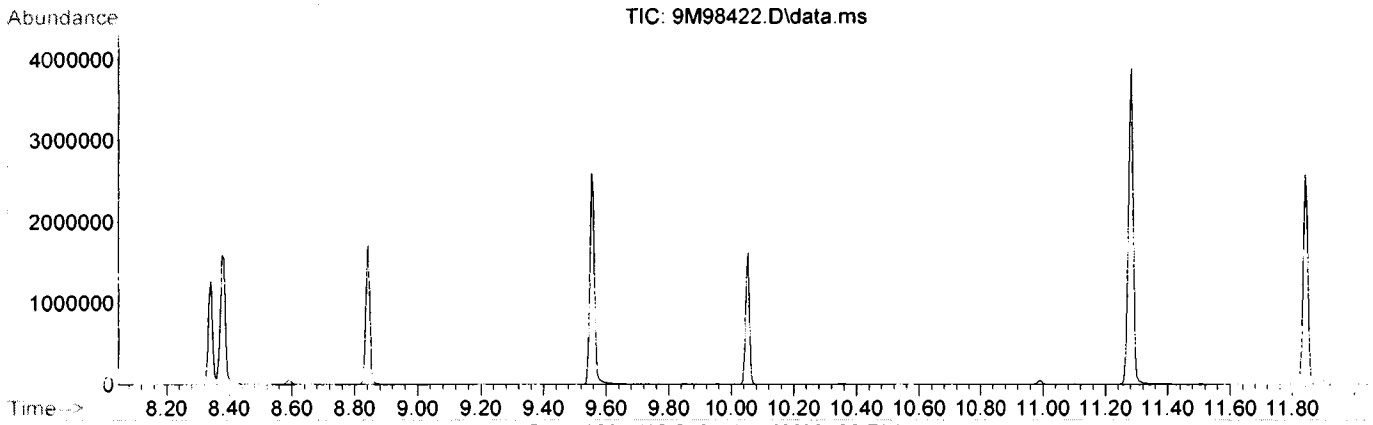
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.6	54480	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.4	61232	PASS
70	69	0.00	2	0.7	416	PASS
127	198	40	60	57.6	81328	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	141248	PASS
199	198	5	9	6.9	9709	PASS
275	198	10	30	20.7	29184	PASS
365	198	1	100	2.3	3240	PASS
441	443	0.01	100	85.7	12285	PASS
442	198	40	100	53.4	75440	PASS
443	442	17	23	19.0	14337	PASS

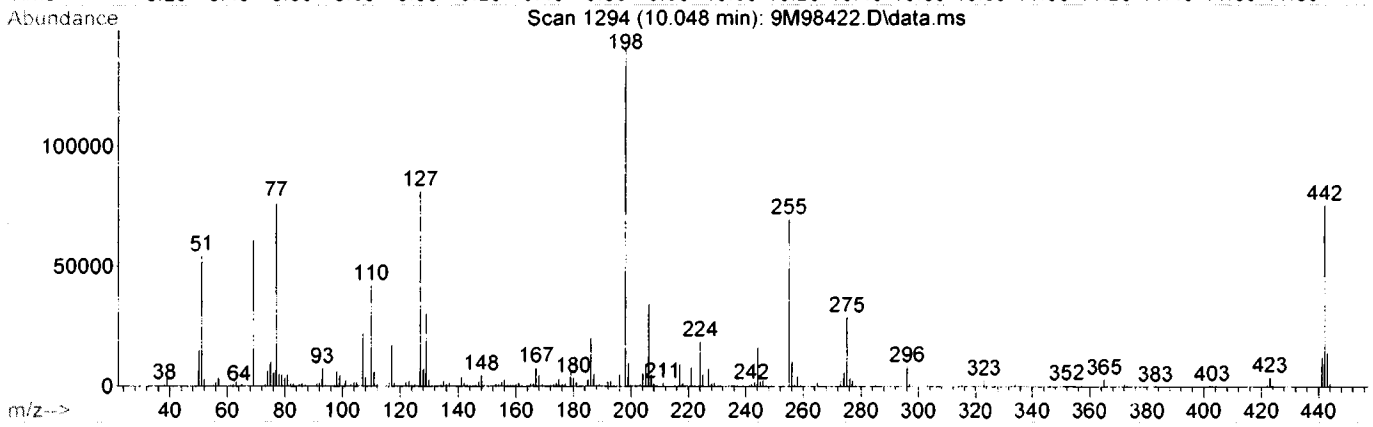
Data File	Sample Number	Analysis Date:
9M98423.D	CAL BNA@50PPM	02/23/20 11:55
9M98424.D	SMB82175	02/23/20 12:40
9M98425.D	SMB83612	02/23/20 13:04
9M98426.D	OMB83614	02/23/20 13:28
9M98427.D	OMB83615	02/23/20 13:52
9M98428.D	SMB82174	02/23/20 14:16
9M98429.D	AD15747-010	02/23/20 14:40
9M98430.D	AD15750-009	02/23/20 15:05
9M98431.D	AD15713-011	02/23/20 15:29
9M98432.D	AD15751-006	02/23/20 15:53
9M98433.D	AD15749-001	02/23/20 16:17
9M98434.D	AD15749-002	02/23/20 16:41
9M98435.D	AD15750-001	02/23/20 17:05
9M98436.D	AD15750-007	02/23/20 17:30
9M98437.D	AD15714-002	02/23/20 17:53
9M98438.D	AD15718-006	02/23/20 18:18
9M98439.D	AD15718-007	02/23/20 18:42
9M98440.D	AD15718-001	02/23/20 19:06
9M98441.D	AD15627-003	02/23/20 19:30

Data Path : G:\GcMsData\2020\GCMS_9\Data\02-23-20\
Data File : 9M98422.D
Acq On : 23 Feb 2020 11:27
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_9\METHODQT\9M_0213.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Feb 13 13:01:38 2020





Spectrum Information: Scan 1294

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.6	54480	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.4	61232	PASS
70	69	0.00	2	0.7	416	PASS
127	198	40	60	57.6	81328	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	141248	PASS
199	198	5	9	6.9	9709	PASS
275	198	10	30	20.7	29184	PASS
365	198	1	100	2.3	3240	PASS
441	443	0.01	100	85.7	12285	PASS
442	198	40	100	53.4	75440	PASS
443	442	17	23	19.0	14337	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7

Data File: 7M105321.D
Analysis Date: 02/23/20 11:26
Method: EPA 8270D

Tune Scan/Time Range: Scan 1280

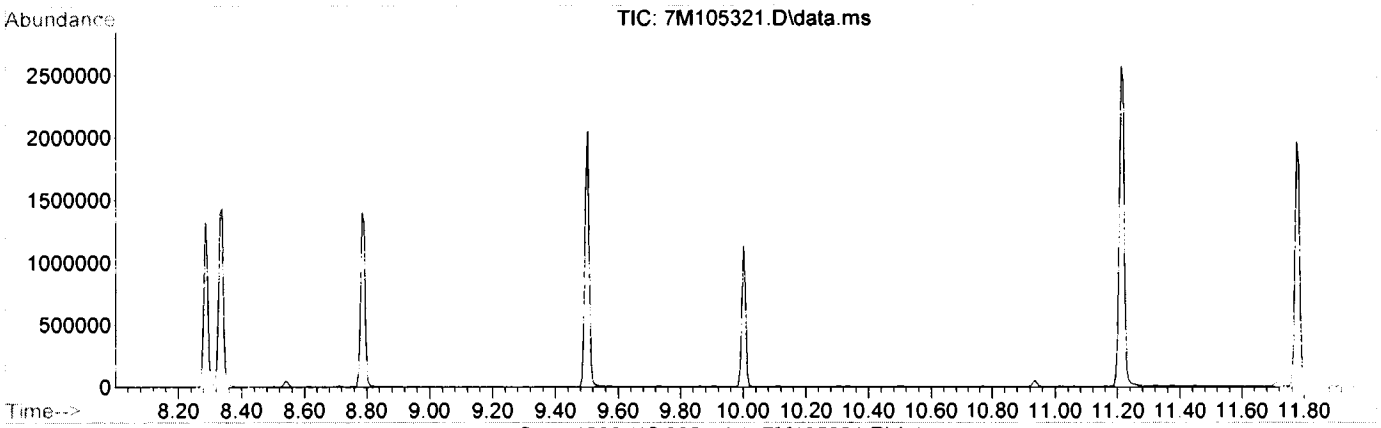
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	40.0	52896	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.7	59168	PASS
70	69	0.00	2	0.8	468	PASS
127	198	40	60	49.3	65240	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	132224	PASS
199	198	5	9	6.3	8396	PASS
275	198	10	30	25.7	34000	PASS
365	198	1	100	3.1	4123	PASS
441	443	0.01	100	76.6	11737	PASS
442	198	40	100	58.8	77776	PASS
443	442	17	23	19.7	15329	PASS

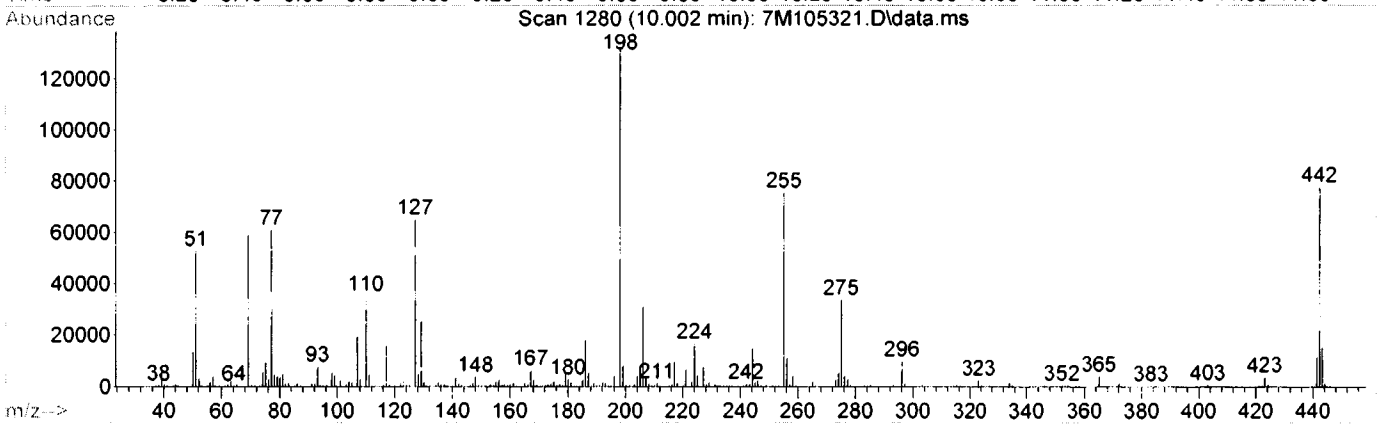
Data File	Sample Number	Analysis Date:
7M105322.D	CAL BNA@50PPM	02/23/20 11:56
7M105323.D	OMB83614	02/23/20 12:38
7M105324.D	OMB83615	02/23/20 13:01
7M105325.D	SMB82174	02/23/20 13:25
7M105326.D	SMB82175	02/23/20 13:48
7M105327.D	SMB83612	02/23/20 14:11
7M105328.D	AD15739-001	02/23/20 14:35
7M105329.D	AD15739-001(MS)	02/23/20 14:58
7M105330.D	AD15739-001(MSD	02/23/20 15:21
7M105331.D	AD15747-001	02/23/20 15:44
7M105332.D	AD15747-002	02/23/20 16:07
7M105333.D	AD15747-005	02/23/20 16:31
7M105334.D	AD15747-003	02/23/20 16:54
7M105335.D	AD15747-004	02/23/20 17:17
7M105336.D	AD15747-006	02/23/20 17:40
7M105337.D	AD15747-009	02/23/20 18:03
7M105338.D	AD15748-001	02/23/20 18:26
7M105339.D	AD15748-002	02/23/20 18:50
7M105340.D	AD15748-003	02/23/20 19:13
7M105341.D	AD15753-006	02/23/20 19:36

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-23-20\
Data File : 7M105321.D
Acq On : 23 Feb 2020 11:26
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0210.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon Feb 10 14:56:43 2020





Spectrum Information: Scan 1280

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.0	52896	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.7	59168	PASS
70	69	0.00	2	0.8	468	PASS
127	198	40	60	49.3	65240	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	132224	PASS
199	198	5	9	6.3	8396	PASS
275	198	10	30	25.7	34000	PASS
365	198	1	100	3.1	4123	PASS
441	443	0.01	100	76.6	11737	PASS
442	198	40	100	58.8	77776	PASS
443	442	17	23	19.7	15329	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10

Data File: 10M79386.D
Analysis Date: 02/23/20 11:29
Method: EPA 8270D

Tune Scan/Time Range: Scan 1455

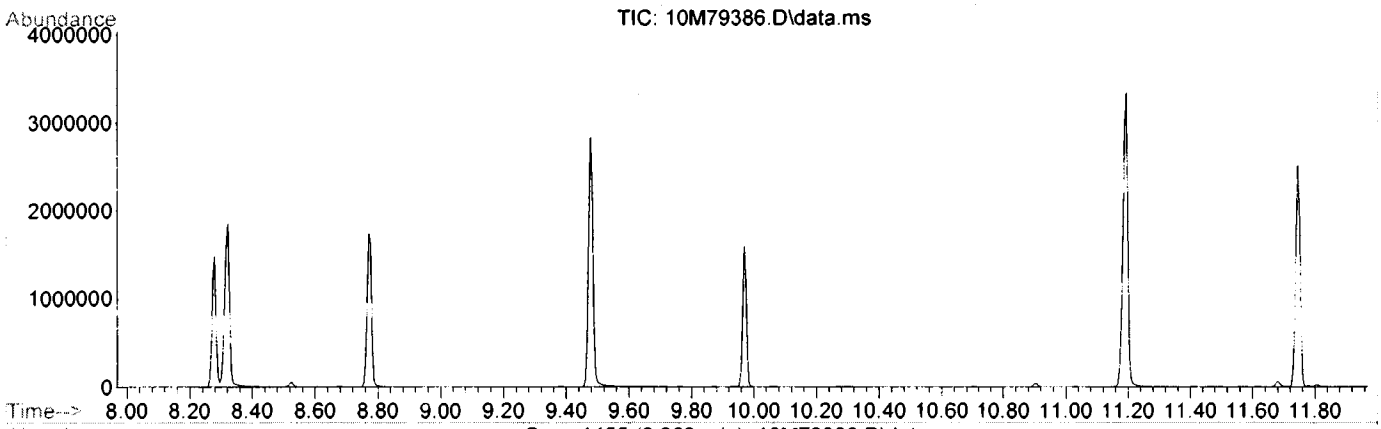
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	36.5	67488	PASS
68	69	0.00	2	1.6	1126	PASS
69	198	0.00	100	38.7	71424	PASS
70	69	0.00	2	0.6	442	PASS
127	198	40	60	50.1	92472	PASS
197	198	0.00	1	0.5	946	PASS
198	198	100	100	100.0	184704	PASS
199	198	5	9	6.7	12367	PASS
275	198	10	30	26.3	48488	PASS
365	198	1	100	3.5	6445	PASS
441	443	0.01	100	71.4	23104	PASS
442	198	40	100	88.0	162496	PASS
443	442	17	23	19.9	32376	PASS

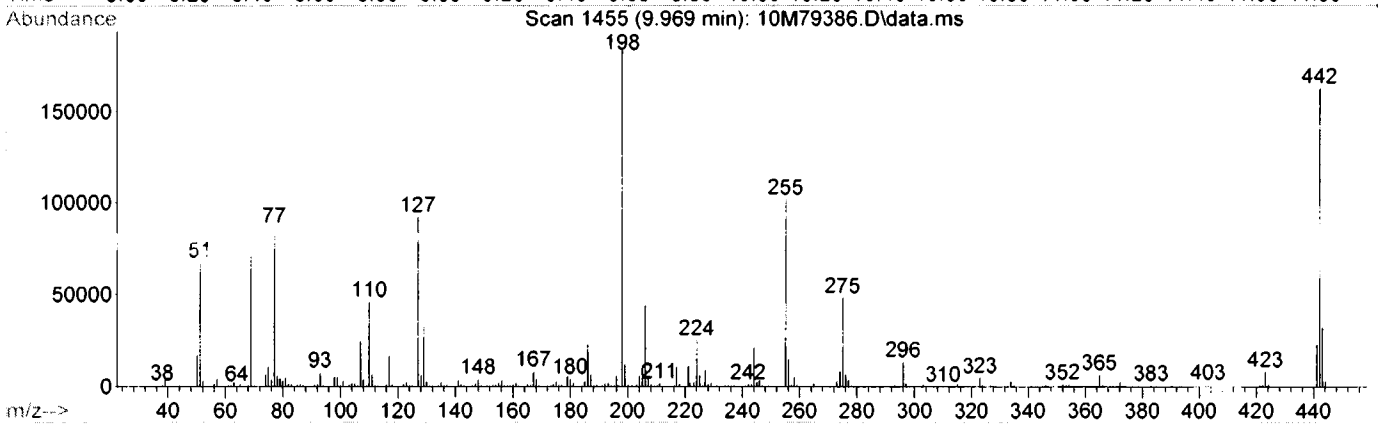
Data File	Sample Number	Analysis Date:
10M79387.D	CAL BNA@50PPM	02/23/20 11:59
10M79388.D	WMB83616	02/23/20 12:44
10M79389.D	WMB83618	02/23/20 13:06
10M79390.D	WMB83606	02/23/20 13:28
10M79391.D	OMB83614(MS)	02/23/20 13:51
10M79392.D	OMB83615(MS)	02/23/20 14:13
10M79393.D	SMB82174(MS)	02/23/20 14:36
10M79394.D	SMB82175(MS)	02/23/20 14:58
10M79395.D	SMB83612(MS)	02/23/20 15:20
10M79396.D	AD15779-001	02/23/20 15:43
10M79397.D	AD15775-001	02/23/20 16:05
10M79398.D	AD15775-002	02/23/20 16:28
10M79399.D	AD15775-003	02/23/20 16:50
10M79400.D	AD15775-004	02/23/20 17:12
10M79401.D	AD15777-007	02/23/20 17:35
10M79402.D	AD15777-008	02/23/20 17:57
10M79403.D	AD15777-009	02/23/20 18:19
10M79404.D	AD15777-010	02/23/20 18:42
10M79405.D	AD15777-011	02/23/20 19:04
10M79406.D	AD15777-001	02/23/20 19:27
10M79407.D	AD15777-002	02/23/20 19:49

Data Path : G:\GcMsData\2020\GCMS_10\Data\02-23-20\
Data File : 10M79386.D
Acq On : 23 Feb 2020 11:29
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_10\METHODQT\10M_0210.M
Title : @GCMS_10,mg,625,8270
Last Update : Mon Feb 10 14:26:59 2020





Spectrum Information: Scan 1455

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.5	67488	PASS
68	69	0.00	2	1.6	1126	PASS
69	198	0.00	100	38.7	71424	PASS
70	69	0.00	2	0.6	442	PASS
127	198	40	60	50.1	92472	PASS
197	198	0.00	1	0.5	946	PASS
198	198	100	100	100.0	184704	PASS
199	198	5	9	6.7	12367	PASS
275	198	10	30	26.3	48488	PASS
365	198	1	100	3.5	6445	PASS
441	443	0.01	100	71.4	23104	PASS
442	198	40	100	88.0	162496	PASS
443	442	17	23	19.9	32376	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M105343.D
Instrument: GCMS 7 **Analysis Date:** 02/24/20 07:36
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.996 to 9.996 min

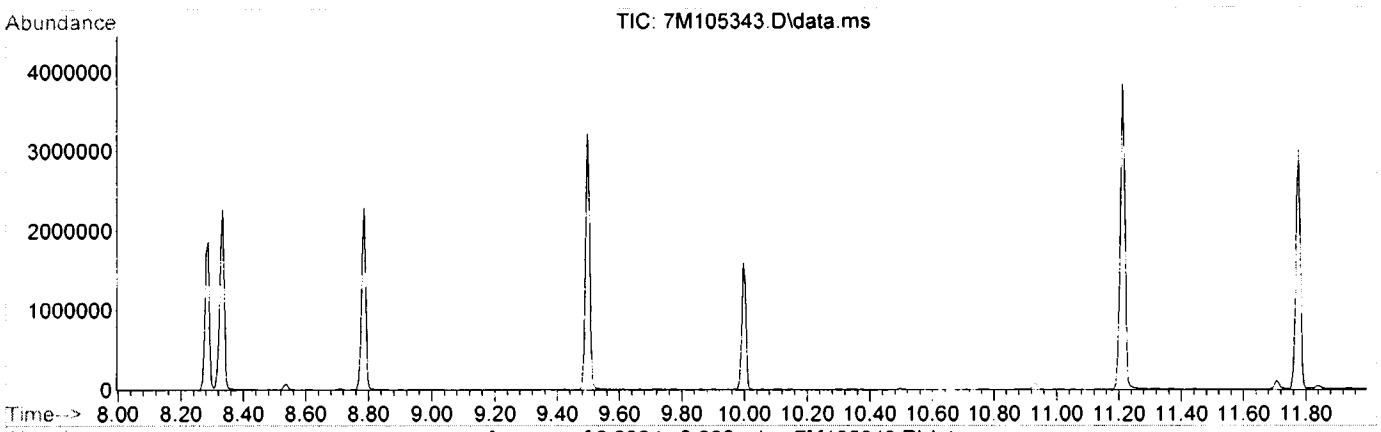
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	42.8	80736	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.0	90520	PASS
70	69	0.00	2	0.6	542	PASS
127	198	40	60	50.8	95704	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	188544	PASS
199	198	5	9	6.5	12289	PASS
275	198	10	30	23.4	44032	PASS
365	198	1	100	2.4	4492	PASS
441	443	0.01	100	69.2	12373	PASS
442	198	40	100	47.5	89496	PASS
443	442	17	23	20.0	17872	PASS

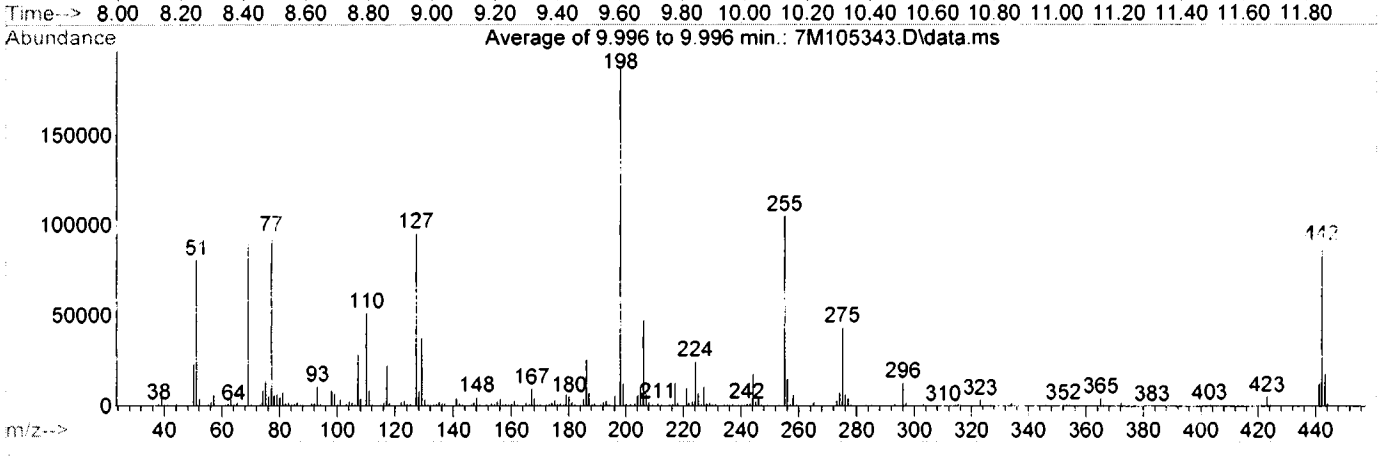
Data File	Sample Number	Analysis Date:
7M105344.D	CAL BNA@50PPM	02/24/20 08:01
7M105345.D	AD15748-008	02/24/20 08:25
7M105346.D	AD15748-009	02/24/20 08:48
7M105347.D	AD15750-003	02/24/20 09:12
7M105348.D	AD15750-011	02/24/20 09:35
7M105349.D	AD15755-006	02/24/20 09:58
7M105350.D	AD15715-001	02/24/20 10:21
7M105351.D	AD15715-002	02/24/20 10:45
7M105352.D	AD15718-002	02/24/20 11:08
7M105353.D	AD15713-003(3X)	02/24/20 11:31
7M105354.D	AD15627-002(3X)	02/24/20 11:54
7M105355.D	AD15627-001(10X)	02/24/20 12:17
7M105356.D	AD15803-001(3X)	02/24/20 12:41
7M105357.D	AD15803-002(3X)	02/24/20 13:04
7M105358.D	15714-001(3X)	02/24/20 13:27
7M105359.D	AD15736-001	02/24/20 13:50
7M105360.D	AD15713-001(3X)	02/24/20 14:14
7M105361.D	AD15713-005	02/24/20 14:37
7M105362.D	AD15715-003	02/24/20 15:00
7M105363.D	AD15715-004	02/24/20 15:23
7M105364.D	AD15714-001(3X)	02/24/20 15:46
7M105365.D	AD15586-002(20X)	02/24/20 16:10
7M105366.D	AD15803-002(3X)(	02/24/20 16:33
7M105367.D	AD15803-002(3X)(	02/24/20 16:56

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-24-20\
Data File : 7M105343.D
Acq On : 24 Feb 2020 7:36
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0210.M
Title : GGCMS_7,mg,625,8270
Last Update : Mon Feb 10 14:56:43 2020





Spectrum Information: Average of 9.996 to 9.996 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.8	80736	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.0	90520	PASS
70	69	0.00	2	0.6	542	PASS
127	198	40	60	50.8	95704	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	188544	PASS
199	198	5	9	6.5	12289	PASS
275	198	10	30	23.4	44032	PASS
365	198	1	100	2.4	4492	PASS
441	443	0.01	100	69.2	12373	PASS
442	198	40	100	47.5	89496	PASS
443	442	17	23	20.0	17872	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 9

Data File: 9M98443.D
Analysis Date: 02/24/20 07:37
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.042 to 10.048 min

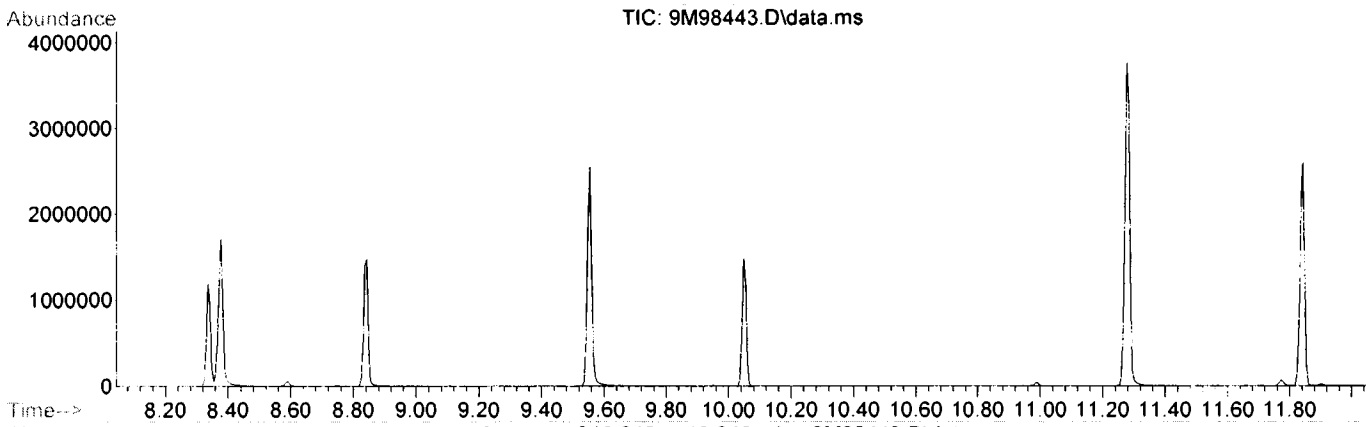
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	37.1	44164	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.0	49972	PASS
70	69	0.00	2	0.5	268	PASS
127	198	40	60	57.5	68376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	119004	PASS
199	198	5	9	7.0	8289	PASS
275	198	10	30	22.1	26299	PASS
365	198	1	100	2.5	3000	PASS
441	443	0.01	100	87.7	13096	PASS
442	198	40	100	64.3	76468	PASS
443	442	17	23	19.5	14929	PASS

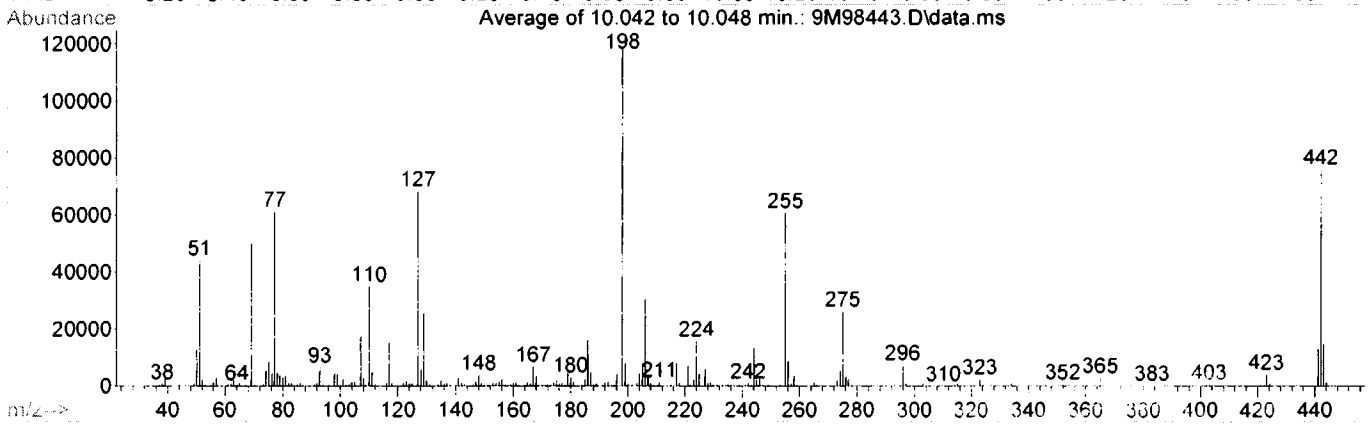
Data File	Sample Number	Analysis Date:
9M98444.D	CAL BNA@50PPM	02/24/20 08:04
9M98445.D	AD15751-004	02/24/20 08:28
9M98446.D	AD15751-002	02/24/20 08:53
9M98447.D	AD15752-002	02/24/20 09:16
9M98448.D	AD15752-004	02/24/20 09:41
9M98449.D	AD15753-004	02/24/20 10:05
9M98450.D	AD15754-002	02/24/20 10:29
9M98451.D	AD15754-004	02/24/20 10:53
9M98452.D	AD15754-006	02/24/20 11:17
9M98453.D	AD15755-002	02/24/20 11:41
9M98454.D	AD15755-004	02/24/20 12:06
9M98455.D	AD15752-006	02/24/20 12:30
9M98456.D	AD15753-002	02/24/20 12:54
9M98457.D	AD15750-005	02/24/20 13:18
9M98458.D	AD15747-006(R)	02/24/20 13:42
9M98459.D	AD15748-007	02/24/20 14:06
9M98460.D	AD15748-010	02/24/20 14:31
9M98461.D	AD15718-005	02/24/20 14:55
9M98462.D	AD15718-008	02/24/20 15:19
9M98463.D	AD15713-011(MS)	02/24/20 15:43
9M98464.D	AD15713-011(MSD	02/24/20 16:07
9M98465.D	AD15751-006(MS)	02/24/20 16:31
9M98466.D	AD15751-006(MSD	02/24/20 16:56

Data Path : G:\GcMsData\2020\GCMS_9\Data\02-24-20\
Data File : 9M98443.D
Acq On : 24 Feb 2020 7:37
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_9\METHODQT\9M_0213.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Feb 13 13:01:38 2020





Spectrum Information: Average of 10.042 to 10.048 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.1	44164	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.0	49972	PASS
70	69	0.00	2	0.5	268	PASS
127	198	40	60	57.5	68376	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	119004	PASS
199	198	5	9	7.0	8289	PASS
275	198	10	30	22.1	26299	PASS
365	198	1	100	2.5	3000	PASS
441	443	0.01	100	87.7	13096	PASS
442	198	40	100	64.3	76468	PASS
443	442	17	23	19.5	14929	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 5M112161.D
Instrument: GCMS 5 **Analysis Date:** 02/24/20 07:39
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.931 to 9.931 min

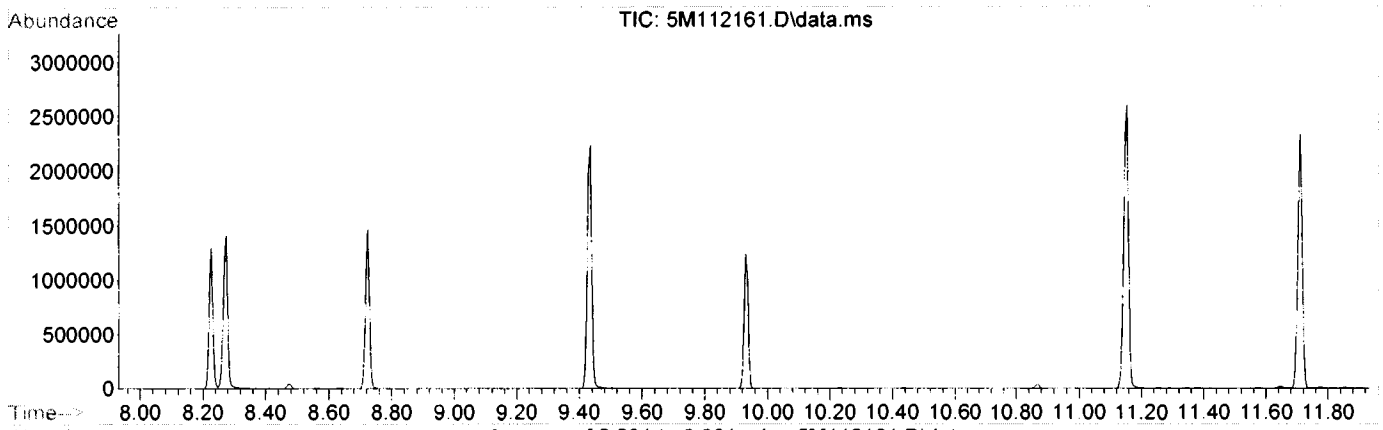
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	34.0	45144	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	58544	PASS
70	69	0.00	2	0.6	379	PASS
127	198	40	60	45.8	60936	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	132928	PASS
199	198	5	9	7.3	9641	PASS
275	198	10	30	26.2	34792	PASS
365	198	1	100	3.6	4742	PASS
441	443	0.01	100	73.6	13515	PASS
442	198	40	100	62.1	82560	PASS
443	442	17	23	22.2	18368	PASS

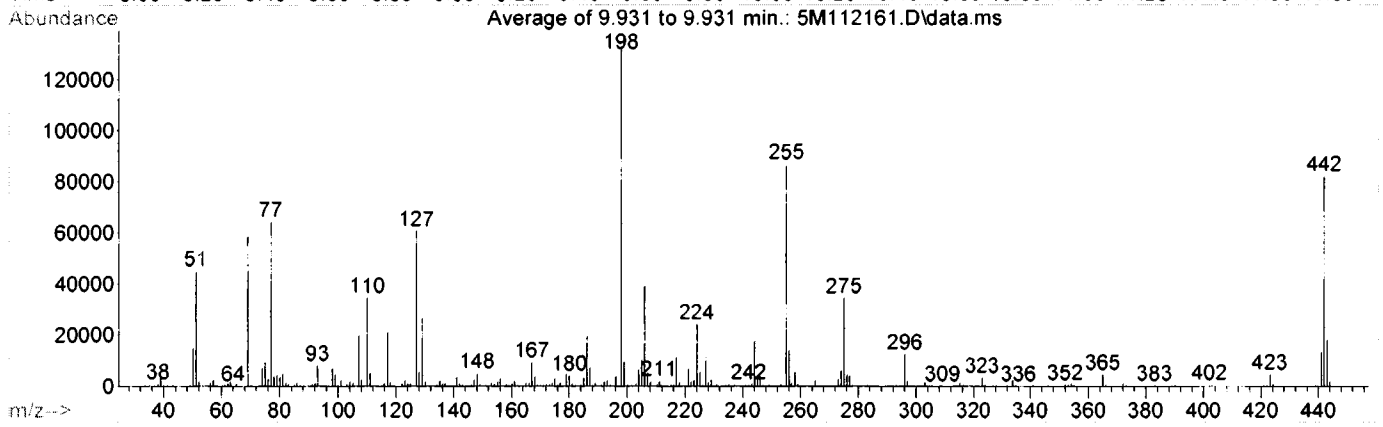
Data File	Sample Number	Analysis Date:
5M112162.D	CAL BNA@50PPM	02/24/20 08:09
5M112163.D	MBS-1	02/24/20 08:32
5M112164.D	AD15699-004	02/24/20 08:55
5M112165.D	AD15796-002	02/24/20 09:19
5M112166.D	WMB83616	02/24/20 09:42
5M112167.D	WMB83618	02/24/20 10:05
5M112168.D	MBS83616-2	02/24/20 10:29
5M112169.D	MBS-3	02/24/20 10:52
5M112170.D	MBS-4	02/24/20 11:15
5M112171.D	MBS-5	02/24/20 11:39
5M112172.D	AD15777-003	02/24/20 12:02
5M112173.D	OMB83632(MS)	02/24/20 12:25
5M112174.D	OMB83632	02/24/20 12:49
5M112175.D	AD15777-004	02/24/20 13:12
5M112176.D	AD15777-005	02/24/20 13:35
5M112177.D	AD15713-007	02/24/20 13:59
5M112178.D	AD15713-009	02/24/20 14:22
5M112179.D	AD15865-001	02/24/20 14:45
5M112180.D	WMB83638(MS)	02/24/20 15:09
5M112181.D	WMB83638	02/24/20 15:32
5M112182.D	SMB82174	02/24/20 15:55
5M112183.D	AD15777-006	02/24/20 16:18
5M112184.D	AD15805-001	02/24/20 16:42
5M112185.D	AD15805-009	02/24/20 17:05
5M112186.D	AD15805-011	02/24/20 17:28
5M112187.D	AD15805-013	02/24/20 17:51
5M112188.D	AD15805-015	02/24/20 18:15
5M112189.D	AD15806-009	02/24/20 18:38

Data Path : G:\GcMsData\2020\GCMS_5\Data\02-24-20\
Data File : 5M112161.D
Acq On : 24 Feb 2020 7:39
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_5\MethodQt\5M_0210.M
Title : @GCMS_5,mg,625,8270
Last Update : Mon Feb 10 13:39:01 2020





Spectrum Information: Average of 9.931 to 9.931 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.0	45144	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	58544	PASS
70	69	0.00	2	0.6	379	PASS
127	198	40	60	45.8	60936	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	132928	PASS
199	198	5	9	7.3	9641	PASS
275	198	10	30	26.2	34792	PASS
365	198	1	100	3.6	4742	PASS
441	443	0.01	100	73.6	13515	PASS
442	198	40	100	62.1	82560	PASS
443	442	17	23	22.2	18368	PASS

0021406 0185

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M111938.D	CAL BNA@50PPM	02/10/20 13:21	2	5M111930.D	CAL BNA@2PPM	02/10/20 10:08
3	5M111931.D	CAL BNA@10PPM	02/10/20 10:31	4	5M111936.D	CAL BNA@20PPM	02/10/20 12:35
5	5M111935.D	CAL BNA@80PPM	02/10/20 12:11	6	5M111934.D	CAL BNA@120PPM	02/10/20 11:48
7	5M111933.D	CAL BNA@160PPM	02/10/20 11:25	8	5M111932.D	CAL BNA@196PPM	02/10/20 11:02
9	5M111937.D	CAL BNA@0.5PPM	02/10/20 12:58				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Avg	0.9285	0.8429	1.0231	1.0335	1.0267	1.0268	0.9730	1.0612	0.6984	0.957	2.56	0.997	0.998	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	1.8489	1.6589	1.5594	1.7999	1.9494	1.9050	1.9444	2.0465	-----	1.84	3.00	0.998	0.999	8.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.4503	1.3183	1.4543	1.5380	1.5466	1.5136	1.5387	1.6515	-----	1.50	2.94	0.997	0.999	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.9403	2.4308	1.8373	2.0068	2.0239	2.0329	2.0674	2.1673	-----	2.06	4.56	0.998	1.00	8.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	2.1103	2.4705	2.0738	2.1808	2.1706	2.0797	2.1087	2.2053	-----	2.18	5.38	0.999	0.999	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	3.2279	4.1958	3.2425	3.4554	3.4319	3.3187	3.2358	3.5864	4.3704	3.56	5.48	0.998	0.998	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7449	0.7484	0.6939	0.7754	0.8018	0.7937	0.8085	0.8417	-----	0.776	5.52	0.999	1.00	5.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.0968	2.5107	2.1945	2.2147	2.2868	2.2319	2.2742	2.3270	3.2600	2.38	5.54	0.999	1.00	15	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.5410	3.1805	2.5219	2.6977	2.6725	2.5860	2.6577	2.8204	-----	2.71	5.44	0.997	0.999	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.1310	3.9908	3.0987	3.2726	3.2729	3.1965	3.2615	3.4533	-----	3.33	5.45	0.999	1.00	8.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.1220	2.6861	2.1542	2.2498	2.2671	2.2696	2.2754	2.4879	-----	2.31	5.58	0.997	0.999	8.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.0246	2.3972	2.1014	2.1073	2.0928	2.0096	2.0180	2.1880	-----	2.12	5.63	0.997	0.998	6.0	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.4952	2.9675	2.5187	2.5873	2.5880	2.6087	2.6321	2.8596	-----	2.66	5.71	0.996	0.999	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5322	1.9018	1.5409	1.4587	1.5746	1.5486	1.5927	1.7038	-----	1.61	5.77	0.997	0.999	8.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.3811	1.7046	1.4687	1.3999	1.4765	1.4664	1.4944	1.6056	-----	1.50	5.90	0.996	0.999	7.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8852	1.0135	0.8095	0.8011	0.8937	0.8814	0.9125	0.9663	-----	0.895	5.87	0.997	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.0891	1.4838	1.1431	1.0866	1.0799	1.0567	1.0883	1.1533	-----	1.15	5.99	0.999	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2241	1.4605	1.2067	1.1616	1.2509	1.2208	1.2683	1.3429	1.6965	1.31	5.96	0.997	0.999	13	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.0342	2.2668	2.0028	2.0126	2.0925	2.0474	2.1727	2.2883	-----	2.11	6.09	0.997	1.00	5.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6099	0.7624	0.5787	0.5920	0.6335	0.6292	0.6474	0.6917	-----	0.643	6.18	0.997	0.999	9.3	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	1.0847	1.1727	1.0235	1.0460	1.0780	1.0332	1.1069	1.1302	1.4714	1.13	6.09	0.998	0.999	12	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3224	1.4071	1.2621	1.2692	1.3409	1.3496	1.4167	1.5350	1.3813	1.36	6.09	0.995	0.999	6.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1508	0.1787	0.1364	0.1537	0.1664	0.1625	0.1604	0.1708	-----	0.160	6.21	0.998	0.999	8.2		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.4419	0.5371	0.4285	0.4437	0.4651	0.4343	0.4268	0.4700	-----	0.456	6.22	0.996	0.997	8.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.7670	0.8308	0.7156	0.7709	0.7916	0.7599	0.7793	0.8251	-----	0.780	6.41	0.998	0.999	4.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1915	0.1577	0.1477	0.1791	0.2024	0.1998	0.1991	0.2135	-----	0.186	6.47	0.998	0.999	12	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.4130	0.5074	0.3981	0.4122	0.4307	0.4076	0.4166	0.4472	0.5204	0.439	6.50	0.997	0.999	10	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2373	-----	0.0776	0.1829	0.2905	0.3033	0.3078	0.3307	-----	0.247	6.57	0.997	0.999	36		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4181	0.4841	0.4113	0.4158	0.4392	0.4244	0.4258	0.4510	-----	0.434	6.58	0.998	0.999	5.6	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3145	0.3470	0.3097	0.3000	0.3376	0.3307	0.3345	0.3662	0.4154	0.340	6.66	0.997	0.999	10	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3794	0.4683	0.3802	0.3700	0.3965	0.3934	0.4014	0.4380	-----	0.403	6.73	0.995	0.999	8.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0579	1.4010	1.0900	1.0551	1.1187	1.1199	1.1257	1.2039	1.4499	1.18	6.78	0.998	0.999	12	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3815	0.4139	0.3846	0.3952	0.4112	0.3825	0.3567	0.3502	0.5840	0.407	6.82	0.996	0.999	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2619	0.3251	0.2670	0.2617	0.2843	0.2815	0.2817	0.3076	-----	0.284	6.87	0.996	0.998	7.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1041	0.0890	0.0876	0.1053	0.1141	0.1065	0.1109	0.1144	-----	0.104	7.09	0.998	0.999	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3496	0.3958	0.3291	0.3390	0.3709	0.3576	0.3583	0.3912	-----	0.361	7.18	0.998	0.999	6.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7313	0.8615	0.7358	0.7325	0.7994	0.7728	0.7956	0.8473	-----	0.785	7.32	0.997	0.999	6.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.7037	0.8790	0.7147	0.7004	0.7456	0.7433	0.7462	0.8245	-----	0.757	7.40	0.995	0.998	8.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7156	0.8703	0.7246	0.7155	0.7718	0.7583	0.7720	0.8361	-----	0.771	7.32	0.997	0.999	7.4		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8910	1.0013	0.8646	0.8768	0.9558	0.9440	0.9650	1.0463	-----	0.939	7.69	0.995	0.999	6.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.6742	0.8130	0.6661	0.6486	0.7204	0.7176	0.7383	0.7855	-----	0.721	7.45	0.997	0.999	8.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.666
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M111938.D	CAL BNA@50PPM	02/10/20 13:21	2	5M111930.D	CAL BNA@2PPM	02/10/20 10:08
3	5M111931.D	CAL BNA@10PPM	02/10/20 10:31	4	5M111936.D	CAL BNA@20PPM	02/10/20 12:35
5	5M111935.D	CAL BNA@80PPM	02/10/20 12:11	6	5M111934.D	CAL BNA@120PPM	02/10/20 11:48
7	5M111933.D	CAL BNA@160PPM	02/10/20 11:25	8	5M111932.D	CAL BNA@196PPM	02/10/20 11:02
9	5M111937.D	CAL BNA@0.5PPM	02/10/20 12:58				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Avg	0.4514	0.4692	0.4166	0.4138	0.4772	0.4894	0.5114	0.5412	-----	0.471	7.44	0.996	1.00	9.3	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3866	0.4269	0.3778	0.3767	0.4286	0.4315	0.4477	0.4642	-----	0.418	7.54	0.998	1.00	7.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.4276	0.3888	0.3659	0.3780	0.4613	0.4631	0.4697	0.4878	-----	0.430	7.56	0.997	0.999	11	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3318	1.6823	1.3425	1.3159	1.3645	1.3392	1.3988	1.4433	-----	1.40	7.60	0.999	1.00	8.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1071	1.3407	1.1098	1.0897	1.1589	1.1829	1.2169	1.2498	-----	1.18	7.71	0.999	1.00	7.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8653	1.0427	0.8632	0.8679	0.9223	0.9554	0.9860	1.0618	-----	0.946	7.99	0.995	1.00	8.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8653	1.0427	0.8632	0.8679	0.9223	0.9554	0.9860	1.0618	-----	0.946	7.99	0.995	1.00	8.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7979	0.9785	0.8190	0.7960	0.8395	0.8471	0.8719	0.8967	-----	0.856	7.77	0.999	1.00	7.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4858	0.4886	0.4518	0.4457	0.5013	0.4707	0.4891	0.4879	-----	0.478	7.78	0.999	0.999	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.3927	0.4671	0.4166	0.4096	0.4296	0.4272	0.4463	0.4667	-----	0.432	7.97	0.997	1.00	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.6181	1.8933	1.6133	1.6140	1.7273	1.7573	1.7692	1.8724	-----	1.73	8.07	0.998	1.00	6.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3145	1.5142	1.2907	1.2963	1.3906	1.3663	1.4144	1.4569	-----	1.38	7.93	0.999	1.00	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.3133	0.3211	0.2979	0.2986	0.3309	0.3408	0.3611	0.3799	-----	0.331	7.99	0.996	1.00	8.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1321	1.3048	1.1207	1.0994	1.1796	1.2044	1.2468	1.2858	-----	1.20	8.22	0.998	1.00	6.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.2853	0.2964	0.2624	0.2701	0.2979	0.2789	0.2800	0.2724	-----	0.280	8.14	0.999	1.00	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1628	-----	0.1000	0.1485	0.2048	0.2057	0.2168	0.2265	-----	0.181	8.23	0.996	0.999	25	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6467	1.9847	1.6471	1.6498	1.7591	1.7487	1.8009	1.8994	2.2690	1.82	8.37	0.998	1.00	11	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4100	0.3966	0.3673	0.4013	0.4362	0.4293	0.4429	0.4603	-----	0.418	8.34	0.998	1.00	7.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.3015	0.2907	0.2676	0.3121	0.3194	0.3088	0.3213	0.3247	-----	0.306	8.26	0.999	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3839	0.3232	0.3507	0.3868	0.4186	0.4259	0.4543	0.4603	-----	0.400	8.48	0.998	1.00	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3513	1.6249	1.3248	1.3091	1.4454	1.4554	1.5330	1.6149	-----	1.46	8.69	0.996	1.00	8.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.7504	0.8880	0.7430	0.7251	0.7861	0.8012	0.8281	0.8839	-----	0.801	8.68	0.996	1.00	7.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3138	1.4764	1.3233	1.2771	1.3736	1.3771	1.4268	1.5056	-----	1.38	8.56	0.997	1.00	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3276	0.3024	0.2907	0.3084	0.3523	0.3392	0.3523	0.3622	-----	0.329	8.70	0.999	1.00	8.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.4566	0.4644	0.4387	0.4429	0.5031	0.4835	0.4977	0.5198	-----	0.476	9.32	0.998	0.999	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Avg	0.1309	-----	0.1059	0.1186	0.1473	0.1480	0.1488	0.1659	-----	0.138	8.72	0.996	0.999	15	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.5692	0.6535	0.5458	0.5510	0.6003	0.6077	0.6210	0.6738	-----	0.603	8.79	0.996	1.00	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1118	0.0989	0.0999	0.1021	0.1167	0.1198	0.1171	0.1303	-----	0.112	8.92	0.995	0.998	9.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7278	0.7662	0.7070	0.7142	0.7582	0.7157	0.8026	0.8449	-----	0.755	8.84	0.995	0.999	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2251	0.2476	0.2275	0.2241	0.2387	0.2474	0.2458	0.2687	-----	0.241	9.17	0.996	0.999	6.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2396	0.3011	0.2363	0.2275	0.2568	0.2585	0.2597	0.2829	-----	0.258	9.24	0.996	0.999	9.5	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3183	0.3336	0.3255	0.3147	0.3376	0.3261	0.3282	0.3407	-----	0.328	9.51	0.999	0.999	2.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1368	-----	0.1061	0.1226	0.1533	0.1564	0.1618	0.1781	-----	0.145	9.43	0.995	0.999	17	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	0.9967	1.2278	1.0047	0.9962	1.0620	1.0764	1.0805	1.1868	-----	1.08	9.67	0.996	0.999	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0456	1.1962	1.0307	1.0053	1.1175	1.1246	1.1460	1.2648	-----	1.12	9.72	0.994	0.999	7.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.8999	1.0091	0.8955	0.8823	0.9577	0.9795	0.9851	1.0648	-----	0.959	9.89	0.996	0.999	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.0748	0.8971	0.9612	1.0029	1.1617	1.1663	1.1945	1.3004	0.9476	1.08	10.27	0.996	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.2001	1.3234	1.1393	1.1665	1.2968	1.3210	1.3123	1.4228	-----	1.27	10.99	0.997	0.999	7.5	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.0769	1.2053	1.0442	1.0431	1.0999	1.0888	1.1316	1.1690	-----	1.11	11.26	0.999	1.00	5.9	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.4999	0.3625	0.4230	0.4761	0.4987	0.4669	0.4584	0.4373	-----	0.453	11.1[illegible]	0.997	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.5704	0.7220	0.5838	0.5586	0.5813	0.5648	0.5997	0.6351	-----	0.602	11.44	0.996	0.999	9.0		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.666
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M111938.D	CAL BNA@50PPM	02/10/20 13:21	2	5M111930.D	CAL BNA@2PPM	02/10/20 10:08
3	5M111931.D	CAL BNA@10PPM	02/10/20 10:31	4	5M111936.D	CAL BNA@20PPM	02/10/20 12:35
5	5M111935.D	CAL BNA@80PPM	02/10/20 12:11	6	5M111934.D	CAL BNA@120PPM	02/10/20 11:48
7	5M111933.D	CAL BNA@160PPM	02/10/20 11:25	8	5M111932.D	CAL BNA@196PPM	02/10/20 11:02
9	5M111937.D	CAL BNA@0.5PPM	02/10/20 12:58				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2859	0.2804	0.2558	0.2639	0.2868	0.3026	0.3102	0.3273	-----	0.289	11.38	0.997	1.00	8.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3633	0.3438	0.3391	0.3506	0.3796	0.3684	0.3895	0.3964	-----	0.366	11.78	0.999	1.00	5.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.4161	0.2958	0.3441	0.3828	0.4279	0.4266	0.4398	0.4609	-----	0.399	12.04	0.998	1.00	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4828	0.4205	0.4243	0.4465	0.4993	0.5088	0.5185	0.5616	-----	0.483	12.14	0.996	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.3624	0.3361	0.3261	0.3522	0.3688	0.3613	0.3461	0.3424	-----	0.349	12.65	0.999	1.00	4.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1135	1.3128	1.1121	1.0968	1.1449	1.1564	1.2050	1.2657	-----	1.18	12.68	0.997	1.00	6.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0883	1.3213	1.0706	1.0432	1.1354	1.1580	1.2200	1.3161	-----	1.17	12.72	0.995	1.00	9.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6056	0.3935	0.5010	0.5634	0.6559	0.6807	0.7026	0.7560	-----	0.607	12.73	0.996	1.00	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.0338	0.5740	0.7486	0.8969	1.0986	1.1033	1.1901	1.2567	-----	0.988	13.48	0.996	1.00	24	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0854	1.0892	1.0184	1.0138	1.1217	1.1102	1.1610	1.3538	-----	1.12	13.89	0.991	0.998	9.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0664	1.2006	1.0302	1.0117	1.1580	1.1639	1.2287	1.2432	-----	1.14	13.92	0.998	1.00	7.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	0.9772	0.9307	0.8522	0.9030	1.0269	1.0373	1.1020	1.1795	-----	1.00	14.24	0.995	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.2003	1.2785	1.1284	1.1434	1.2622	1.2596	1.3215	1.4297	-----	1.25	15.58	0.996	1.00	7.8	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	1.0351	1.0911	0.9837	0.9883	1.1088	1.1150	1.1838	1.2927	-----	1.10	15.60	0.993	0.999	9.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0067	1.1505	0.9509	0.9606	1.0443	1.0300	1.0756	1.1610	-----	1.05	15.95	0.995	0.999	7.5	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.86
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M79175.D	CAL BNA@50PPM	02/10/20 14:03	2	10M79170.D	CAL BNA@2PPM	02/10/20 12:10
3	10M79166.D	CAL BNA@10PPM	02/10/20 10:05	4	10M79173.D	CAL BNA@20PPM	02/10/20 13:18
5	10M79172.D	CAL BNA@80PPM	02/10/20 12:55	6	10M79171.D	CAL BNA@120PPM	02/10/20 12:33
7	10M79169.D	CAL BNA@160PPM	02/10/20 11:48	8	10M79168.D	CAL BNA@196PPM	02/10/20 11:26
9	10M79174.D	CAL BNA@0.5PPM	02/10/20 13:41				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	0.9664	1.6038	1.0570	0.9957	0.9973	0.9742	0.9593	1.0400	2.1894	1.20	2.67	0.997	0.998	35		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Qua	1.6944	0.7587	1.4116	1.5320	1.9136	1.8905	1.9158	2.1193	-----	1.65	3.13	0.995	0.999	26		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.4786	1.7686	1.4220	1.4647	1.5659	1.5289	1.5306	1.6626	-----	1.55	3.06	0.997	0.998	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.0882	2.5246	2.0658	2.0260	2.2212	2.1800	2.1783	2.3791	-----	2.21	4.63	0.997	0.999	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	1.9336	2.4339	1.9248	1.9263	2.0190	1.9512	1.8993	2.0299	-----	2.01	5.44	0.998	0.998	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	3.4723	3.8929	3.3266	3.4220	3.6222	3.5165	3.4802	3.7664	3.5706	3.56	5.54	0.999	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7908	1.0141	0.7861	0.7783	0.8385	0.8265	0.8219	0.8863	-----	0.843	5.58	0.997	0.999	9.2	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.3420	3.3156	2.5701	2.4443	2.4775	2.4214	2.3851	2.6021	4.1155	2.74	5.59	0.997	0.998	22	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.7353	3.4757	2.6929	2.6853	2.8817	2.8157	2.7589	2.9807	-----	2.88	5.50	0.997	0.998	9.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.2548	4.2460	3.2072	3.2346	3.4498	3.3923	3.3383	3.5474	-----	3.46	5.51	0.998	0.999	9.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.4382	3.0113	2.4293	2.4106	2.5629	2.5038	2.4944	2.6734	-----	2.57	5.64	0.998	0.999	7.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.5519	3.1780	2.6017	2.5077	2.6290	2.5447	2.4608	2.5761	-----	2.63	5.68	0.999	0.999	8.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.6395	3.3747	2.6470	2.5876	2.7409	2.6722	2.6402	2.8362	-----	2.77	5.77	0.998	0.999	9.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4998	1.9003	1.5029	1.5053	1.5828	1.5152	1.5270	1.6224	-----	1.58	5.83	0.998	0.999	8.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4143	1.7623	1.4028	1.4190	1.4849	1.4325	1.4486	1.5521	-----	1.49	5.95	0.997	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9051	1.0469	0.8559	0.9012	0.9686	0.9397	0.9517	1.0330	-----	0.950	5.93	0.997	0.999	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.8046	2.2964	1.8561	1.8502	1.8823	1.7973	1.7820	1.8925	-----	1.90	6.04	0.999	0.999	8.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2751	1.4982	1.2313	1.2623	1.3367	1.2937	1.3127	1.4088	1.5291	1.35	6.02	0.997	0.999	7.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.9023	2.3065	1.8158	1.8858	1.9473	1.7585	1.6490	1.6432	-----	1.86	6.14	0.995	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5695	0.7182	0.5650	0.5679	0.6078	0.5819	0.5944	0.6365	-----	0.605	6.23	0.997	0.999	8.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	0.9877	1.1716	0.9658	0.9925	1.0013	0.9077	0.8525	0.8529	1.1918	0.992	6.14	0.995	0.999	12	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3753	1.5933	1.3000	1.3640	1.4023	1.2691	1.1839	1.1559	1.6187	1.36	6.14	0.993	0.999	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1645	0.1907	0.1561	0.1571	0.1756	0.1716	0.1786	0.1879	-----	0.173	6.26	0.997	1.00	7.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3659	0.4503	0.3607	0.3620	0.3814	0.3692	0.3755	0.3955	-----	0.383	6.28	0.998	0.999	7.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6838	0.7926	0.6598	0.6782	0.7084	0.6797	0.6922	0.7238	-----	0.702	6.46	0.999	0.999	5.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1871	0.1960	0.1742	0.1789	0.1996	0.1979	0.2054	0.2177	-----	0.195	6.52	0.997	1.00	7.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3489	0.4219	0.3353	0.3477	0.3684	0.3576	0.3636	0.3779	0.4184	0.371	6.55	0.999	1.00	8.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1951	-----	0.0825	0.1269	0.2479	0.2607	0.2801	0.2979	-----	0.213	6.63	0.993	0.999	38		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4162	0.5065	0.4076	0.4120	0.4303	0.4158	0.4223	0.4411	-----	0.432	6.63	0.999	0.999	7.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2883	0.3263	0.2763	0.2832	0.3041	0.2985	0.3045	0.3213	0.3024	0.301	6.71	0.998	0.999	5.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3136	0.3950	0.3095	0.3026	0.3281	0.3208	0.3274	0.3460	-----	0.330	6.77	0.998	0.999	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.1064	1.3985	1.0801	1.0994	1.1267	1.0799	1.0673	1.0737	1.5890	1.18	6.83	1.00	1.00	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3993	0.4835	0.3955	0.4100	0.4102	0.3745	0.3596	0.3260	0.5102	0.408	6.87	0.990	0.999	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1748	0.2064	0.1683	0.1653	0.1836	0.1798	0.1870	0.1986	-----	0.183	6.93	0.997	0.999	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1130	0.1072	0.1005	0.1097	0.1191	0.1145	0.1162	0.1153	-----	0.112	7.14	1.00	1.00	5.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.2971	0.3451	0.2804	0.2921	0.3152	0.3058	0.3138	0.3316	-----	0.310	7.23	0.998	0.999	6.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7228	0.8892	0.7239	0.7119	0.7426	0.7052	0.6937	0.7099	-----	0.737	7.36	0.999	0.999	8.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6821	0.8551	0.6895	0.6832	0.6983	0.6772	0.6680	0.6851	-----	0.705	7.44	1.00	1.00	8.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7035	0.8708	0.7040	0.6936	0.7224	0.6881	0.6783	0.6970	-----	0.720	7.36	0.999	0.999	8.7		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8029	0.9987	0.8012	0.7988	0.8271	0.7836	0.7800	0.8039	-----	0.824	7.74	0.999	0.999	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachlorobe	1	0	Avg	0.5535	0.6818	0.5450	0.5458	0.5928	0.5828	0.5979	0.6222	-----	0.590	7.50	0.998	1.00	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd 8.968
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0021406 0188

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M79175.D	CAL BNA@50PPM	02/10/20 14:03	2	10M79170.D	CAL BNA@2PPM	02/10/20 12:10
3	10M79166.D	CAL BNA@10PPM	02/10/20 10:05	4	10M79173.D	CAL BNA@20PPM	02/10/20 13:18
5	10M79172.D	CAL BNA@80PPM	02/10/20 12:55	6	10M79171.D	CAL BNA@120PPM	02/10/20 12:33
7	10M79169.D	CAL BNA@160PPM	02/10/20 11:48	8	10M79168.D	CAL BNA@196PPM	02/10/20 11:26
9	10M79174.D	CAL BNA@0.5PPM	02/10/20 13:41				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.3109	0.2270	0.2702	0.2742	0.3517	0.3510	0.3701	0.4023	-----	0.320	7.49	0.993	0.999	19	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3602	0.3701	0.3350	0.3632	0.3912	0.3840	0.3966	0.4200	-----	0.378	7.58	0.997	0.999	6.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3841	0.4115	0.3539	0.3697	0.4195	0.3888	0.4077	0.4436	-----	0.397	7.62	0.995	0.998	7.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2708	1.5881	1.2920	1.2546	1.3431	1.3119	1.3358	1.4018	-----	1.35	7.65	0.999	1.00	7.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1263	1.3920	1.1017	1.0997	1.1929	1.1563	1.1548	1.2079	-----	1.18	7.76	0.999	0.999	8.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.9192	1.1049	0.9082	0.9133	0.9748	0.9275	0.8979	0.8678	-----	0.939	8.04	0.998	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9192	1.1049	0.9082	0.9133	0.9748	0.9275	0.8979	0.8678	-----	0.939	8.04	0.998	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7956	0.9794	0.7741	0.7773	0.8400	0.8296	0.8260	0.8537	-----	0.835	7.82	0.999	1.00	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4150	0.4490	0.3939	0.4076	0.4427	0.4260	0.4250	0.4422	-----	0.425	7.83	0.999	0.999	4.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4661	0.5602	0.4566	0.4584	0.5038	0.4933	0.4917	0.4834	-----	0.489	8.02	0.999	1.00	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7629	2.1281	1.7355	1.7564	1.8538	1.7654	1.7591	1.7830	-----	1.82	8.11	1.00	1.00	7.2	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2574	1.5267	1.2498	1.2557	1.3312	1.2862	1.2967	1.3382	-----	1.32	7.98	0.999	1.00	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2989	0.3153	0.2869	0.2924	0.3298	0.3146	0.3062	0.2978	-----	0.305	8.04	0.999	0.999	4.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1644	1.4568	1.1575	1.1625	1.2126	1.1706	1.1453	1.1641	-----	1.20	8.27	1.00	1.00	8.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3276	0.3828	0.3127	0.3253	0.3473	0.3243	0.3131	0.3164	-----	0.331	8.18	0.998	0.999	7.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1277	-----	0.0965	0.1097	0.1572	0.1599	0.1695	0.1759	-----	0.142	8.27	0.997	0.999	22	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6122	2.0085	1.6078	1.6070	1.6985	1.6337	1.6212	1.6660	2.2730	1.75	8.42	1.00	1.00	13	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.3775	0.3525	0.3418	0.3680	0.4123	0.4034	0.4136	0.4410	-----	0.389	8.39	0.997	0.999	8.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2591	0.2608	0.2261	0.2324	0.2687	0.2609	0.2783	0.2815	-----	0.259	8.31	0.998	0.999	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3220	0.3286	0.3064	0.3101	0.3498	0.3469	0.3551	0.3870	-----	0.338	8.52	0.996	0.999	7.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3417	1.5745	1.2994	1.3199	1.4149	1.3338	1.3202	1.3442	-----	1.37	8.74	0.999	0.999	6.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6486	0.7584	0.6036	0.6190	0.6876	0.6735	0.6859	0.7136	-----	0.674	8.73	0.999	1.00	7.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2427	1.4355	1.1978	1.2281	1.3173	1.2908	1.3021	1.3542	-----	1.30	8.61	0.999	1.00	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3840	0.4605	0.3459	0.3840	0.4141	0.3975	0.3983	0.4168	-----	0.400	8.74	0.999	0.999	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3703	0.4078	0.3434	0.3492	0.4004	0.3905	0.4026	0.4277	-----	0.387	9.36	0.997	0.999	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1133	-----	0.0867	0.0963	0.1283	0.1301	0.1377	0.1462	-----	0.120	8.77	0.996	1.00	18	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6365	0.7350	0.6207	0.6163	0.6669	0.6475	0.6540	0.6770	-----	0.657	8.84	0.999	1.00	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1253	0.1102	0.1127	0.1138	0.1387	0.1402	0.1509	0.1648	-----	0.132	8.97	0.991	1.00	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.8367	0.8844	0.7414	0.7544	0.8012	0.7714	0.7824	0.8794	-----	0.806	8.88	0.996	0.997	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2167	0.2452	0.2075	0.2055	0.2306	0.2296	0.2400	0.2564	-----	0.229	9.21	0.996	0.999	7.9	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2569	0.3015	0.2401	0.2397	0.2729	0.2731	0.2854	0.3062	-----	0.272	9.28	0.991	0.999	9.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4523	0.4731	0.4353	0.4361	0.4726	0.4506	0.4437	0.4373	-----	0.450	9.55	0.999	1.00	3.4	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1189	-----	0.0891	0.0910	0.1420	0.1473	0.1646	0.1799	-----	0.133	9.48	0.988	0.999	26	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0695	1.3318	1.0561	1.0412	1.1009	1.0515	1.0640	1.0972	-----	1.10	9.71	0.999	0.999	8.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1065	1.2602	1.0689	1.0668	1.1556	1.1081	1.1076	1.1484	-----	1.13	9.77	0.999	0.999	5.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0210	1.2347	0.9917	0.9998	1.0624	1.0205	1.0235	1.0645	-----	1.05	9.93	0.999	0.999	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.1988	1.2210	1.1063	1.1371	1.2737	1.2234	1.2309	1.2713	1.1944	1.21	10.31	0.999	0.999	4.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1446	1.2893	1.0925	1.1171	1.1935	1.1535	1.1596	1.1982	-----	1.17	11.03	0.999	1.00	5.2	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1179	1.3932	1.1436	1.1205	1.1218	1.0826	1.1062	1.1435	-----	1.15	11.30	0.999	1.00	8.6	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.5899	0.6474	0.5934	0.5954	0.5919	0.5463	0.5337	0.5331	-----	0.579	11.18	0.998	1.00	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.5762	0.7272	0.5725	0.5578	0.5901	0.5825	0.6051	0.6618	-----	0.609	11.48	0.996	0.999	9.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.968
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M79175.D	CAL BNA@50PPM	02/10/20 14:03	2	10M79170.D	CAL BNA@2PPM	02/10/20 12:10
3	10M79166.D	CAL BNA@10PPM	02/10/20 10:05	4	10M79173.D	CAL BNA@20PPM	02/10/20 13:18
5	10M79172.D	CAL BNA@80PPM	02/10/20 12:55	6	10M79171.D	CAL BNA@120PPM	02/10/20 12:33
7	10M79169.D	CAL BNA@160PPM	02/10/20 11:48	8	10M79168.D	CAL BNA@196PPM	02/10/20 11:26
9	10M79174.D	CAL BNA@0.5PPM	02/10/20 13:41				

Compound	Co	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2616	0.2936	0.2431	0.2443	0.2788	0.2826	0.3037	0.3275	-----	0.279	11.41	0.993	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3501	0.3595	0.3251	0.3288	0.3627	0.3583	0.3673	0.3905	-----	0.355	11.81	0.998	1.00	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.4873	0.4838	0.4615	0.4626	0.5172	0.5079	0.5279	0.5469	-----	0.499	12.07	0.998	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4497	0.3910	0.4091	0.4116	0.4762	0.4613	0.4580	0.4557	-----	0.439	12.17	1.00	1.00	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.3776	0.4890	0.3719	0.3884	0.3892	0.3597	0.3598	0.3490	-----	0.386	12.68	0.998	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0800	1.3708	1.0925	1.0680	1.1192	1.0752	1.1146	1.1572	-----	1.13	12.71	0.998	0.999	8.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0895	1.2956	1.0562	1.0376	1.1210	1.0827	1.0692	1.0741	-----	1.10	12.75	1.00	1.00	7.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7363	0.6699	0.6639	0.6862	0.7830	0.7412	0.7209	0.6989	-----	0.713	12.76	0.998	0.999	5.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.1289	1.0508	1.0029	1.0569	1.2041	1.1895	1.2310	1.2679	-----	1.14	13.50	0.998	1.00	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0742	1.2426	0.9814	0.9947	1.0667	1.1015	1.0910	1.2029	-----	1.09	13.92	0.997	0.999	8.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.1066	1.2969	1.0315	1.0124	1.0093	1.0593	1.1550	1.1854	-----	1.11	13.94	0.995	0.999	9.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	0.9652	1.0849	0.9001	0.8852	1.0010	1.0003	1.0484	1.1113	-----	1.00	14.26	0.997	1.00	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.2212	1.4050	1.1423	1.1263	1.2797	1.2976	1.3663	1.4557	-----	1.29	15.62	0.995	1.00	9.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	1.0468	1.1485	0.9734	0.9664	1.0975	1.1164	1.1737	1.2295	-----	1.09	15.63	0.997	1.00	8.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0051	1.2171	0.9798	0.9676	1.0584	1.0590	1.1080	1.1777	-----	1.07	15.98	0.996	1.00	8.5	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.968
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105116.D	CAL BNA@50PPM	02/10/20 14:31	2	7M105108.D	CAL BNA@2PPM	02/10/20 11:23
3	7M105109.D	CAL BNA@10PPM	02/10/20 11:46	4	7M105114.D	CAL BNA@20PPM	02/10/20 13:44
5	7M105113.D	CAL BNA@80PPM	02/10/20 13:21	6	7M105112.D	CAL BNA@120PPM	02/10/20 12:55
7	7M105111.D	CAL BNA@160PPM	02/10/20 12:32	8	7M105110.D	CAL BNA@196PPM	02/10/20 12:09
9	7M105115.D	CAL BNA@0.5PPM	02/10/20 14:07				

Compound	Col	Mr	Fit	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	1.0727	1.3447	1.0030	0.9710	0.9972	0.9495	0.9626	1.0400	1.4687	1.09	2.64	0.997	0.997	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	1.8569	1.2167	1.8023	1.8364	2.0547	1.9575	2.0233	2.1326	-----	1.98	3.09	0.998	0.999	7.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.5769	1.9042	1.6295	1.6340	1.7116	1.5979	1.6159	1.7618	-----	1.68	3.03	0.996	0.997	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.9642	2.6438	2.1619	2.1876	2.2558	2.1697	2.1865	2.3767	-----	2.24	4.63	0.996	0.998	8.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	2.0817	2.8955	2.3527	2.3260	2.3270	2.2093	2.1730	2.3019	-----	2.33	5.44	0.999	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Qua	3.2946	4.4347	3.6595	3.6955	3.7391	3.5041	3.4625	3.6806	5.1119	3.84	5.54	0.998	0.998	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7438	1.1680	0.8182	0.7778	0.8370	0.8197	0.8159	0.8637	-----	0.856	5.58	0.998	0.999	15	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.3192	3.2545	2.4842	2.5062	2.5754	2.4161	2.4284	2.5762	3.8473	2.71	5.60	0.998	0.999	19	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.5525	3.4968	2.7262	2.8381	2.9572	2.8257	2.8700	3.0731	-----	2.92	5.50	0.996	0.998	9.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.1382	4.3383	3.4635	3.4773	3.6053	3.4390	3.4268	3.6431	-----	3.57	5.51	0.997	0.998	9.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.2007	2.8195	2.4362	2.3744	2.4880	2.4127	2.4064	2.5800	-----	2.46	5.64	0.998	0.999	7.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.7948	3.6725	2.9788	3.0229	3.0283	2.8602	2.7800	2.9107	-----	3.01	5.60	0.999	0.999	9.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.3155	3.1119	2.5873	2.5196	2.6490	2.5064	2.5253	2.6955	-----	2.61	5.77	0.997	0.998	8.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4797	1.9645	1.4618	1.5059	1.5346	1.4925	1.5202	1.6588	-----	1.58	5.84	0.995	0.998	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4130	1.7925	1.3844	1.4194	1.4562	1.4286	1.4395	1.5504	-----	1.49	5.96	0.997	0.999	9.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9458	1.1667	0.9836	0.9395	1.0030	0.9836	0.9714	1.0732	-----	1.01	5.93	0.997	0.999	7.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	2.2187	2.7619	2.1898	2.2030	2.1768	2.0324	2.0161	2.1395	-----	2.22	6.05	0.998	0.998	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2975	1.5775	1.3215	1.2959	1.3258	1.3178	1.3117	1.4243	1.9710	1.43	6.02	0.997	0.999	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.0989	2.6378	2.1782	2.0857	2.1661	2.1056	2.1056	2.2736	-----	2.21	6.14	0.997	0.998	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6200	0.8630	0.6162	0.6312	0.6483	0.6315	0.6284	0.6761	-----	0.664	6.24	0.997	0.999	12	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	1.1858	1.5261	1.1672	1.2042	1.2153	1.1649	1.1400	1.2322	1.7731	1.29	6.15	0.999	0.999	17	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3709	1.7620	1.3730	1.3876	1.4490	1.4095	1.4138	1.5353	2.0194	1.52	6.14	0.998	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1636	0.2055	0.1617	0.1684	0.1699	0.1687	0.1680	0.1792	-----	0.173	6.27	0.998	0.999	8.1		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.4608	0.6177	0.4551	0.4509	0.4582	0.4457	0.4470	0.4708	-----	0.476	6.28	0.999	0.999	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.8093	1.0210	0.8055	0.7942	0.8262	0.8020	0.8017	0.8480	-----	0.839	6.47	0.998	0.999	9.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1966	0.2234	0.1934	0.1842	0.2058	0.2016	0.2055	0.2190	-----	0.204	6.53	0.998	0.999	6.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3968	0.5200	0.3763	0.3858	0.4001	0.3907	0.3966	0.4194	0.5720	0.429	6.56	0.998	0.999	16	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Avg	0.3290	-----	0.2337	0.2907	0.3606	0.3382	0.3509	0.3755	-----	0.326	6.61	0.998	0.998	15		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4529	0.5602	0.4525	0.4595	0.4662	0.4519	0.4559	0.4835	-----	0.473	6.63	0.998	0.999	7.8	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2837	0.3656	0.2883	0.2842	0.2954	0.2915	0.3000	0.3174	0.3438	0.308	6.71	0.998	1.00	9.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3157	0.4104	0.3105	0.3148	0.3223	0.3246	0.3284	0.3501	-----	0.335	6.78	0.997	0.999	9.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0615	1.3763	1.0707	1.0526	1.1014	1.0721	1.0874	1.1502	1.6140	1.18	6.85	0.998	0.999	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4058	0.5000	0.4334	0.4185	0.4072	0.3783	0.3440	0.3126	0.5805	0.420	6.88	0.985	1.00	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1775	0.2067	0.1770	0.1776	0.1879	0.1843	0.1877	0.1995	-----	0.187	6.94	0.998	0.999	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1102	0.1376	0.1130	0.1066	0.1199	0.1177	0.1208	0.1258	-----	0.119	7.14	0.998	1.00	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3317	0.3984	0.3406	0.3351	0.3492	0.3453	0.3500	0.3769	-----	0.353	7.24	0.997	0.999	6.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7233	0.8639	0.7021	0.7168	0.7493	0.7377	0.7499	0.8004	-----	0.755	7.38	0.997	0.999	7.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6676	0.8199	0.6792	0.6629	0.7006	0.6910	0.7043	0.7544	-----	0.710	7.46	0.997	0.999	7.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.6951	0.8417	0.6907	0.6898	0.7249	0.7145	0.7270	0.7774	-----	0.733	7.38	0.997	0.999	7.2		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8188	1.0035	0.8416	0.8159	0.8509	0.8316	0.8568	0.9247	-----	0.868	7.75	0.996	0.999	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5641	0.6238	0.5518	0.5332	0.5834	0.5644	0.5800	0.6063	-----	0.576	7.51	0.998	0.999	5.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.53
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105116.D	CAL BNA@50PPM	02/10/20 14:31	2	7M105108.D	CAL BNA@2PPM	02/10/20 11:23
3	7M105109.D	CAL BNA@10PPM	02/10/20 11:46	4	7M105114.D	CAL BNA@20PPM	02/10/20 13:44
5	7M105113.D	CAL BNA@80PPM	02/10/20 13:21	6	7M105112.D	CAL BNA@120PPM	02/10/20 12:55
7	7M105111.D	CAL BNA@160PPM	02/10/20 12:32	8	7M105110.D	CAL BNA@196PPM	02/10/20 12:09
9	7M105115.D	CAL BNA@0.5PPM	02/10/20 14:07				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Avg	0.3622	0.3913	0.3622	0.3456	0.3772	0.3648	0.3893	0.4127	-----	0.376	7.51	0.997	0.999	5.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4205	0.4243	0.3806	0.3811	0.4651	0.4187	0.3984	0.4128	-----	0.413	7.59	0.997	0.997	6.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3970	0.4960	0.3929	0.3826	0.4053	0.3947	0.4034	0.4295	-----	0.413	7.62	0.998	0.999	8.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2812	1.5514	1.2778	1.2665	1.2970	1.2431	1.2957	1.3674	-----	1.32	7.66	0.998	0.999	7.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1545	1.4409	1.1571	1.1254	1.1657	1.1134	1.1581	1.2314	-----	1.19	7.78	0.997	0.999	8.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.9244	1.1245	0.9066	0.9128	0.9242	0.8969	0.9261	0.9982	-----	0.952	8.05	0.998	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9244	1.1245	0.9066	0.9128	0.9242	0.8969	0.9261	0.9982	-----	0.952	8.05	0.998	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7929	0.9021	0.8031	0.7846	0.8128	0.7791	0.8108	0.8525	-----	0.817	7.83	0.998	0.999	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.5445	0.6461	0.5396	0.5389	0.5498	0.5195	0.5224	0.5419	-----	0.550	7.84	0.999	0.999	7.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4635	0.5695	0.4594	0.4530	0.4626	0.4496	0.4673	0.4961	-----	0.478	8.03	0.997	0.999	8.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7129	2.1034	1.7086	1.6595	1.7611	1.7027	1.7321	1.8470	-----	1.78	8.13	0.998	0.999	8.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3322	1.6084	1.3243	1.2942	1.3597	1.3066	1.3505	1.4298	-----	1.38	7.99	0.997	0.999	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.3166	0.3648	0.2970	0.3056	0.3293	0.3169	0.3418	0.3497	-----	0.328	8.05	0.998	0.999	7.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1917	1.5528	1.1745	1.1520	1.2206	1.1544	1.2100	1.2948	-----	1.24	8.28	0.996	0.998	11	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3248	0.3757	0.3273	0.3195	0.3313	0.2945	0.3001	0.3005	-----	0.322	8.19	0.998	0.999	8.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Avg	0.1664	-----	0.1652	0.1546	0.1565	0.1535	0.1757	0.2086	-----	0.169	8.28	0.979	0.994	11	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6266	2.0153	1.6638	1.6117	1.6867	1.5946	1.6490	1.7718	2.4052	1.78	8.43	0.997	0.999	15	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4206	0.4208	0.4119	0.4120	0.4332	0.4215	0.4405	0.4686	-----	0.429	8.40	0.997	0.999	4.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.3613	0.4577	0.3775	0.3481	0.3361	0.3353	0.3439	0.3685	-----	0.366	8.32	0.998	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3430	0.4021	0.3291	0.3178	0.3493	0.3382	0.3608	0.3839	-----	0.353	8.54	0.996	0.999	8.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3846	1.6678	1.3631	1.3324	1.4166	1.3585	1.3994	1.4995	-----	1.43	8.76	0.997	0.999	7.7	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6494	0.8125	0.6273	0.6276	0.6723	0.6412	0.6730	0.7184	-----	0.678	8.74	0.996	0.999	9.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.4099	1.7389	1.4035	1.3694	1.4468	1.3731	1.4191	1.5183	-----	1.46	8.63	0.997	0.999	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3756	0.4011	0.3683	0.3567	0.3900	0.3749	0.3836	0.4057	-----	0.382	8.75	0.998	0.999	4.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3987	0.4659	0.3856	0.3854	0.4267	0.4103	0.4247	0.4549	-----	0.419	9.39	0.996	0.999	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Avg	0.1244	-----	0.1259	0.1195	0.1299	0.1267	0.1265	0.1403	-----	0.128	8.79	0.994	0.997	5.0	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6380	0.7542	0.6255	0.6243	0.6663	0.6347	0.6459	0.6973	-----	0.661	8.86	0.998	0.999	6.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1011	0.0994	0.0977	0.0914	0.1073	0.1050	0.1087	0.1206	-----	0.104	8.99	0.995	0.999	8.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	1.0250	1.0792	0.8661	0.9040	1.0171	0.9511	0.9488	1.0126	-----	0.976	8.90	0.998	0.998	7.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2064	0.2520	0.2042	0.2001	0.2192	0.2112	0.2130	0.2360	-----	0.218	9.23	0.994	0.998	8.1	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2154	0.2555	0.2062	0.2170	0.2256	0.2192	0.2255	0.2448	-----	0.226	9.30	0.996	0.999	7.2	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.5869	0.6822	0.5387	0.5488	0.5730	0.5373	0.5343	0.5628	-----	0.571	9.58	0.998	0.998	8.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Avg	0.1330	-----	0.1344	0.1227	0.1455	0.1321	0.1279	0.1130	-----	0.130	9.50	0.989	0.997	7.8	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0719	1.3335	1.0748	1.0541	1.0966	1.0551	1.0709	1.1597	-----	1.11	9.73	0.998	0.999	8.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1077	1.3503	1.1198	1.0822	1.1549	1.1066	1.1157	1.2201	-----	1.16	9.78	0.996	0.998	7.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.9932	1.1868	0.9836	0.9867	1.0451	0.9891	1.0179	1.1004	-----	1.04	9.95	0.996	0.998	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.3090	1.5725	1.2479	1.2459	1.3782	1.3039	1.3081	1.4247	1.6241	1.38	10.34	0.998	0.999	9.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1639	1.3414	1.1419	1.1321	1.2241	1.1548	1.1996	1.2931	-----	1.21	11.05	0.996	0.998	6.3	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.2425	1.5534	1.2389	1.2177	1.2711	1.2573	1.2956	1.3558	-----	1.30	11.32	0.998	1.00	8.4	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.6117	0.7193	0.6277	0.5745	0.6175	0.5804	0.5535	0.5181	-----	0.600	11.21	0.996	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6086	0.7704	0.6108	0.5930	0.6330	0.6234	0.6492	0.6947	-----	0.649	11.51	0.996	0.999	3.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.53
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105116.D	CAL BNA@50PPM	02/10/20 14:31	2	7M105108.D	CAL BNA@2PPM	02/10/20 11:23
3	7M105109.D	CAL BNA@10PPM	02/10/20 11:46	4	7M105114.D	CAL BNA@20PPM	02/10/20 13:44
5	7M105113.D	CAL BNA@80PPM	02/10/20 13:21	6	7M105112.D	CAL BNA@120PPM	02/10/20 12:55
7	7M105111.D	CAL BNA@160PPM	02/10/20 12:32	8	7M105110.D	CAL BNA@196PPM	02/10/20 12:09
9	7M105115.D	CAL BNA@0.5PPM	02/10/20 14:07				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2789	0.3154	0.2723	0.2785	0.2918	0.2900	0.3071	0.3260	-----	0.295	11.44	0.996	1.00	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3940	0.4859	0.3908	0.3795	0.4086	0.4039	0.4160	0.4345	-----	0.414	11.84	0.998	1.00	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.5956	0.7066	0.5740	0.5707	0.6026	0.6080	0.6297	0.6563	-----	0.618	12.10	0.998	1.00	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4844	0.5379	0.4523	0.4564	0.5023	0.4983	0.5124	0.5408	-----	0.498	12.20	0.998	1.00	6.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.4070	0.4939	0.4050	0.3943	0.4017	0.3769	0.3650	0.3528	-----	0.400	12.71	0.997	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1663	1.5369	1.1533	1.1309	1.1903	1.1706	1.2341	1.2697	-----	1.23	12.73	0.998	1.00	11	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1216	1.4292	1.1335	1.1194	1.1326	1.1287	1.1681	1.2297	-----	1.18	12.78	0.997	1.00	9.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.8397	0.9869	0.8097	0.8063	0.8461	0.8404	0.8787	0.9178	-----	0.866	12.80	0.998	1.00	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.3844	1.5779	1.3126	1.2937	1.4571	1.4567	1.5127	1.5998	-----	1.45	13.55	0.997	1.00	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1832	1.2773	1.0305	1.0061	1.1377	1.1374	1.1583	1.2276	-----	1.14	13.95	0.998	0.999	8.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.1190	1.2590	1.1035	1.0651	1.1263	1.1478	1.1700	1.2510	-----	1.16	13.98	0.997	0.999	6.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0168	1.1789	0.9745	0.9673	1.0372	1.0502	1.0779	1.1481	-----	1.06	14.30	0.997	1.00	7.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1486	1.3270	1.1346	1.0991	1.2031	1.2183	1.2610	1.3394	-----	1.22	15.65	0.997	1.00	7.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9409	1.0914	0.9011	0.8655	0.9802	1.0013	1.0315	1.1037	-----	0.989	15.68	0.996	1.00	8.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9782	1.1308	0.9734	0.9254	1.0087	1.0168	1.0495	1.1131	-----	1.02	16.02	0.997	1.00	6.9	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.53
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M98302.D	CAL BNA@50PPM	02/13/20 12:30	2	9M98299.D	CAL BNA@2PPM	02/13/20 11:17
3	9M98298.D	CAL BNA@10PPM	02/13/20 10:53	4	9M98300.D	CAL BNA@20PPM	02/13/20 11:41
5	9M98297.D	CAL BNA@80PPM	02/13/20 10:29	6	9M98296.D	CAL BNA@120PPM	02/13/20 10:05
7	9M98295.D	CAL BNA@160PPM	02/13/20 09:41	8	9M98294.D	CAL BNA@196PPM	02/13/20 09:17
9	9M98301.D	CAL BNA@0.5PPM	02/13/20 12:05				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRF	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Avg	0.9591	1.2909	0.9071	0.9741	0.9621	0.9154	0.9379	0.9906	1.4367	1.04	2.68	0.999	0.999	18		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	1.9650	2.6900	1.7389	1.8444	1.9705	1.9002	1.9489	2.0413	-----	2.01	3.15	0.998	0.999	14		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.5181	1.7719	1.5080	1.4579	1.5231	1.4498	1.4833	1.5635	-----	1.53	3.08	0.999	0.999	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.2091	2.6102	2.2084	2.2157	2.2594	2.1252	2.1965	2.3009	-----	2.27	4.67	0.998	0.999	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	1.9148	2.7522	2.0420	1.9637	1.8703	1.6214	1.4564	1.2584	-----	1.86	5.48	0.963	0.999	24	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Qua	3.4715	4.3687	3.6071	3.5806	3.4088	3.0555	3.0370	3.0577	5.3735	3.66	5.58	0.998	0.999	21		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.8027	1.0491	0.7923	0.7875	0.8060	0.7516	0.7662	0.8017	-----	0.820	5.62	0.998	0.999	12	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.3624	3.2430	2.4618	2.4332	2.3648	2.1992	2.2054	2.3046	3.7879	2.60	5.64	0.999	0.999	21	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.7892	3.5176	2.8518	2.7919	2.8160	2.6229	2.6949	2.7538	-----	2.85	5.54	0.999	0.999	9.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.3730	4.2098	3.3545	3.3539	3.3652	3.1216	3.1700	3.2427	-----	3.40	5.55	0.999	0.999	10	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.5764	3.2949	2.6065	2.5958	2.6274	2.4578	2.5126	2.5863	-----	2.66	5.68	0.999	0.999	9.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.2317	3.1764	2.4069	2.2953	2.2299	2.0614	2.0455	2.0865	-----	2.32	5.72	0.999	0.999	16	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.7677	3.5405	2.8203	2.7664	2.7621	2.5621	2.5866	2.6749	-----	2.81	5.81	0.999	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4705	1.9140	1.5178	1.5039	1.5085	1.4389	1.4367	1.5303	-----	1.54	5.88	0.998	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.3992	1.7763	1.4749	1.4184	1.4215	1.3641	1.3627	1.4328	-----	1.46	6.00	0.999	0.999	9.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.8818	1.0552	0.8631	0.8773	0.9203	0.8898	0.8980	0.9483	-----	0.917	5.97	0.999	0.999	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.3863	1.8188	1.4483	1.4102	1.3979	1.3349	1.3363	1.3907	-----	1.44	6.08	0.999	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Qua	1.2695	1.6982	1.3188	1.2578	1.2790	1.2293	1.2402	1.2980	1.8946	1.39	6.06	0.999	0.999	17	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.7449	2.3654	1.8854	1.7827	1.7243	1.6091	1.5747	1.6150	-----	1.79	6.19	0.999	0.999	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5293	0.6829	0.5384	0.5284	0.5518	0.5246	0.5310	0.5698	-----	0.557	6.28	0.998	0.999	9.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Qua	0.8517	1.1067	0.9109	0.8831	0.8411	0.7909	0.7747	0.8099	1.2226	0.910	6.19	0.999	0.999	17	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Qua	1.2814	1.6057	1.3368	1.3081	1.2601	1.1505	1.1330	1.1444	1.7533	1.33	6.18	0.998	0.999	16		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1560	0.1787	0.1584	0.1534	0.1690	0.1656	0.1682	0.1778	-----	0.166	6.31	0.998	0.999	5.7		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3306	0.4007	0.3341	0.3209	0.3451	0.3303	0.3340	0.3526	-----	0.344	6.32	0.998	0.999	7.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6497	0.8237	0.6672	0.6538	0.6609	0.6294	0.6356	0.6674	-----	0.674	6.51	0.998	0.999	9.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1637	0.1526	0.1461	0.1476	0.1771	0.1737	0.1776	0.1839	-----	0.165	6.57	0.998	0.999	9.0	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Qua	0.3377	0.4156	0.3373	0.3364	0.3452	0.3247	0.3307	0.3461	0.4708	0.361	6.60	0.999	0.999	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1444	-----	0.1218	0.1140	0.1829	0.1868	0.2020	0.2065	-----	0.166	6.66	0.996	0.999	23		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.3927	0.4786	0.3983	0.3936	0.3972	0.3758	0.3783	0.3915	-----	0.401	6.67	0.999	0.999	8.1	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2813	0.3357	0.2806	0.2757	0.2892	0.2735	0.2787	0.2904	0.3494	0.295	6.75	0.999	0.999	9.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3005	0.3932	0.3109	0.3006	0.3048	0.2907	0.2897	0.3015	-----	0.312	6.82	0.999	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Qua	1.1240	1.4568	1.1655	1.1314	1.1251	1.0594	1.0480	1.0739	1.7390	1.21	6.89	0.999	0.999	19	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4025	0.5212	0.4209	0.4207	0.3828	0.3171	0.2726	-----	0.5612	0.412	6.92	0.965	0.999	23	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0		0.50
Hexachlorobutadiene	1	0	Avg	0.1543	0.2138	0.1582	0.1580	0.1578	0.1486	0.1489	0.1549	-----	0.162	6.98	0.999	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1151	0.1393	0.1096	0.1144	0.1200	0.1149	0.1179	0.1255	-----	0.120	7.19	0.998	0.999	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.2825	0.3323	0.2734	0.2818	0.2966	0.2799	0.2871	0.3058	-----	0.292	7.28	0.997	0.999	6.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7365	0.9202	0.7547	0.7395	0.7397	0.6924	0.6887	0.7108	-----	0.748	7.42	0.999	0.999	9.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6917	0.8838	0.7143	0.6928	0.6950	0.6504	0.6517	0.6734	-----	0.707	7.50	0.999	0.999	11	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7136	0.9020	0.7339	0.7161	0.7174	0.6708	0.6703	0.6932	-----	0.727	7.42	0.999	0.999	10		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8108	1.0578	0.8160	0.8058	0.8110	0.7637	0.7651	0.7809	-----	0.826	7.80	0.999	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5174	0.6796	0.5396	0.5264	0.5246	0.4927	0.4845	0.4914	-----	0.532	7.55	0.999	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria if applicable

Note: Avg Rsd: 10.58
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M98302.D	CAL BNA@50PPM	02/13/20 12:30	2	9M98299.D	CAL BNA@2PPM	02/13/20 11:17
3	9M98298.D	CAL BNA@10PPM	02/13/20 10:53	4	9M98300.D	CAL BNA@20PPM	02/13/20 11:41
5	9M98297.D	CAL BNA@80PPM	02/13/20 10:29	6	9M98296.D	CAL BNA@120PPM	02/13/20 10:05
7	9M98295.D	CAL BNA@160PPM	02/13/20 09:41	8	9M98294.D	CAL BNA@196PPM	02/13/20 09:17
9	9M98301.D	CAL BNA@0.5PPM	02/13/20 12:05				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.2375	0.1371	0.1898	0.2089	0.2537	0.2446	0.2414	0.2508	-----	0.221	7.55	0.999	0.999	18	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3333	0.3654	0.3211	0.3202	0.3433	0.3700	0.3306	0.3530	-----	0.342	7.64	0.996	0.996	5.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3525	0.3743	0.3348	0.3449	0.3573	0.3574	0.3626	0.3760	-----	0.357	7.68	0.999	1.00	3.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3247	1.6471	1.3552	1.3279	1.3490	1.2928	1.3112	1.3486	-----	1.37	7.71	1.00	1.00	8.3		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1194	1.4044	1.1665	1.1478	1.1375	1.0620	1.0658	1.0893	-----	1.15	7.82	0.999	1.00	9.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8839	1.1124	0.9323	0.9072	0.8774	0.8144	0.7910	0.7824	-----	0.888	8.11	0.998	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8839	1.1124	0.9323	0.9072	0.8774	0.8144	0.7910	0.7824	-----	0.888	8.11	0.998	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7970	1.0302	0.8117	0.7960	0.7961	0.7634	0.7563	0.7626	-----	0.814	7.88	1.00	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3195	0.3030	0.2865	0.2987	0.3406	0.3333	0.3349	0.3450	-----	0.320	7.90	0.999	1.00	6.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4558	0.5938	0.4700	0.4594	0.4666	0.4396	0.4327	0.4318	-----	0.469	8.08	0.999	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.8047	2.3182	1.8617	1.8199	1.8419	1.7522	1.7254	1.7435	-----	1.86	8.18	1.00	1.00	10	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2444	1.5772	1.2764	1.2634	1.2838	1.2186	1.2218	1.2515	-----	1.29	8.04	0.999	0.999	9.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2723	0.2477	0.2594	0.2690	0.2804	0.2598	0.2500	0.2424	-----	0.260	8.10	0.996	1.00	5.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1582	1.4974	1.1912	1.1728	1.1764	1.1127	1.0952	1.1131	-----	1.19	8.34	0.999	0.999	11	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3009	0.2591	0.2895	0.2980	0.3117	0.2798	0.2560	0.2538	-----	0.281	8.25	0.991	0.998	8.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.0596	-----	0.0317	0.0414	0.0822	0.0870	0.0914	0.0961	-----	0.0699	8.34	0.992	0.997	37	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.6276	2.1323	1.6782	1.6442	1.6516	1.5499	1.5500	1.5722	2.3714	1.75	8.49	0.999	0.999	17	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Qua	0.3627	0.2651	0.2863	0.3232	0.3833	0.3717	0.3810	0.3956	-----	0.346	8.46	0.999	0.999	14	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.1835	0.1369	0.1496	0.1653	0.2038	0.1993	0.2033	0.2139	-----	0.182	8.38	0.998	0.999	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.2750	0.2799	0.2639	0.2676	0.2982	0.2774	0.2890	0.2993	-----	0.281	8.60	0.998	0.999	4.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2989	1.6800	1.3507	1.3287	1.2963	1.2245	1.2050	1.2125	-----	1.32	8.81	0.999	1.00	12	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.5957	0.7801	0.6200	0.6028	0.6037	0.5786	0.5706	0.5674	-----	0.615	8.80	1.00	1.00	11	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2376	1.5775	1.2669	1.2498	1.2752	1.2304	1.2248	1.2587	-----	1.29	8.68	1.00	1.00	9.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Qua	0.3484	0.3178	0.3105	0.3375	0.3657	0.3520	0.3553	0.3590	-----	0.343	8.81	1.00	1.00	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3604	0.4101	0.3589	0.3565	0.3743	0.3599	0.3591	0.3646	-----	0.368	9.44	1.00	1.00	4.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.0721	-----	0.0435	0.0535	0.0877	0.0900	0.0936	0.0989	-----	0.0771	8.85	0.996	0.999	28	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6536	0.8018	0.6633	0.6447	0.6542	0.6242	0.6199	0.6374	-----	0.662	8.91	1.00	1.00	8.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.0908	0.0780	0.0799	0.0817	0.0950	0.0928	0.0925	0.0968	-----	0.0885	9.05	0.999	0.999	8.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7569	0.9902	0.7897	0.7531	0.7758	0.6810	0.7431	0.7668	-----	0.782	8.95	0.998	0.998	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.1887	0.2412	0.1914	0.1879	0.1927	0.1846	0.1830	0.1894	-----	0.195	9.29	0.999	0.999	9.7	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2021	0.2605	0.2060	0.1960	0.2046	0.1953	0.1930	0.1988	-----	0.207	9.36	0.999	0.999	11	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.3670	0.4205	0.3664	0.3710	0.3713	0.3550	0.3466	0.3503	-----	0.369	9.63	0.999	1.00	6.2	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.0931	-----	0.0658	0.0754	0.1053	0.1061	0.1076	0.1164	-----	0.0957	9.56	0.997	0.999	19	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0626	1.3925	1.0808	1.0551	1.0622	1.0142	0.9873	1.0147	-----	1.08	9.80	0.999	0.999	12	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0899	1.3667	1.1168	1.0925	1.1046	1.0495	1.0347	1.0521	-----	1.11	9.85	0.999	1.00	9.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0357	1.2732	1.0341	1.0209	1.0373	1.0056	0.9815	1.0065	-----	1.05	10.02	0.999	0.999	8.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.2107	1.3430	1.1849	1.1733	1.2471	1.1975	1.1913	1.2260	1.5613	1.26	10.40	1.00	1.00	9.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1468	1.3506	1.1395	1.1378	1.1679	1.1248	1.0952	1.1366	-----	1.16	11.13	0.999	0.999	6.8	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.2403	1.4793	1.2410	1.2213	1.2543	1.1902	1.2230	1.2847	-----	1.27	11.40	0.998	0.999	7.1	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.5970	0.5396	0.5887	0.6049	0.5763	0.4745	-----	0.3591	-----	0.534	11.28	0.932	0.999	17		50.00	2.00	10.00	20.00	80.00	120.0		196.0	
Terphenyl-d14	1	0	Avg	0.6300	0.7554	0.6102	0.6036	0.6487	0.6264	0.6556	0.7045	-----	0.654	11.58	0.996	0.999	7.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.58
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M98302.D	CAL BNA@50PPM	02/13/20 12:30	2	9M98299.D	CAL BNA@2PPM	02/13/20 11:17
3	9M98298.D	CAL BNA@10PPM	02/13/20 10:53	4	9M98300.D	CAL BNA@20PPM	02/13/20 11:41
5	9M98297.D	CAL BNA@80PPM	02/13/20 10:29	6	9M98296.D	CAL BNA@120PPM	02/13/20 10:05
7	9M98295.D	CAL BNA@160PPM	02/13/20 09:41	8	9M98294.D	CAL BNA@196PPM	02/13/20 09:17
9	9M98301.D	CAL BNA@0.5PPM	02/13/20 12:05				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2516	0.2982	0.2552	0.2474	0.2613	0.2509	0.2654	0.2782	-----	0.264	11.51	0.997	0.999	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3616	0.3761	0.3524	0.3474	0.3744	0.3573	0.3679	0.3889	-----	0.366	11.91	0.999	0.999	3.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.5499	0.5846	0.5133	0.5255	0.5723	0.5571	0.5850	0.6099	-----	0.562	12.17	0.998	1.00	5.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4055	0.3355	0.3531	0.3773	0.4060	0.3832	0.3884	0.4057	-----	0.382	12.27	0.999	0.999	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.3709	0.4165	0.3911	0.3884	0.3596	0.3132	0.2938	0.2808	-----	0.352	12.79	0.988	0.999	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1277	1.4149	1.1673	1.1333	1.1700	1.0871	1.1063	1.1747	-----	1.17	12.82	0.997	0.998	8.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0585	1.3454	1.1016	1.0748	1.0317	0.9515	0.9649	0.9878	-----	1.06	12.86	0.999	0.999	12	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7868	0.9076	0.7715	0.7693	0.7869	0.7395	0.7592	0.7945	-----	0.789	12.87	0.998	0.999	6.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.2983	1.4919	1.2660	1.2281	1.3419	1.2971	1.3227	1.3551	-----	1.33	13.61	0.999	1.00	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0435	1.3313	1.0617	1.0495	1.0762	1.0461	1.0577	1.1076	-----	1.10	14.04	0.999	0.999	8.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0756	1.2528	1.0919	1.0179	1.0219	0.9458	0.9418	0.9441	-----	1.04	14.07	0.998	0.999	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	0.9688	1.2017	0.9948	0.9477	0.9852	0.9378	0.9382	0.9754	-----	0.994	14.39	0.999	0.999	8.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1734	1.4860	1.2172	1.1493	1.1770	1.1242	1.1384	1.1817	-----	1.21	15.80	0.999	0.999	9.7	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9788	1.2055	1.0209	0.9537	0.9879	0.9418	0.9433	0.9647	-----	1.00	15.82	0.999	1.00	8.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9874	1.2327	1.0343	0.9676	0.9932	0.9577	0.9702	1.0127	-----	1.02	16.18	0.999	0.999	8.8	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 10.58
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M98423.D **Instrument:** GCMS 9

Cont Calibration Date/Time 2/23/2020 11:55:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.65	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.68	47.43	50	**		1.042	0.988	5.14	
Pyridine	1	0		3.15	43.04	50	**		2.012	1.732	13.92	
N-Nitrosodimethylamine	1	0		3.08	48.89	50	**		1.534	1.500	2.22	
2-Fluorophenol	1	0	S	4.67	50.17	50	**		2.266	2.274	0.35	
Benzaldehyde	1	0		5.48	43.65	50	20	0.01	1.860	1.748	12.71	
Aniline	1	0		5.58	51.95	50	**		3.662	3.451	3.91	
Pentachloroethane	1	0		5.62	49.14	50	**	0.05	0.820	0.806	1.72	
bis(2-Chloroethyl)ether	1	0		5.64	53.48	50	20	0.7	2.596	2.421	6.95	
Phenol-d5	1	0	S	5.54	50.92	50	**		2.855	2.907	1.84	
Phenol	1	0		5.55	51.08	50	20	0.8	3.399	3.472	2.15	
2-Chlorophenol	1	0		5.68	51.05	50	20	0.8	2.657	2.713	2.09	
N-Decane	1	0		5.72	47.21	50	**	0.05	2.317	2.188	5.58	
1,3-Dichlorobenzene	1	0		5.81	50.69	50	**		2.810	2.849	1.38	
1,4-Dichlorobenzene-d4	1	0	I	5.86	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.88	48.00	50	20		1.540	1.478	4.00	
1,2-Dichlorobenzene	1	0		6.00	47.89	50	**		1.456	1.395	4.21	
Benzyl alcohol	1	0		5.97	47.51	50	**		0.917	0.871	4.99	
bis(2-chloroisopropyl)ether	1	0		6.08	45.60	50	20	0.01	1.440	1.314	8.81	
2-Methylphenol	1	0		6.06	51.03	50	20	0.7	1.387	1.253	2.06	
Acetophenone	1	0		6.19	50.05	50	20	0.01	1.788	1.789	0.09	
Hexachloroethane	1	0		6.28	47.51	50	20	0.3	0.557	0.529	4.98	
N-Nitroso-di-n-propylamine	1	0		6.19	51.98	50	20	0.5	0.910	0.849	3.96	
3&4-Methylphenol	1	0		6.18	53.54	50	20		1.330	1.320	7.09	
Naphthalene-d8	1	0	I	6.87	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.31	25.22	25	**		0.166	0.167	0.89	
Nitrobenzene	1	0		6.32	48.23	50	20	0.2	0.344	0.331	3.54	
Isophorone	1	0		6.51	46.42	50	20	0.4	0.674	0.625	7.16	
2-Nitrophenol	1	0		6.57	56.46	50	20	0.1	0.165	0.187	12.93	
2,4-Dimethylphenol	1	0		6.60	50.94	50	20	0.2	0.361	0.333	1.88	
Benzoic Acid	1	0		6.65	47.09	50	**		0.166	0.154	5.83	
bis(2-Chloroethoxy)methane	1	0		6.67	48.19	50	20	0.3	0.401	0.386	3.61	
2,4-Dichlorophenol	1	0		6.75	49.02	50	20	0.2	0.295	0.289	1.96	
1,2,4-Trichlorobenzene	1	0		6.82	48.48	50	**		0.312	0.302	3.04	
Naphthalene	1	0		6.88	51.18	50	20	0.7	1.214	1.121	2.37	
4-Chloroaniline	1	0		6.92	49.08	50	20	0.01	0.412	0.402	1.84	
Hexachlorobutadiene	1	0		6.98	48.05	50	20	0.01	0.162	0.156	3.91	
Caprolactam	1	0		7.18	46.04	50	20	0.01	0.120	0.110	7.91	
4-Chloro-3-methylphenol	1	0		7.28	48.63	50	20	0.2	0.292	0.284	2.73	
2-Methylnaphthalene	1	0		7.42	49.41	50	**	0.4	0.748	0.739	1.17	
1-Methylnaphthalene	1	0		7.50	48.86	50	**	0.4	0.707	0.691	2.29	
Methylnaphthalenes	1	0		7.50	98.30	50	**			1.430	96.59	
1,1'-Biphenyl	1	0		7.80	48.82	50	20	0.01	0.826	0.807	2.36	
Acenaphthene-d10	1	0	I	8.30	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.55	50.16	50	20	0.01	0.532	0.534	0.32	
Hexachlorocyclopentadiene	1	0		7.54	31.39	50	20	0.05	0.221	0.150	37.22	C1
2,4,6-Trichlorophenol	1	0		7.64	51.81	50	20	0.2	0.342	0.355	3.62	
2,4,5-Trichlorophenol	1	0		7.67	51.18	50	20	0.2	0.358	0.366	2.36	
2-Fluorobiphenyl	1	0	S	7.71	24.34	25	**		1.370	1.333	2.65	
2-Chloronaphthalene	1	0		7.82	49.31	50	20	0.8	1.149	1.133	1.38	
1,4-Dimethylnaphthalene	1	0		8.10	51.34	50	**		0.888	0.911	2.68	
Dimethylnaphthalenes	1	0		8.10	51.34	50	20			0.911	2.68	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M98423.D **Instrument:** GC/MS 9

Cont Calibration Date/Time 2/23/2020 11:55:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.88	49.94	50	**		0.814	0.813	0.13	
2-Nitroaniline	1	0		7.90	52.06	50	20	0.01	0.320	0.333	4.12	
Coumarin	1	0		8.08	49.40		**		0.469			
Acenaphthylene	1	0		8.18	48.94	50	20	0.9	1.858	1.819	2.12	
Dimethylphthalate	1	0		8.04	49.08	50	20	0.01	1.292	1.268	1.85	
2,6-Dinitrotoluene	1	0		8.10	56.16	50	20	0.2	0.260	0.292	12.33	
Acenaphthene	1	0		8.33	50.14	50	20	0.9	1.190	1.193	0.27	
3-Nitroaniline	1	0		8.25	53.37	50	20	0.01	0.281	0.326	6.75	
2,4-Dinitrophenol	1	0		8.34	67.00	50	20	0.2	0.070	0.101	34.00	C1
Dibenzofuran	1	0		8.48	51.48	50	20	0.8	1.753	1.652	2.97	
2,4-Dinitrotoluene	1	0		8.45	52.59	50	20	0.2	0.346	0.380	5.18	
4-Nitrophenol	1	0		8.38	52.81	50	20	0.01	0.182	0.200	5.61	
2,3,4,6-Tetrachlorophenol	1	0		8.59	53.77	50	20	0.01	0.281	0.303	7.54	
Fluorene	1	0		8.81	50.22	50	20	0.9	1.325	1.330	0.44	
4-Chlorophenyl-phenylether	1	0		8.80	50.23	50	20	0.4	0.615	0.618	0.46	
Diethylphthalate	1	0		8.67	48.35	50	20	0.01	1.290	1.248	3.30	
4-Nitroaniline	1	0		8.81	53.19	50	20	0.01	0.343	0.376	6.39	
Atrazine	1	0		9.44	47.42	50	20	0.01	0.368	0.349	5.16	
Phenanthrene-d10	1	0	I	9.77	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.84	60.62	50	20	0.01	0.077	0.097	21.25	C1
n-Nitrosodiphenylamine	1	0		8.91	49.42	50	20	0.01	0.662	0.655	1.16	
2,4,6-Tribromophenol	1	0	S	9.04	53.90	50	**		0.088	0.095	7.79	
1,2-Diphenylhydrazine	1	0		8.95	43.50	50	**		0.782	0.680	13.00	
4-Bromophenyl-phenylether	1	0		9.28	48.49	50	20	0.1	0.195	0.189	3.02	
Hexachlorobenzene	1	0		9.35	49.40	50	20	0.1	0.207	0.205	1.20	
N-Octadecane	1	0		9.62	46.69	50	**	0.05	0.369	0.344	6.62	
Pentachlorophenol	1	0		9.55	57.89	50	20	0.05	0.096	0.109	15.77	
Phenanthrene	1	0		9.79	49.10	50	20	0.7	1.084	1.064	1.80	
Anthracene	1	0		9.85	49.34	50	20	0.7	1.113	1.099	1.32	
Carbazole	1	0		10.01	48.83	50	20	0.01	1.049	1.025	2.34	
Di-n-butylphthalate	1	0		10.40	46.75	50	20	0.01	1.259	1.178	6.50	
Fluoranthene	1	0		11.12	49.02	50	20	0.6	1.162	1.140	1.95	
Chrysene-d12	1	0	I	12.82	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.39	47.61	50	20	0.6	1.267	1.206	4.78	
Benzidine	1	0		11.28	30.45	50	**		0.534	0.386	39.10	
Terphenyl-d14	1	0	S	11.57	22.85	25	**		0.654	0.598	8.61	
4,4'-DDE	1	0		11.51	47.67		**		0.264			
4,4'-DDD	1	0		11.91	47.99		**		0.366			
Butylbenzylphthalate	1	0		12.16	45.86	50	20	0.01	0.562	0.516	8.29	
4,4'-DDT	1	0		12.27	53.78		**		0.382			
3,3'-Dichlorobenzidine	1	0		12.78	52.01	50	20	0.01	0.352	0.366	4.02	
Benzo[a]anthracene	1	0		12.81	46.92	50	20	0.8	1.173	1.100	6.17	
Chrysene	1	0		12.85	50.45	50	20	0.7	1.065	1.074	0.90	
bis(2-Ethylhexyl)phthalate	1	0		12.86	46.95	50	20	0.01	0.789	0.741	6.11	
Perylene-d12	1	0	I	14.45	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.61	44.86	50	20	0.01	1.325	1.189	10.29	
Benzo[b]fluoranthene	1	0		14.02	48.07	50	20	0.7	1.097	1.054	3.87	
Benzo[k]fluoranthene	1	0		14.06	51.93	50	20	0.7	1.037	1.076	3.85	
Benzo[a]pyrene	1	0		14.39	48.57	50	20	0.7	0.994	0.965	2.86	
Indeno[1,2,3-cd]pyrene	1	0		15.79	47.68	50	20	0.5	1.206	1.150	4.63	
Dibenzo[a,h]anthracene	1	0		15.81	48.21	50	20	0.4	1.000	0.964	3.58	
Benzo[g,h,i]perylene	1	0		16.17	47.45	50	20	0.5	1.020	0.967	5.11	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M98423.D **Instrument:** GCMS 9

Cont Calibration Date/Time 2/23/2020 11:55:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.727	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.888	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105322.D **Instrument:** GCMS 7

Cont Calibration Date/Time 2/23/2020 11:56:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.60	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.63	51.64	50	**		1.090	0.985	3.29	
Pyridine	1	0		3.09	44.64	50	**		1.981	1.769	10.73	
N-Nitrosodimethylamine	1	0		3.02	47.88	50	**		1.679	1.608	4.25	
2-Fluorophenol	1	0	S	4.64	49.49	50	**		2.243	2.220	1.03	
Benzaldehyde	1	0		5.44	43.92	50	20	0.01	2.333	2.049	12.17	
Aniline	1	0		5.54	50.90	50	**		3.843	3.523	1.80	
Pentachloroethane	1	0		5.58	49.02	50	**	0.05	0.856	0.839	1.95	
bis(2-Chloroethyl)ether	1	0		5.60	51.53	50	20	0.7	2.712	2.457	3.06	
Phenol-d5	1	0	S	5.51	48.69	50	**		2.918	2.841	2.63	
Phenol	1	0		5.52	48.85	50	20	0.8	3.566	3.485	2.30	
2-Chlorophenol	1	0		5.64	51.89	50	20	0.8	2.465	2.558	3.78	
N-Decane	1	0		5.69	45.47	50	**	0.05	3.006	2.734	9.06	
1,3-Dichlorobenzene	1	0		5.77	49.64	50	**		2.614	2.595	0.72	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	45.91	50	20		1.577	1.448	8.17	
1,2-Dichlorobenzene	1	0		5.96	46.37	50	**		1.486	1.378	7.25	
Benzyl alcohol	1	0		5.93	45.45	50	**		1.008	0.917	9.10	
bis(2-chloroisopropyl)ether	1	0		6.04	40.10	50	20	0.01	2.217	1.778	19.79	
2-Methylphenol	1	0		6.03	44.16	50	20	0.7	1.427	1.260	11.68	
Acetophenone	1	0		6.14	45.05	50	20	0.01	2.206	1.988	9.90	
Hexachloroethane	1	0		6.24	43.71	50	20	0.3	0.664	0.581	12.58	
N-Nitroso-di-n-propylamine	1	0		6.14	41.57	50	20	0.5	1.290	1.072	16.86	
3&4-Methylphenol	1	0		6.15	43.47	50	20		1.525	1.325	13.06	
Naphthalene-d8	1	0	I	6.82	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	24.26	25	**		0.173	0.168	2.97	
Nitrobenzene	1	0		6.28	43.49	50	20	0.2	0.476	0.414	13.02	
Isophorone	1	0		6.46	44.56	50	20	0.4	0.839	0.747	10.88	
2-Nitrophenol	1	0		6.53	48.30	50	20	0.1	0.204	0.197	3.40	
2,4-Dimethylphenol	1	0		6.56	44.64	50	20	0.2	0.429	0.383	10.72	
Benzoic Acid	1	0		6.62	35.73	50	**		0.326	0.233	28.54	
bis(2-Chloroethoxy)methane	1	0		6.63	45.12	50	20	0.3	0.473	0.427	9.77	
2,4-Dichlorophenol	1	0		6.72	48.09	50	20	0.2	0.308	0.296	3.82	
1,2,4-Trichlorobenzene	1	0		6.78	48.91	50	**		0.335	0.327	2.19	
Naphthalene	1	0		6.84	44.69	50	20	0.7	1.176	1.051	10.61	
4-Chloroaniline	1	0		6.88	46.46	50	20	0.01	0.420	0.399	7.07	
Hexachlorobutadiene	1	0		6.94	49.72	50	20	0.01	0.187	0.186	0.56	
Caprolactam	1	0		7.14	47.47	50	20	0.01	0.119	0.113	5.05	
4-Chloro-3-methylphenol	1	0		7.25	47.18	50	20	0.2	0.353	0.334	5.64	
2-Methylnaphthalene	1	0		7.38	48.03	50	**	0.4	0.755	0.726	3.94	
1-Methylnaphthalene	1	0		7.45	48.77	50	**	0.4	0.710	0.693	2.46	
Methylnaphthalenes	1	0		7.38	96.77	50	**			1.418	93.54	
1,1'-Biphenyl	1	0		7.75	47.83	50	20	0.01	0.868	0.830	4.35	
Acenaphthene-d10	1	0	I	8.25	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.50	49.84	50	20	0.01	0.576	0.574	0.32	
Hexachlorocyclopentadiene	1	0		7.50	31.19	50	20	0.05	0.376	0.234	37.62	C1
2,4,6-Trichlorophenol	1	0		7.60	45.81	50	20	0.2	0.413	0.378	8.38	
2,4,5-Trichlorophenol	1	0		7.63	48.10	50	20	0.2	0.413	0.397	3.80	
2-Fluorobiphenyl	1	0	S	7.66	24.17	25	**		1.323	1.279	3.30	
2-Chloronaphthalene	1	0		7.77	47.42	50	20	0.8	1.193	1.132	5.16	
1,4-Dimethylnaphthalene	1	0		8.05	47.58	50	**		0.952	0.906	4.85	
Dimethylnaphthalenes	1	0		8.05	47.58	50	20			0.906	4.85	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.
624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105322.D **Instrument:** GCMS 7

Cont Calibration Date/Time 2/23/2020 11:56:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	48.51	50	**		0.817	0.793	2.97	
2-Nitroaniline	1	0		7.85	43.59	50	20	0.01	0.550	0.480	12.83	
Coumarin	1	0		8.03	47.23		**		0.478			
Acenaphthylene	1	0		8.13	47.44	50	20	0.9	1.778	1.687	5.12	
Dimethylphthalate	1	0		7.99	48.06	50	20	0.01	1.376	1.322	3.89	
2,6-Dinitrotoluene	1	0		8.05	48.12	50	20	0.2	0.328	0.315	3.76	
Acenaphthene	1	0		8.28	47.00	50	20	0.9	1.244	1.169	6.00	
3-Nitroaniline	1	0		8.19	49.58	50	20	0.01	0.322	0.319	0.85	
2,4-Dinitrophenol	1	0		8.29	52.78	50	20	0.2	0.169	0.178	5.56	
Dibenzofuran	1	0		8.43	45.32	50	20	0.8	1.781	1.614	9.36	
2,4-Dinitrotoluene	1	0		8.40	49.13	50	20	0.2	0.429	0.421	1.74	
4-Nitrophenol	1	0		8.33	40.45	50	20	0.01	0.366	0.296	19.09	
2,3,4,6-Tetrachlorophenol	1	0		8.54	49.38	50	20	0.01	0.353	0.349	1.23	
Fluorene	1	0		8.76	47.69	50	20	0.9	1.428	1.362	4.63	
4-Chlorophenyl-phenylether	1	0		8.74	47.81	50	20	0.4	0.678	0.648	4.38	
Diethylphthalate	1	0		8.62	46.59	50	20	0.01	1.460	1.360	6.82	
4-Nitroaniline	1	0		8.76	47.04	50	20	0.01	0.382	0.359	5.92	
Atrazine	1	0		9.39	49.26	50	20	0.01	0.419	0.413	1.49	
Phenanthrene-d10	1	0	I	9.71	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	52.89	50	20	0.01	0.128	0.135	5.78	
n-Nitrosodiphenylamine	1	0		8.86	48.19	50	20	0.01	0.661	0.637	3.62	
2,4,6-Tribromophenol	1	0	S	8.99	49.10	50	**		0.104	0.102	1.81	
1,2-Diphenylhydrazine	1	0		8.90	44.24	50	**		0.976	0.863	11.52	
4-Bromophenyl-phenylether	1	0		9.23	48.83	50	20	0.1	0.218	0.213	2.35	
Hexachlorobenzene	1	0		9.30	48.82	50	20	0.1	0.226	0.221	2.36	
N-Octadecane	1	0		9.57	41.94	50	**	0.05	0.571	0.479	16.11	
Pentachlorophenol	1	0		9.50	50.90	50	20	0.05	0.130	0.132	1.80	
Phenanthrene	1	0		9.73	47.53	50	20	0.7	1.115	1.060	4.94	
Anthracene	1	0		9.78	47.51	50	20	0.7	1.157	1.100	4.98	
Carbazole	1	0		9.95	48.15	50	20	0.01	1.038	0.999	3.70	
Di-n-butylphthalate	1	0		10.34	45.49	50	20	0.01	1.379	1.255	9.02	
Fluoranthene	1	0		11.06	48.81	50	20	0.6	1.206	1.178	2.37	
Chrysene-d12	1	0	I	12.76	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.32	47.72	50	20	0.6	1.304	1.245	4.56	
Benzidine	1	0		11.21	35.06	50	**		0.600	0.421	29.87	
Terphenyl-d14	1	0	S	11.51	24.22	25	**		0.649	0.628	3.12	
4,4'-DDE	1	0		11.45	46.76		**		0.295			
4,4'-DDD	1	0		11.84	48.98		**		0.414			
Butylbenzylphthalate	1	0		12.10	46.71	50	20	0.01	0.618	0.577	6.58	
4,4'-DDT	1	0		12.20	49.94		**		0.498			
3,3'-Dichlorobenzidine	1	0		12.72	52.93	50	20	0.01	0.400	0.423	5.85	
Benzo[a]anthracene	1	0		12.75	47.44	50	20	0.8	1.232	1.168	5.13	
Chrysene	1	0		12.79	47.46	50	20	0.7	1.183	1.123	5.08	
bis(2-Ethylhexyl)phthalate	1	0		12.80	46.93	50	20	0.01	0.866	0.813	6.13	
Perylene-d12	1	0	I	14.37	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.55	48.86	50	20	0.01	1.449	1.416	2.28	
Benzo[b]fluoranthene	1	0		13.96	49.91	50	20	0.7	1.145	1.143	0.18	
Benzo[k]fluoranthene	1	0		13.99	46.12	50	20	0.7	1.155	1.066	7.75	
Benzo[a]pyrene	1	0		14.31	48.18	50	20	0.7	1.056	1.018	3.64	
Indeno[1,2,3-cd]pyrene	1	0		15.67	48.26	50	20	0.5	1.216	1.174	3.48	
Dibenzo[a,h]anthracene	1	0		15.69	48.79	50	20	0.4	0.990	0.966	2.42	
Benzo[g,h,i]perylene	1	0		16.04	49.25	50	20	0.5	1.025	1.009	1.51	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105322.D **Instrument:** GCMS 7

Cont Calibration Date/Time 2/23/2020 11:56:00 Method: EPA 8270D

TxtCompd.	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.733	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.952	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound
N/O or N/Q - Not applicable for this run

I-Internal Standard Compound
C1-Compound %Diff exceeds limits

** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F.
624 limits are compared against the concentration found.
625 limits are compared against the %DIFF.
524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M79387.D **Instrument:** GCMS 10

Cont Calibration Date/Time 2/23/2020 11:59:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.63	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.66	52.09	50	**		1.198	0.984	4.18	
Pyridine	1	0		3.12	47.08	50	**		1.655	1.587	5.83	
N-Nitrosodimethylamine	1	0		3.05	48.73	50	**		1.553	1.513	2.54	
2-Fluorophenol	1	0	S	4.63	46.36	50	**		2.208	2.047	7.27	
Benzaldehyde	1	0		5.44	43.61	50	20	0.01	2.015	1.757	12.79	
Aniline	1	0		5.54	46.48	50	**		3.563	3.312	7.05	
Pentachloroethane	1	0		5.58	45.66	50	**	0.05	0.843	0.770	8.68	
bis(2-Chloroethyl)ether	1	0		5.59	49.88	50	20	0.7	2.742	2.314	0.25	
Phenol-d5	1	0	S	5.50	47.06	50	**		2.878	2.709	5.87	
Phenol	1	0		5.51	47.08	50	20	0.8	3.459	3.257	5.84	
2-Chlorophenol	1	0		5.64	45.79	50	20	0.8	2.566	2.349	8.42	
N-Decane	1	0		5.68	49.99	50	**	0.05	2.631	2.631	0.03	
1,3-Dichlorobenzene	1	0		5.77	44.97	50	**		2.767	2.489	10.06	
1,4-Dichlorobenzene-d4	1	0	I	5.81	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	48.23	50	20		1.582	1.526	3.54	
1,2-Dichlorobenzene	1	0		5.95	48.57	50	**		1.490	1.447	2.86	
Benzyl alcohol	1	0		5.93	48.92	50	**		0.950	0.930	2.16	
bis(2-chloroisopropyl)ether	1	0		6.04	54.48	50	20	0.01	1.895	2.065	8.96	
2-Methylphenol	1	0		6.02	49.81	50	20	0.7	1.350	1.345	0.38	
Acetophenone	1	0		6.14	52.51	50	20	0.01	1.864	1.957	5.02	
Hexachloroethane	1	0		6.23	48.46	50	20	0.3	0.605	0.587	3.08	
N-Nitroso-di-n-propylamine	1	0		6.14	52.45	50	20	0.5	0.992	1.040	4.90	
3&4-Methylphenol	1	0		6.14	52.09	50	20		1.363	1.419	4.18	
Naphthalene-d8	1	0	I	6.82	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.26	23.96	25	**		0.173	0.166	4.18	
Nitrobenzene	1	0		6.28	50.22	50	20	0.2	0.383	0.384	0.44	
Isophorone	1	0		6.46	51.07	50	20	0.4	0.702	0.717	2.14	
2-Nitrophenol	1	0		6.52	48.11	50	20	0.1	0.195	0.187	3.79	
2,4-Dimethylphenol	1	0		6.55	48.83	50	20	0.2	0.371	0.362	2.33	
Benzoic Acid	1	0		6.62	39.04	50	**		0.213	0.149	21.93	
bis(2-Chloroethoxy)methane	1	0		6.62	50.80	50	20	0.3	0.432	0.438	1.59	
2,4-Dichlorophenol	1	0		6.71	48.01	50	20	0.2	0.301	0.289	3.97	
1,2,4-Trichlorobenzene	1	0		6.77	46.70	50	**		0.330	0.309	6.60	
Naphthalene	1	0		6.83	47.75	50	20	0.7	1.180	1.127	4.50	
4-Chloroaniline	1	0		6.87	49.20	50	20	0.01	0.408	0.414	1.61	
Hexachlorobutadiene	1	0		6.92	45.75	50	20	0.01	0.183	0.167	8.50	
Caprolactam	1	0		7.14	51.72	50	20	0.01	0.112	0.116	3.44	
4-Chloro-3-methylphenol	1	0		7.23	49.59	50	20	0.2	0.310	0.308	0.82	
2-Methylnaphthalene	1	0		7.36	49.28	50	**	0.4	0.737	0.727	1.44	
1-Methylnaphthalene	1	0		7.44	49.18	50	**	0.4	0.705	0.693	1.64	
Methylnaphthalenes	1	0		7.36	98.47	50	**			1.418	96.95	
1,1'-Biphenyl	1	0		7.73	49.09	50	20	0.01	0.824	0.810	1.81	
Acenaphthene-d10	1	0	I	8.24	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.50	45.70	50	20	0.01	0.590	0.540	8.59	
Hexachlorocyclopentadiene	1	0		7.49	35.05	50	20	0.05	0.320	0.212	29.90	C1
2,4,6-Trichlorophenol	1	0		7.58	47.11	50	20	0.2	0.378	0.356	5.78	
2,4,5-Trichlorophenol	1	0		7.62	46.17	50	20	0.2	0.397	0.367	7.67	
2-Fluorobiphenyl	1	0	S	7.65	23.85	25	**		1.350	1.288	4.58	
2-Chloronaphthalene	1	0		7.76	48.01	50	20	0.8	1.179	1.132	3.99	
1,4-Dimethylnaphthalene	1	0		8.04	49.65	50	**		0.939	0.933	0.71	
Dimethylnaphthalenes	1	0		8.04	49.65	50	20			0.933	0.71	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.
624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M79387.D **Instrument:** GCMS 10

Cont Calibration Date/Time 2/23/2020 11:59:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.82	47.97	50	**		0.835	0.801	4.05	
2-Nitroaniline	1	0		7.84	50.44	50	20	0.01	0.425	0.429	0.88	
Coumarin	1	0		8.02	48.57		**		0.489			
Acenaphthylene	1	0		8.11	48.62	50	20	0.9	1.818	1.768	2.76	
Dimethylphthalate	1	0		7.98	47.80	50	20	0.01	1.318	1.260	4.40	
2,6-Dinitrotoluene	1	0		8.03	49.28	50	20	0.2	0.305	0.301	1.44	
Acenaphthene	1	0		8.26	48.86	50	20	0.9	1.204	1.177	2.29	
3-Nitroaniline	1	0		8.18	50.08	50	20	0.01	0.331	0.332	0.17	
2,4-Dinitrophenol	1	0		8.27	45.19	50	20	0.2	0.142	0.128	9.62	
Dibenzofuran	1	0		8.42	46.36	50	20	0.8	1.748	1.620	7.28	
2,4-Dinitrotoluene	1	0		8.39	48.82	50	20	0.2	0.389	0.380	2.36	
4-Nitrophenol	1	0		8.31	50.51	50	20	0.01	0.259	0.261	1.03	
2,3,4,6-Tetrachlorophenol	1	0		8.52	46.15	50	20	0.01	0.338	0.312	7.69	
Fluorene	1	0		8.74	48.77	50	20	0.9	1.369	1.335	2.47	
4-Chlorophenyl-phenylether	1	0		8.73	46.94	50	20	0.4	0.674	0.633	6.12	
Diethylphthalate	1	0		8.61	48.50	50	20	0.01	1.296	1.257	2.99	
4-Nitroaniline	1	0		8.74	47.73	50	20	0.01	0.400	0.382	4.53	
Atrazine	1	0		9.36	46.37	50	20	0.01	0.387	0.358	7.27	
Phenanthrene-d10	1	0	I	9.69	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.77	49.43	50	20	0.01	0.120	0.115	1.15	
n-Nitrosodiphenylamine	1	0		8.84	49.16	50	20	0.01	0.657	0.646	1.67	
2,4,6-Tribromophenol	1	0	S	8.97	46.40	50	**		0.132	0.123	7.19	
1,2-Diphenylhydrazine	1	0		8.88	50.38	50	**		0.806	0.813	0.77	
4-Bromophenyl-phenylether	1	0		9.21	46.81	50	20	0.1	0.229	0.214	6.38	
Hexachlorobenzene	1	0		9.28	45.53	50	20	0.1	0.272	0.248	8.93	
N-Octadecane	1	0		9.54	55.84	50	**	0.05	0.450	0.503	11.67	
Pentachlorophenol	1	0		9.48	56.08	50	20	0.05	0.133	0.136	12.17	
Phenanthrene	1	0		9.71	48.96	50	20	0.7	1.102	1.079	2.09	
Anthracene	1	0		9.77	49.30	50	20	0.7	1.128	1.112	1.40	
Carbazole	1	0		9.93	48.75	50	20	0.01	1.052	1.026	2.50	
Di-n-butylphthalate	1	0		10.31	49.64	50	20	0.01	1.206	1.198	0.72	
Fluoranthene	1	0		11.03	48.29	50	20	0.6	1.169	1.129	3.42	
Chrysene-d12	1	0	I	12.72	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.30	50.07	50	20	0.6	1.154	1.155	0.14	
Benzidine	1	0		11.18	31.94	50	**		0.579	0.370	36.11	
Terphenyl-d14	1	0	S	11.48	23.87	25	**		0.609	0.582	4.53	
4,4'-DDE	1	0		11.41	45.89		**		0.279			
4,4'-DDD	1	0		11.81	49.17		**		0.355			
Butylbenzylphthalate	1	0		12.06	50.07	50	20	0.01	0.499	0.500	0.14	
4,4'-DDT	1	0		12.17	50.96		**		0.439			
3,3'-Dichlorobenzidine	1	0		12.68	49.57	50	20	0.01	0.386	0.382	0.85	
Benzo[a]anthracene	1	0		12.71	47.47	50	20	0.8	1.135	1.077	5.07	
Chrysene	1	0		12.75	49.78	50	20	0.7	1.103	1.098	0.44	
bis(2-Ethylhexyl)phthalate	1	0		12.76	52.10	50	20	0.01	0.713	0.743	4.20	
Perylene-d12	1	0	I	14.33	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.50	49.44	50	20	0.01	1.142	1.129	1.12	
Benzo[b]fluoranthene	1	0		13.92	47.97	50	20	0.7	1.094	1.050	4.06	
Benzo[k]fluoranthene	1	0		13.95	47.65	50	20	0.7	1.107	1.055	4.70	
Benzo[a]pyrene	1	0		14.27	48.08	50	20	0.7	1.000	0.961	3.83	
Indeno[1,2,3-cd]pyrene	1	0		15.62	46.70	50	20	0.5	1.287	1.202	6.60	
Dibenzo[a,h]anthracene	1	0		15.64	46.91	50	20	0.4	1.094	1.026	6.19	
Benzo[g,h,i]perylene	1	0		15.99	46.33	50	20	0.5	1.072	0.993	7.35	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M79387.D **Instrument:** GCMS 10

Cont Calibration Date/Time 2/23/2020 11:59:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dichlorobenzene-d4(I)	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8(I)	1	100		0.00	0.00	40	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.720	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.939	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run CT-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105344.D **Instrument:** GCMS 7

Cont Calibration Date/Time 2/24/2020 8:01:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.59	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.64	50.02	50	**		1.090	0.953	0.03	
Pyridine	1	0		3.09	45.59	50	**		1.981	1.807	8.82	
N-Nitrosodimethylamine	1	0		3.02	47.85	50	**		1.679	1.607	4.29	
2-Fluorophenol	1	0	S	4.63	49.31	50	**		2.243	2.213	1.37	
Benzaldehyde	1	0		5.44	43.71	50	20	0.01	2.333	2.040	12.58	
Aniline	1	0		5.54	50.62	50	**		3.843	3.503	1.24	
Pentachloroethane	1	0		5.58	48.03	50	**	0.05	0.856	0.822	3.95	
bis(2-Chloroethyl)ether	1	0		5.60	51.74	50	20	0.7	2.712	2.468	3.49	
Phenol-d5	1	0	S	5.51	48.37	50	**		2.918	2.822	3.26	
Phenol	1	0		5.52	48.30	50	20	0.8	3.566	3.445	3.41	
2-Chlorophenol	1	0		5.64	49.99	50	20	0.8	2.465	2.464	0.01	
N-Decane	1	0		5.69	45.71	50	**	0.05	3.006	2.748	8.58	
1,3-Dichlorobenzene	1	0		5.77	49.21	50	**		2.614	2.572	1.58	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	46.81	50	20		1.577	1.477	6.37	
1,2-Dichlorobenzene	1	0		5.96	47.41	50	**		1.486	1.408	5.19	
Benzyl alcohol	1	0		5.93	46.04	50	**		1.008	0.929	7.92	
bis(2-chloroisopropyl)ether	1	0		6.04	41.60	50	20	0.01	2.217	1.845	16.80	
2-Methylphenol	1	0		6.02	45.61	50	20	0.7	1.427	1.302	8.78	
Acetophenone	1	0		6.14	45.38	50	20	0.01	2.206	2.002	9.25	
Hexachloroethane	1	0		6.24	45.19	50	20	0.3	0.664	0.601	9.61	
N-Nitroso-di-n-propylamine	1	0		6.14	42.30	50	20	0.5	1.290	1.091	15.40	
3&4-Methylphenol	1	0		6.15	44.04	50	20		1.525	1.343	11.92	
Naphthalene-d8	1	0	I	6.82	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	23.65	25	**		0.173	0.164	5.39	
Nitrobenzene	1	0		6.28	43.83	50	20	0.2	0.476	0.417	12.33	
Isophorone	1	0		6.47	45.80	50	20	0.4	0.839	0.768	8.39	
2-Nitrophenol	1	0		6.53	49.15	50	20	0.1	0.204	0.200	1.70	
2,4-Dimethylphenol	1	0		6.56	44.68	50	20	0.2	0.429	0.383	10.65	
Benzoic Acid	1	0		6.62	34.28	50	**		0.326	0.223	31.44	
bis(2-Chloroethoxy)methane	1	0		6.63	46.09	50	20	0.3	0.473	0.436	7.82	
2,4-Dichlorophenol	1	0		6.71	47.94	50	20	0.2	0.308	0.295	4.12	
1,2,4-Trichlorobenzene	1	0		6.78	47.90	50	**		0.335	0.321	4.21	
Naphthalene	1	0		6.84	44.71	50	20	0.7	1.176	1.052	10.59	
4-Chloroaniline	1	0		6.87	47.04	50	20	0.01	0.420	0.404	5.92	
Hexachlorobutadiene	1	0		6.94	50.05	50	20	0.01	0.187	0.188	0.10	
Caprolactam	1	0		7.13	48.42	50	20	0.01	0.119	0.115	3.16	
4-Chloro-3-methylphenol	1	0		7.24	48.02	50	20	0.2	0.353	0.339	3.96	
2-Methylnaphthalene	1	0		7.38	47.86	50	**	0.4	0.755	0.723	4.29	
1-Methylnaphthalene	1	0		7.45	48.28	50	**	0.4	0.710	0.686	3.44	
Methylnaphthalenes	1	0		7.38	96.11	50	**			1.408	92.22	
1,1'-Biphenyl	1	0		7.75	48.34	50	20	0.01	0.868	0.839	3.32	
Acenaphthene-d10	1	0	I	8.25	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	48.54	50	20	0.01	0.576	0.559	2.92	
Hexachlorocyclopentadiene	1	0		7.50	32.55	50	20	0.05	0.376	0.245	34.89	C1
2,4,6-Trichlorophenol	1	0		7.59	45.40	50	20	0.2	0.413	0.375	9.20	
2,4,5-Trichlorophenol	1	0		7.63	45.66	50	20	0.2	0.413	0.377	8.69	
2-Fluorobiphenyl	1	0	S	7.66	23.68	25	**		1.323	1.253	5.28	
2-Chloronaphthalene	1	0		7.77	46.05	50	20	0.8	1.193	1.099	7.91	
1,4-Dimethylnaphthalene	1	0		8.05	46.68	50	**		0.952	0.889	6.64	
Dimethylnaphthalenes	1	0		8.05	46.68	50	20			0.889	6.64	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105344.D **Instrument:** GCMS 7

Cont Calibration Date/Time 2/24/2020 8:01:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	48.00	50	**		0.817	0.785	4.01	
2-Nitroaniline	1	0		7.84	43.00	50	20	0.01	0.550	0.473	14.01	
Coumarin	1	0		8.03	46.45		**		0.478			
Acenaphthylene	1	0		8.13	46.90	50	20	0.9	1.778	1.668	6.19	
Dimethylphthalate	1	0		7.99	48.01	50	20	0.01	1.376	1.321	3.98	
2,6-Dinitrotoluene	1	0		8.05	47.59	50	20	0.2	0.328	0.312	4.82	
Acenaphthene	1	0		8.27	45.55	50	20	0.9	1.244	1.133	8.91	
3-Nitroaniline	1	0		8.19	49.72	50	20	0.01	0.322	0.320	0.56	
2,4-Dinitrophenol	1	0		8.28	50.72	50	20	0.2	0.169	0.171	1.44	
Dibenzofuran	1	0		8.43	44.86	50	20	0.8	1.781	1.598	10.27	
2,4-Dinitrotoluene	1	0		8.40	49.40	50	20	0.2	0.429	0.424	1.20	
4-Nitrophenol	1	0		8.33	43.07	50	20	0.01	0.366	0.315	13.86	
2,3,4,6-Tetrachlorophenol	1	0		8.54	47.28	50	20	0.01	0.353	0.334	5.44	
Fluorene	1	0		8.75	46.39	50	20	0.9	1.428	1.325	7.22	
4-Chlorophenyl-phenylether	1	0		8.74	47.23	50	20	0.4	0.678	0.640	5.54	
Diethylphthalate	1	0		8.62	46.87	50	20	0.01	1.460	1.369	6.26	
4-Nitroaniline	1	0		8.75	46.42	50	20	0.01	0.382	0.355	7.16	
Atrazine	1	0		9.38	48.21	50	20	0.01	0.419	0.404	3.59	
Phenanthrene-d10	1	0	I	9.70	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	52.16	50	20	0.01	0.128	0.133	4.31	
n-Nitrosodiphenylamine	1	0		8.85	47.90	50	20	0.01	0.661	0.633	4.20	
2,4,6-Tribromophenol	1	0	S	8.99	49.41	50	**		0.104	0.103	1.17	
1,2-Diphenylhydrazine	1	0		8.90	41.84	50	**		0.976	0.816	16.32	
4-Bromophenyl-phenylether	1	0		9.23	48.00	50	20	0.1	0.218	0.209	4.00	
Hexachlorobenzene	1	0		9.30	48.08	50	20	0.1	0.226	0.217	3.85	
N-Octadecane	1	0		9.57	43.38	50	**	0.05	0.571	0.495	13.24	
Pentachlorophenol	1	0		9.50	50.98	50	20	0.05	0.130	0.132	1.95	
Phenanthrene	1	0		9.73	46.38	50	20	0.7	1.115	1.034	7.24	
Anthracene	1	0		9.78	47.28	50	20	0.7	1.157	1.094	5.44	
Carbazole	1	0		9.95	47.95	50	20	0.01	1.038	0.995	4.09	
Di-n-butylphthalate	1	0		10.34	46.28	50	20	0.01	1.379	1.277	7.44	
Fluoranthene	1	0		11.06	49.04	50	20	0.6	1.206	1.183	1.92	
Chrysene-d12	1	0	I	12.75	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.32	48.02	50	20	0.6	1.304	1.253	3.95	
Benzidine	1	0		11.21	35.09	50	**		0.600	0.421	29.83	
Terphenyl-d14	1	0	S	11.51	24.32	25	**		0.649	0.631	2.73	
4,4'-DDE	1	0		11.44	48.76		**		0.295			
4,4'-DDD	1	0		11.84	49.63		**		0.414			
Butylbenzylphthalate	1	0		12.09	48.06	50	20	0.01	0.618	0.594	3.88	
4,4'-DDT	1	0		12.20	50.99		**		0.498			
3,3'-Dichlorobenzidine	1	0		12.71	53.43	50	20	0.01	0.400	0.427	6.86	
Benzo[a]anthracene	1	0		12.74	47.47	50	20	0.8	1.232	1.169	5.06	
Chrysene	1	0		12.78	47.65	50	20	0.7	1.183	1.127	4.69	
bis(2-Ethylhexyl)phthalate	1	0		12.80	47.17	50	20	0.01	0.866	0.817	5.65	
Perylene-d12	1	0	I	14.37	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.54	49.17	50	20	0.01	1.449	1.425	1.67	
Benzo[b]fluoranthene	1	0		13.96	48.36	50	20	0.7	1.145	1.107	3.28	
Benzo[k]fluoranthene	1	0		13.99	47.98	50	20	0.7	1.155	1.109	4.03	
Benzo[a]pyrene	1	0		14.30	48.15	50	20	0.7	1.056	1.017	3.70	
Indeno[1,2,3-cd]pyrene	1	0		15.67	47.90	50	20	0.5	1.216	1.165	4.19	
Dibenzo[a,h]anthracene	1	0		15.68	48.50	50	20	0.4	0.990	0.960	3.00	
Benzo[g,h,i]perylene	1	0		16.04	48.30	50	20	0.5	1.025	0.990	3.39	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105344.D **Instrument:** GCMS 7

Cont Calibration Date/Time 2/24/2020 8:01:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dichlorobenzene-d4(I)	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8(I)	1	100		0.00	0.00	40	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.733	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.952	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M98444 D Instrument: GCMS 9

Cont Calibration Date/Time 2/24/2020 8:04:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane d8(INT)	1	0	I	2.65	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.68	48.08	50	**		1.042	1.001	3.85	
Pyridine	1	0		3.15	43.22	50	**		2.012	1.740	13.55	
N-Nitrosodimethylamine	1	0		3.08	49.19	50	**		1.534	1.510	1.62	
2-Fluorophenol	1	0	S	4.67	50.14	50	**		2.266	2.272	0.28	
Benzaldehyde	1	0		5.48	44.26	50	20	0.01	1.860	1.770	11.48	
Aniline	1	0		5.58	52.48	50	**		3.662	3.485	4.96	
Pentachloroethane	1	0		5.62	50.40	50	**	0.05	0.820	0.826	0.79	
bis(2-Chloroethyl)ether	1	0		5.64	55.00	50	20	0.7	2.596	2.491	10.00	
Phenol-d5	1	0	S	5.54	51.18	50	**		2.855	2.922	2.37	
Phenol	1	0		5.55	51.36	50	20	0.8	3.399	3.491	2.72	
2-Chlorophenol	1	0		5.68	51.70	50	20	0.8	2.657	2.748	3.40	
N-Decane	1	0		5.72	48.14	50	**	0.05	2.317	2.231	3.71	
1,3-Dichlorobenzene	1	0		5.81	51.60	50	**		2.810	2.900	3.21	
1,4-Dichlorobenzene-d4	1	0	I	5.86	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.87	48.40	50	20		1.540	1.491	3.21	
1,2-Dichlorobenzene	1	0		6.00	48.68	50	**		1.456	1.418	2.64	
Benzyl alcohol	1	0		5.97	47.96	50	**		0.917	0.879	4.08	
bis(2-chloroisopropyl)ether	1	0		6.08	46.06	50	20	0.01	1.440	1.327	7.88	
2-Methylphenol	1	0		6.06	51.61	50	20	0.7	1.387	1.267	3.22	
Acetophenone	1	0		6.18	50.05	50	20	0.01	1.788	1.790	0.10	
Hexachloroethane	1	0		6.28	47.84	50	20	0.3	0.557	0.533	4.32	
N-Nitroso-di-n-propylamine	1	0		6.18	51.77	50	20	0.5	0.910	0.845	3.53	
3&4-Methylphenol	1	0		6.18	53.64	50	20		1.330	1.322	7.27	
Naphthalene-d8	1	0	I	6.87	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.31	24.54	25	**		0.166	0.163	1.83	
Nitrobenzene	1	0		6.32	47.15	50	20	0.2	0.344	0.324	5.69	
Isophorone	1	0		6.51	46.55	50	20	0.4	0.674	0.627	6.90	
2-Nitrophenol	1	0		6.57	55.30	50	20	0.1	0.165	0.183	10.61	
2,4-Dimethylphenol	1	0		6.60	50.39	50	20	0.2	0.361	0.330	0.78	
Benzoic Acid	1	0		6.65	47.75	50	**		0.166	0.157	4.50	
bis(2-Chloroethoxy)methane	1	0		6.67	47.96	50	20	0.3	0.401	0.384	4.09	
2,4-Dichlorophenol	1	0		6.75	48.67	50	20	0.2	0.295	0.287	2.66	
1,2,4-Trichlorobenzene	1	0		6.82	48.10	50	**		0.312	0.300	3.81	
Naphthalene	1	0		6.88	51.03	50	20	0.7	1.214	1.118	2.06	
4-Chloroaniline	1	0		6.92	49.16	50	20	0.01	0.412	0.402	1.68	
Hexachlorobutadiene	1	0		6.97	47.67	50	20	0.01	0.162	0.154	4.65	
Caprolactam	1	0		7.18	45.91	50	20	0.01	0.120	0.110	8.19	
4-Chloro-3-methylphenol	1	0		7.28	48.98	50	20	0.2	0.292	0.286	2.04	
2-Methylnaphthalene	1	0		7.42	48.73	50	**	0.4	0.748	0.729	2.55	
1-Methylnaphthalene	1	0		7.50	49.35	50	**	0.4	0.707	0.697	1.30	
Methylnaphthalenes	1	0		7.50	98.02	50	**			1.426	96.04	
1,1'-Biphenyl	1	0		7.80	49.12	50	20	0.01	0.826	0.812	1.75	
Acenaphthene-d10	1	0	I	8.30	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.55	49.88	50	20	0.01	0.532	0.531	0.24	
Hexachlorocyclopentadiene	1	0		7.54	36.26	50	20	0.05	0.221	0.174	27.49	C1
2,4,6-Trichlorophenol	1	0		7.64	51.43	50	20	0.2	0.342	0.352	2.86	
2,4,5-Trichlorophenol	1	0		7.67	50.02	50	20	0.2	0.358	0.358	0.05	
2-Fluorobiphenyl	1	0	S	7.71	24.05	25	**		1.370	1.318	3.79	
2-Chloronaphthalene	1	0		7.82	49.22	50	20	0.8	1.149	1.131	1.56	
1,4-Dimethylnaphthalene	1	0		8.10	50.90	50	**		0.888	0.904	1.81	
Dimethylnaphthalenes	1	0		8.10	50.90	50	20			0.904	1.81	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M98444.D **Instrument:** GCMS 9

Cont Calibration Date/Time 2/24/2020 8:04:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.88	49.91	50	**		0.814	0.813	0.18	
2-Nitroaniline	1	0		7.89	50.84	50	20	0.01	0.320	0.326	1.68	
Coumarin	1	0		8.08	49.24		**		0.469			
Acenaphthylene	1	0		8.18	48.35	50	20	0.9	1.858	1.797	3.30	
Dimethylphthalate	1	0		8.04	49.14	50	20	0.01	1.292	1.270	1.71	
2,6-Dinitrotoluene	1	0		8.10	56.44	50	20	0.2	0.260	0.294	12.88	
Acenaphthene	1	0		8.33	49.93	50	20	0.9	1.190	1.188	0.13	
3-Nitroaniline	1	0		8.24	51.74	50	20	0.01	0.281	0.317	3.48	
2,4-Dinitrophenol	1	0		8.34	64.15	50	20	0.2	0.070	0.096	28.29	C1
Dibenzofuran	1	0		8.48	51.47	50	20	0.8	1.753	1.651	2.93	
2,4-Dinitrotoluene	1	0		8.45	51.45	50	20	0.2	0.346	0.372	2.90	
4-Nitrophenol	1	0		8.37	50.48	50	20	0.01	0.182	0.190	0.96	
2,3,4,6-Tetrachlorophenol	1	0		8.59	52.51	50	20	0.01	0.281	0.295	5.03	
Fluorene	1	0		8.81	50.56	50	20	0.9	1.325	1.339	1.12	
4-Chlorophenyl-phenylether	1	0		8.80	50.21	50	20	0.4	0.615	0.617	0.41	
Diethylphthalate	1	0		8.67	47.96	50	20	0.01	1.290	1.237	4.09	
4-Nitroaniline	1	0		8.81	50.94	50	20	0.01	0.343	0.360	1.89	
Atrazine	1	0		9.44	47.00	50	20	0.01	0.368	0.346	5.99	
Phenanthrene-d10	1	0	I	9.77	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.84	60.54	50	20	0.01	0.077	0.097	21.09	C1
n-Nitrosodiphenylamine	1	0		8.91	49.85	50	20	0.01	0.662	0.660	0.31	
2,4,6-Tribromophenol	1	0	S	9.04	53.86	50	**		0.088	0.095	7.71	
1,2-Diphenylhydrazine	1	0		8.95	43.18	50	**		0.782	0.676	13.63	
4-Bromophenyl-phenylether	1	0		9.28	47.69	50	20	0.1	0.195	0.186	4.61	
Hexachlorobenzene	1	0		9.35	48.35	50	20	0.1	0.207	0.200	3.30	
N-Octadecane	1	0		9.62	46.60	50	**	0.05	0.369	0.344	6.79	
Pentachlorophenol	1	0		9.55	56.49	50	20	0.05	0.096	0.106	12.98	
Phenanthrene	1	0		9.79	48.67	50	20	0.7	1.084	1.055	2.65	
Anthracene	1	0		9.84	49.25	50	20	0.7	1.113	1.097	1.51	
Carbazole	1	0		10.01	48.45	50	20	0.01	1.049	1.017	3.10	
Di-n-butylphthalate	1	0		10.40	46.37	50	20	0.01	1.259	1.168	7.25	
Fluoranthene	1	0		11.12	48.18	50	20	0.6	1.162	1.120	3.64	
Chrysene-d12	1	0	I	12.82	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.39	46.52	50	20	0.6	1.267	1.179	6.96	
Benzidine	1	0		11.27	29.40	50	**		0.534	0.374	41.20	
Terphenyl-d14	1	0	S	11.57	22.36	25	**		0.654	0.585	10.57	
4,4'-DDE	1	0		11.51	46.45		**		0.264			
4,4'-DDD	1	0		11.90	46.58		**		0.366			
Butylbenzylphthalate	1	0		12.16	44.62	50	20	0.01	0.562	0.502	10.75	
4,4'-DDT	1	0		12.26	54.84		**		0.382			
3,3'-Dichlorobenzidine	1	0		12.78	50.58	50	20	0.01	0.352	0.356	1.17	
Benzo[a]anthracene	1	0		12.81	47.22	50	20	0.8	1.173	1.107	5.56	
Chrysene	1	0		12.85	49.67	50	20	0.7	1.065	1.058	0.65	
bis(2-Ethylhexyl)phthalate	1	0		12.85	46.08	50	20	0.01	0.789	0.728	7.83	
Perylene-d12	1	0	I	14.45	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.60	44.24	50	20	0.01	1.325	1.172	11.53	
Benzo[b]fluoranthene	1	0		14.02	49.20	50	20	0.7	1.097	1.079	1.60	
Benzo[k]fluoranthene	1	0		14.05	49.83	50	20	0.7	1.037	1.033	0.35	
Benzo[a]pyrene	1	0		14.38	48.34	50	20	0.7	0.994	0.961	3.32	
Indeno[1,2,3-cd]pyrene	1	0		15.78	48.74	50	20	0.5	1.206	1.176	2.52	
Dibenzo[a,h]anthracene	1	0		15.81	49.04	50	20	0.4	1.000	0.980	1.92	
Benzo[g,h,i]perylene	1	0		16.17	47.63	50	20	0.5	1.020	0.971	4.75	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.
624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 9M98444.D **Instrument:** GCMS 9

Cont Calibration Date/Time 2/24/2020 8:04:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dichlorobenzene-d4(I)	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8(I)	1	100		0.00	0.00	40	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.727	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.888	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M112162.D **Instrument:** GCMS 5

Cont Calibration Date/Time 2/24/2020 8:09:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.53	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.57	55.60	50	**		0.957	1.064	11.19	
Pyridine	1	0		3.01	45.36	50	**		1.839	1.669	9.27	
N-Nitrosodimethylamine	1	0		2.94	50.27	50	**		1.501	1.509	0.53	
2-Fluorophenol	1	0	S	4.57	45.86	50	**		2.063	1.893	8.27	
Benzaldehyde	1	0		5.38	44.83	50	20	0.01	2.175	1.950	10.33	
Aniline	1	0		5.48	43.56	50	**		3.563	3.104	12.89	
Pentachloroethane	1	0		5.52	46.84	50	**	0.05	0.776	0.727	6.32	
bis(2-Chloroethyl)ether	1	0		5.53	49.78	50	20	0.7	2.377	2.173	0.45	
Phenol-d5	1	0	S	5.45	47.15	50	**		2.710	2.556	5.69	
Phenol	1	0		5.46	45.54	50	20	0.8	3.335	3.037	8.92	
2-Chlorophenol	1	0		5.58	45.23	50	20	0.8	2.314	2.093	9.54	
N-Decane	1	0		5.62	46.63	50	**	0.05	2.117	1.975	6.73	
1,3-Dichlorobenzene	1	0		5.71	45.05	50	**		2.657	2.394	9.90	
1,4-Dichlorobenzene-d4	1	0	I	5.76	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.77	46.91	50	20		1.607	1.507	6.18	
1,2-Dichlorobenzene	1	0		5.90	47.09	50	**		1.500	1.412	5.83	
Benzyl alcohol	1	0		5.87	49.81	50	**		0.895	0.892	0.38	
bis(2-chloroisopropyl)ether	1	0		5.98	50.55	50	20	0.01	1.148	1.160	1.11	
2-Methylphenol	1	0		5.97	47.29	50	20	0.7	1.315	1.243	5.42	
Acetophenone	1	0		6.09	50.07	50	20	0.01	2.115	2.117	0.13	
Hexachloroethane	1	0		6.17	48.04	50	20	0.3	0.643	0.618	3.93	
N-Nitroso-di-n-propylamine	1	0		6.09	50.72	50	20	0.5	1.127	1.144	1.43	
3&4-Methylphenol	1	0		6.09	49.48	50	20		1.365	1.351	1.05	
Naphthalene-d8	1	0	I	6.77	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.21	24.66	25	**		0.160	0.158	1.34	
Nitrobenzene	1	0		6.22	51.53	50	20	0.2	0.456	0.470	3.07	
Isophorone	1	0		6.41	51.96	50	20	0.4	0.780	0.811	3.92	
2-Nitrophenol	1	0		6.47	51.23	50	20	0.1	0.186	0.191	2.47	
2,4-Dimethylphenol	1	0		6.50	47.94	50	20	0.2	0.439	0.421	4.11	
Benzoic Acid	1	0		6.56	38.70	50	**		0.247	0.180	22.61	
bis(2-Chloroethoxy)methane	1	0		6.58	49.71	50	20	0.3	0.434	0.431	0.58	
2,4-Dichlorophenol	1	0		6.66	46.43	50	20	0.2	0.340	0.315	7.14	
1,2,4-Trichlorobenzene	1	0		6.72	45.41	50	**		0.403	0.366	9.19	
Naphthalene	1	0		6.78	43.73	50	20	0.7	1.180	1.032	12.54	
4-Chloroaniline	1	0		6.82	49.16	50	20	0.01	0.407	0.400	1.68	
Hexachlorobutadiene	1	0		6.87	46.83	50	20	0.01	0.284	0.266	6.35	
Caprolactam	1	0		7.08	52.66	50	20	0.01	0.104	0.110	5.32	
4-Chloro-3-methylphenol	1	0		7.18	49.34	50	20	0.2	0.361	0.357	1.32	
2-Methylnaphthalene	1	0		7.31	47.23	50	**	0.4	0.785	0.741	5.53	
1-Methylnaphthalene	1	0		7.39	46.29	50	**	0.4	0.757	0.701	7.41	
Methylnaphthalenes	1	0		7.39	93.64	50	**			1.443	87.28	
1,1'-Biphenyl	1	0		7.69	46.93	50	20	0.01	0.939	0.882	6.14	
Acenaphthene-d10	1	0	I	8.19	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.45	47.56	50	20	0.01	0.721	0.685	4.89	
Hexachlorocyclopentadiene	1	0		7.44	35.76	50	20	0.05	0.471	0.337	28.49	C1
2,4,6-Trichlorophenol	1	0		7.54	49.43	50	20	0.2	0.418	0.413	1.13	
2,4,5-Trichlorophenol	1	0		7.57	51.34	50	20	0.2	0.430	0.442	2.68	
2-Fluorobiphenyl	1	0	S	7.60	23.17	25	**		1.402	1.300	7.32	
2-Chloronaphthalene	1	0		7.71	47.76	50	20	0.8	1.182	1.129	4.48	
1,4-Dimethylnaphthalene	1	0		7.99	47.64	50	**		0.946	0.901	4.73	
Dimethylnaphthalenes	1	0		7.99	47.64	50	20			0.901	4.73	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M112162.D **Instrument:** GCMS 5

Cont Calibration Date/Time 2/24/2020 8:09:00 A Method EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.77	48.41	50	**		0.856	0.829	3.18	
2-Nitroaniline	1	0		7.79	54.04	50	20	0.01	0.478	0.516	8.08	
Coumarin	1	0		7.97	50.31		**		0.432			
Acenaphthylene	1	0		8.07	47.25	50	20	0.9	1.733	1.638	5.50	
Dimethylphthalate	1	0		7.93	49.14	50	20	0.01	1.381	1.357	1.72	
2,6-Dinitrotoluene	1	0		7.99	48.74	50	20	0.2	0.331	0.322	2.52	
Acenaphthene	1	0		8.22	48.87	50	20	0.9	1.197	1.170	2.27	
3-Nitroaniline	1	0		8.14	51.01	50	20	0.01	0.280	0.286	2.03	
2,4-Dinitrophenol	1	0		8.23	48.94	50	20	0.2	0.181	0.169	2.12	
Dibenzofuran	1	0		8.37	45.95	50	20	0.8	1.823	1.675	8.10	
2,4-Dinitrotoluene	1	0		8.34	52.15	50	20	0.2	0.418	0.436	4.30	
4-Nitrophenol	1	0		8.27	50.52	50	20	0.01	0.306	0.309	1.05	
2,3,4,6-Tetrachlorophenol	1	0		8.48	50.51	50	20	0.01	0.401	0.405	1.03	
Fluorene	1	0		8.69	47.98	50	20	0.9	1.457	1.399	4.03	
4-Chlorophenyl-phenylether	1	0		8.68	47.92	50	20	0.4	0.801	0.767	4.16	
Diethylphthalate	1	0		8.56	49.42	50	20	0.01	1.384	1.368	1.15	
4-Nitroaniline	1	0		8.70	50.21	50	20	0.01	0.329	0.331	0.41	
Atrazine	1	0		9.32	49.37	50	20	0.01	0.476	0.470	1.26	
Phenanthrene-d10	1	0	I	9.64	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.72	48.02	50	20	0.01	0.138	0.133	3.96	
n-Nitrosodiphenylamine	1	0		8.79	48.26	50	20	0.01	0.603	0.582	3.49	
2,4,6-Tribromophenol	1	0	S	8.92	49.21	50	**		0.112	0.110	1.57	
1,2-Diphenylhydrazine	1	0		8.84	51.00	50	**		0.755	0.770	2.01	
4-Bromophenyl-phenylether	1	0		9.17	46.15	50	20	0.1	0.241	0.222	7.70	
Hexachlorobenzene	1	0		9.24	46.69	50	20	0.1	0.258	0.241	6.62	
N-Octadecane	1	0		9.50	52.48	50	**	0.05	0.328	0.344	4.96	
Pentachlorophenol	1	0		9.43	52.16	50	20	0.05	0.145	0.143	4.32	
Phenanthrene	1	0		9.66	46.87	50	20	0.7	1.079	1.011	6.26	
Anthracene	1	0		9.72	47.11	50	20	0.7	1.116	1.052	5.79	
Carbazole	1	0		9.89	47.64	50	20	0.01	0.959	0.914	4.73	
Di-n-butylphthalate	1	0		10.27	51.45	50	20	0.01	1.079	1.110	2.89	
Fluoranthene	1	0		10.99	48.53	50	20	0.6	1.273	1.235	2.95	
Chrysene-d12	1	0	I	12.69	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.26	48.69	50	20	0.6	1.111	1.082	2.62	
Benzidine	1	0		11.15	35.51	50	**		0.453	0.322	28.98	
Terphenyl-d14	1	0	S	11.44	23.89	25	**		0.602	0.575	4.45	
4,4'-DDE	1	0		11.38	48.96		**		0.289			
4,4'-DDD	1	0		11.78	51.50		**		0.366			
Butylbenzylphthalate	1	0		12.04	52.70	50	20	0.01	0.399	0.421	5.40	
4,4'-DDT	1	0		12.14	50.74		**		0.483			
3,3'-Dichlorobenzidine	1	0		12.65	53.73	50	20	0.01	0.349	0.376	7.45	
Benzo[a]anthracene	1	0		12.68	46.76	50	20	0.8	1.176	1.100	6.47	
Chrysene	1	0		12.72	47.49	50	20	0.7	1.169	1.110	5.03	
bis(2-Ethylhexyl)phthalate	1	0		12.73	50.40	50	20	0.01	0.607	0.615	0.80	
Perylene-d12	1	0	I	14.30	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.48	50.76	50	20	0.01	0.988	1.028	1.53	
Benzo[b]fluoranthene	1	0		13.89	49.68	50	20	0.7	1.119	1.112	0.64	
Benzo[k]fluoranthene	1	0		13.92	48.39	50	20	0.7	1.138	1.101	3.22	
Benzo[a]pyrene	1	0		14.24	49.16	50	20	0.7	1.001	0.984	1.68	
Indeno[1,2,3-cd]pyrene	1	0		15.58	48.88	50	20	0.5	1.253	1.225	2.23	
Dibenzo[a,h]anthracene	1	0		15.60	48.57	50	20	0.4	1.100	1.068	2.87	
Benzo[g,h,i]perylene	1	0		15.95	49.95	50	20	0.5	1.048	1.047	0.09	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.
624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M112162.D **Instrument:** GCMS 5

Cont Calibration Date/Time 2/24/2020 8:09:00 A Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.771	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.946	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

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FORM8

Internal Standard Areas

Evaluation Std Data File: 5M111938.D Method: EPA 8270D

Analysis Date/Time: 02/10/20 13:21

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	47419	2.52	79956	5.76	299288	6.77	192481	8.19	387496	9.64	450504	12.69	442232	14.30
Eval File Area Limit:	23710-94838		39978-159912		149644-598576		96240-384962		193748-774992		225252-901008		221116-884464	
Eval File Rt Limit:	2.02-3.02		5.26-6.26		6.27-7.27		7.69-8.69		9.14-10.14		12.19-13.19		13.8-14.8	

Data File	Sample#														
5M111930.D	CAL BNA@2PPM	45269	2.53	77905	5.76	289609	6.77	182224	8.19	371039	9.64	417049	12.69	410000	14.30
5M111931.D	CAL BNA@10PPM	46238	2.53	78228	5.76	292560	6.77	183943	8.19	373805	9.64	425950	12.69	436742	14.30
5M111932.D	CAL BNA@196PPM	46558	2.51	80778	5.76	301670	6.77	202063	8.19	399287	9.65	496166	12.70	462750	14.31
5M111933.D	CAL BNA@160PPM	45629	2.52	77308	5.76	294794	6.77	187192	8.19	382809	9.64	460505	12.70	436507	14.30
5M111934.D	CAL BNA@120PPM	59767	2.52	104470	5.76	384565	6.77	247807	8.19	495574	9.65	613083	12.70	593343	14.31
5M111935.D	CAL BNA@80PPM	47763	2.51	82664	5.76	300633	6.77	194617	8.19	394070	9.64	478116	12.69	460937	14.30
5M111936.D	CAL BNA@20PPM	46217	2.52	84097	5.76	306886	6.77	197837	8.19	396785	9.64	458650	12.69	455881	14.30
5M111937.D	CAL BNA@0.5PPM	65055	2.52	115480	5.76	423797	6.77	275639	8.19	552978	9.64	640633	12.69	649676	14.30
5M111938.D	CAL BNA@50PPM	47419	2.52	79956	5.76	299288	6.77	192481	8.19	387496	9.64	450504	12.69	442232	14.30
5M111939.D	ICV BNA@50PPM	47004	2.52	81106	5.76	296419	6.77	194827	8.19	383695	9.64	454168	12.69	451450	14.30
5M111940.D	AD15343-001(T)	45620	2.54	81117	5.76	700226 A	6.80	95910 A	8.26	255304	9.65	489781	12.69	460425	14.30
5M111941.D	WMB82078(MS)	46442	2.51	83131	5.76	296569	6.77	195273	8.19	385570	9.65	441165	12.69	415767	14.30
5M111942.D	AD15343-001(30X)(T)	68110	2.53	122673	5.76	479938	6.77	293657	8.19	585161	9.65	635894	12.69	612508	14.30
5M111943.D	AD15343-001(3000X)(	63283	2.53	111973	5.76	431087	6.77	274623	8.19	550689	9.64	596386	12.69	594479	14.30

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5[illegible] L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0216

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M79175.D Method: EPA 8270D

Analysis Date/Time: 02/10/20 14:03

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	58043	2.63	103778	5.82	389125	6.82	218392	8.24	385037	9.69	409994	12.72	422521	14.33
Eval File Area Limit:	29022-116086		51889-207556		194562-778250		109196-436784		192518-770074		204997-819988		211260-845042	
Eval File Rt Limit:	2.13-3.13		5.32-6.32		6.32-7.32		7.74-8.74		9.19-10.19		12.22-13.22		13.83-14.83	

Data File	Sample#														
10M79166.D	CAL BNA@10PPM	48988	2.63	88631	5.81	330862	6.82	185246	8.24	326358	9.69	333334	12.72	351264	14.33
10M79168.D	CAL BNA@196PPM	56432	2.63	100403	5.82	383482	6.82	217553	8.24	379302	9.69	413280	12.73	406239	14.33
10M79169.D	CAL BNA@160PPM	58643	2.63	103617	5.82	386843	6.82	216473	8.24	378205	9.69	410617	12.73	407373	14.33
10M79170.D	CAL BNA@2PPM	52063	2.63	94792	5.81	357219	6.81	200278	8.23	357409	9.68	360174	12.72	383519	14.32
10M79171.D	CAL BNA@120PPM	57130	2.63	103112	5.82	387397	6.82	214345	8.24	377986	9.69	414039	12.72	422408	14.33
10M79172.D	CAL BNA@80PPM	58957	2.63	104494	5.81	395425	6.82	218860	8.24	387598	9.69	424333	12.72	435009	14.33
10M79173.D	CAL BNA@20PPM	59981	2.63	106485	5.81	404043	6.82	225124	8.24	401567	9.69	419131	12.72	436075	14.33
10M79174.D	CAL BNA@0.5PPM	56819	2.63	102696	5.81	387711	6.82	218355	8.24	393093	9.69	404329	12.72	433127	14.32
10M79175.D	CAL BNA@50PPM	58043	2.63	103778	5.82	389125	6.82	218392	8.24	385037	9.69	409994	12.72	422521	14.33
10M79176.D	ICV BNA@50PPM	61164	2.63	112985	5.81	421659	6.82	238481	8.24	421630	9.69	437393	12.72	445151	14.33
10M79177.D	WMB82078	56893	2.63	101551	5.81	382953	6.82	217022	8.24	385616	9.68	380753	12.72	398691	14.32
10M79178.D	SMB82066(MS)	52068	2.61	93496	5.81	352611	6.82	199045	8.24	355087	9.69	366354	12.72	381984	14.32
10M79179.D	SMB82067(MS)	51716	2.60	94715	5.81	355988	6.82	200445	8.24	358467	9.69	370662	12.72	383261	14.32
10M79180.D	MBS-1	53085	2.63	94717	5.81	359194	6.82	199086	8.24	357313	9.69	377079	12.72	387281	14.33
10M79181.D	MBS-2	56939	2.63	101916	5.81	380773	6.82	216324	8.24	381535	9.69	400643	12.72	405125	14.33
10M79182.D	MBS-3	54741	2.64	98656	5.82	369390	6.82	208793	8.24	367432	9.69	386256	12.72	395065	14.33
10M79183.D	MBS-4	53489	2.63	97388	5.82	365986	6.82	204869	8.24	359787	9.69	382250	12.72	387111	14.33
10M79184.D	MBS-5	50514	2.64	90129	5.82	339468	6.82	187328	8.24	329535	9.69	351103	12.72	352192	14.33
10M79185.D	MB	57033	2.63	101167	5.81	382510	6.82	213332	8.24	385053	9.69	379234	12.72	400110	14.32

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 50 mg/L (in final extract)
624/8260 Internal Standard concentration = 50ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0217

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105116.D Method: EPA 8270D

Analysis Date/Time: 02/10/20 14:31

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	46860	2.60	74032	5.82	281116	6.83	157414	8.25	286801	9.70	275094	12.75	275089	14.36
Eval File Area Limit:	23430-93720		37016-148064		140558-562232		78707-314828		143400-573602		137547-550188		137544-550178	
Eval File Rt Limit:	2.1-3.1		5.32-6.32		6.33-7.33		7.75-8.75		9.2-10.2		12.25-13.25		13.86-14.86	
Data File Sample#														
7M105108.D CAL BNA@2PPM	36318	2.60	61043	5.82	237199	6.82	138142	8.25	248681	9.70	231087	12.75	233172	14.36
7M105109.D CAL BNA@10PPM	42607	2.60	73557	5.82	285330	6.82	161313	8.25	295932	9.70	275909	12.75	277806	14.36
7M105110.D CAL BNA@196PPM	40528	2.60	67269	5.82	262034	6.83	155719	8.26	287474	9.71	279156	12.76	274131	14.36
7M105111.D CAL BNA@160PPM	43504	2.60	73490	5.82	278839	6.83	163142	8.25	304804	9.71	283965	12.76	283684	14.37
7M105112.D CAL BNA@120PPM	43146	2.60	73278	5.82	281471	6.83	166267	8.26	304747	9.71	289321	12.75	283379	14.37
7M105113.D CAL BNA@80PPM	43367	2.60	75556	5.82	289331	6.83	165895	8.26	301162	9.71	296254	12.75	293268	14.37
7M105114.D CAL BNA@20PPM	42820	2.60	75293	5.82	291482	6.83	166029	8.25	300152	9.71	283760	12.75	285867	14.36
7M105115.D CAL BNA@0.5PPM	41941	2.60	71150	5.82	272007	6.83	157822	8.25	288009	9.70	274158	12.75	278443	14.37
7M105116.D CAL BNA@50PPM	46860	2.60	74032	5.82	281116	6.83	157414	8.25	286801	9.70	275094	12.75	275089	14.36
7M105117.D ICV BNA@50PPM	44341	2.60	75985	5.82	291879	6.83	166521	8.25	305519	9.71	291260	12.75	278624	14.36

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration = 5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0218

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M98302.D Method: EPA 8270D

Analysis Date/Time: 02/13/20 12:30

Lab File ID: CAL BNA@50PPM

		I1		I2		I3		I4		I5		I6		I7	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:		69548	2.64	132055	5.86	492873	6.87	279894	8.31	495402	9.77	477062	12.83	492586	14.46
Eval File Area Limit:		34774-139096		66028-264110		246436-985746		139947-559788		247701-990804		238531-954124		246293-985172	
Eval File Rt Limit:		2.14-3.14		5.36-6.36		6.37-7.37		7.81-8.81		9.27-10.27		12.33-13.33		13.96-14.96	
Data File	Sample#														
9M98294.D	CAL BNA@196PPM	66033	2.65	116859	5.87	443918	6.88	256508	8.31	454069	9.78	408412	12.84	444056	14.47
9M98295.D	CAL BNA@160PPM	65342	2.65	119241	5.87	447446	6.87	253556	8.31	454508	9.78	415511	12.84	448986	14.46
9M98296.D	CAL BNA@120PPM	67800	2.65	122678	5.87	462206	6.87	260586	8.31	463581	9.77	446072	12.84	467944	14.47
9M98297.D	CAL BNA@80PPM	68446	2.65	127485	5.86	477602	6.87	270698	8.31	484391	9.77	463123	12.84	485115	14.46
9M98298.D	CAL BNA@10PPM	68358	2.65	128217	5.86	481502	6.87	268640	8.30	480238	9.77	464965	12.83	473069	14.46
9M98299.D	CAL BNA@2PPM	63940	2.65	121890	5.86	461263	6.87	259795	8.30	467401	9.77	453708	12.83	461997	14.46
9M98300.D	CAL BNA@20PPM	71064	2.65	134573	5.86	504797	6.87	285218	8.30	515385	9.77	495825	12.83	515520	14.46
9M98301.D	CAL BNA@0.5PPM	67710	2.64	131317	5.86	497016	6.87	282429	8.30	503681	9.77	495328	12.83	510984	14.46
9M98302.D	CAL BNA@50PPM	69548	2.64	132055	5.86	492873	6.87	279894	8.31	495402	9.77	477062	12.83	492586	14.46
9M98303.D	ICV BNA@50PPM	68831	2.65	130944	5.86	490851	6.87	278061	8.30	500839	9.77	482831	12.83	491809	14.46

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt

0021406 0219

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105322.D Method: EPA 8270D

Analysis Date/Time: 02/23/20 11:56

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	46891	2.60	86614	5.82	325539	6.82	191240	8.25	355103	9.71	344180	12.76	343371	14.37
Eval File Area Limit:	23446-93782		43307-173228		162770-651078		95620-382480		177552-710206		172090-688360		171686-686742	
Eval File Rt Limit:	2.1-3.1		5.32-6.32		6.32-7.32		7.75-8.75		9.21-10.21		12.26-13.26		13.87-14.87	
Data File Sample#														
7M105323.D OMB83614	43457	2.59	78880	5.82	304404	6.82	176453	8.25	321251	9.71	301735	12.75	301356	14.37
7M105324.D OMB83615	39531	2.60	74631	5.82	285679	6.82	168111	8.25	305607	9.70	297114	12.75	295675	14.37
7M105325.D SMB82174	44039	2.59	79128	5.82	299137	6.82	174874	8.25	320847	9.70	310128	12.75	309149	14.37
7M105326.D SMB82175	41770	2.58	77763	5.82	293414	6.82	171381	8.25	316524	9.70	302314	12.75	309829	14.37
7M105327.D SMB83612	39674	2.59	71715	5.82	277730	6.82	162741	8.25	294887	9.70	288124	12.75	289024	14.37
7M105328.D AD15739-001	48203	2.60	89217	5.82	344410	6.82	199182	8.25	360160	9.70	333453	12.75	329392	14.36
7M105329.D AD15739-001(MS)	51338	2.60	98817	5.82	375976	6.82	221078	8.25	393482	9.70	369413	12.75	364591	14.37
7M105330.D AD15739-001(MSD)	43763	2.59	85041	5.82	320020	6.82	189643	8.25	340523	9.70	312403	12.75	314282	14.36
7M105331.D AD15747-001	49003	2.60	90836	5.82	348398	6.82	204801	8.25	361990	9.70	326740	12.75	326708	14.37
7M105332.D AD15747-002	44577	2.60	83195	5.82	318574	6.82	186793	8.25	331586	9.70	291659	12.75	287334	14.37
7M105333.D AD15747-005	50932	2.60	97487	5.82	369442	6.82	217209	8.25	377021	9.70	335766	12.75	334448	14.37
7M105334.D AD15747-003	47778	2.61	90480	5.82	353912	6.82	203860	8.25	364295	9.70	313860	12.75	308330	14.37
7M105335.D AD15747-004	51916	2.62	96028	5.82	373401	6.82	213413	8.25	375043	9.70	332731	12.75	323063	14.36
7M105336.D AD15747-006	45857	2.61	87598	5.82	339156	6.82	193446	8.25	338791	9.70	297092	12.75	285506	14.37
7M105337.D AD15747-009	50151	2.61	96306	5.82	367068	6.82	207923	8.25	369754	9.70	316787	12.75	317881	14.36
7M105338.D AD15748-001	54068	2.60	106263	5.82	399815	6.82	226961	8.25	400028	9.70	351296	12.75	347672	14.37
7M105339.D AD15748-002	50267	2.60	96113	5.82	371185	6.82	216509	8.25	375925	9.70	327610	12.75	329737	14.37
7M105340.D AD15748-003	54771	2.60	104903	5.82	397486	6.82	226047	8.25	395982	9.70	344009	12.75	341176	14.37
7M105341.D AD15753-006	45692	2.60	88528	5.82	335609	6.82	190247	8.25	338183	9.70	294442	12.75	284973	14.37

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration = 5 ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0220

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M98423.D Method: EPA 8270D

Analysis Date/Time: 02/23/20 11:55

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	58324	2.65	114311	5.86	432120	6.87	242763	8.30	433653	9.77	419907	12.82	410829	14.45
Eval File Area Limit:	29162-116648		57156-228622		216060-864240		121382-485526		216826-867306		209954-839814		205414-821658	
Eval File Rt Limit:	2.15-3.15		5.36-6.36		6.37-7.37		7.8-8.8		9.27-10.27		12.32-13.32		13.95-14.95	
Data File / Sample#														
9M98424.D SMB82175	63347	2.63	116292	5.86	434457	6.87	244472	8.30	444584	9.77	394994	12.82	387436	14.45
9M98425.D SMB83612	57926	2.63	106285	5.86	403254	6.87	226683	8.30	404712	9.77	360651	12.82	348738	14.45
9M98426.D OMB83614	58966	2.65	112873	5.86	425348	6.87	237386	8.30	428377	9.76	378727	12.82	365417	14.45
9M98427.D OMB83615	56111	2.65	108671	5.86	405501	6.87	227845	8.30	405808	9.76	357867	12.82	340670	14.45
9M98428.D SMB82174	60495	2.64	116037	5.86	434622	6.87	243380	8.30	442080	9.76	392202	12.82	368351	14.45
9M98429.D AD15747-010	56867	2.65	111509	5.86	417878	6.87	234286	8.30	418606	9.76	384593	12.82	374199	14.45
9M98430.D AD15750-009	58864	2.65	115378	5.86	435626	6.87	241525	8.30	426964	9.77	390244	12.82	384021	14.45
9M98431.D AD15713-011	54569	2.64	103815	5.86	395269	6.87	223306	8.30	392753	9.76	351145	12.82	342176	14.45
9M98432.D AD15751-006	69679	2.64	136910	5.86	519434	6.87	290992	8.30	516056	9.77	469239	12.82	455131	14.45
9M98433.D AD15749-001	60953	2.65	118258	5.86	449274	6.87	246924	8.30	436252	9.76	391708	12.82	383523	14.45
9M98434.D AD15749-002	54856	2.65	106232	5.86	406724	6.87	222323	8.30	390796	9.76	345178	12.82	333614	14.45
9M98435.D AD15750-001	61801	2.65	120625	5.86	446894	6.87	247604	8.30	436174	9.76	392080	12.82	380417	14.45
9M98436.D AD15750-007	63476	2.65	124235	5.86	461649	6.87	254569	8.30	450120	9.77	413204	12.82	401650	14.45
9M98437.D AD15714-002	56217	2.64	107041	5.86	407329	6.87	224718	8.30	397635	9.76	354722	12.82	337873	14.45
9M98438.D AD15718-006	56068	2.64	110219	5.86	419521	6.87	231092	8.30	411185	9.76	364510	12.82	343791	14.45
9M98439.D AD15718-007	58378	2.64	115122	5.86	434788	6.87	243925	8.30	428015	9.76	379576	12.82	359342	14.45
9M98440.D AD15718-001	53551	2.64	105285	5.86	399991	6.87	221023	8.30	391117	9.76	343384	12.82	326730	14.45
9M98441.D AD15627-003	56358	2.64	113201	5.86	422833	6.87	233868	8.30	408573	9.76	369045	12.82	348909	14.45

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0021406 0221

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M79387.D Method: EPA 8270D

Analysis Date/Time: 02/23/20 11:59

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	55789	2.63	93051	5.81	352714	6.82	197456	8.24	342811	9.69	352245	12.72	351559	14.33
Eval File Area Limit:	27894-111578		46526-186102		176357-705428		98728-394912		171406-685622		176122-704490		175780-703118	
Eval File Rt Limit:	2.13-3.13		5.31-6.31		6.32-7.32		7.74-8.74		9.19-10.19		12.22-13.22		13.83-14.83	

Data File	Sample#														
10M79388.D	WMB83616	47586	2.62	78722	5.81	300509	6.81	166475	8.23	294366	9.68	277507	12.72	284522	14.32
10M79389.D	WMB83618	52831	2.63	89729	5.81	342313	6.81	188529	8.23	329479	9.68	310114	12.71	318291	14.32
10M79390.D	WMB83606	62050	2.63	105405	5.81	397395	6.81	220003	8.23	387957	9.69	366935	12.72	371377	14.32
10M79391.D	OMB83614(MS)	52764	2.64	91074	5.81	348546	6.82	191652	8.24	329961	9.69	326642	12.72	324130	14.33
10M79392.D	OMB83615(MS)	47302	2.63	81228	5.81	311657	6.82	168871	8.24	289633	9.69	291385	12.72	285873	14.32
10M79393.D	SMB82174(MS)	46727	2.61	77343	5.81	296156	6.82	163512	8.24	283337	9.69	280198	12.72	275843	14.33
10M79394.D	SMB82175(MS)	54089	2.61	92733	5.81	354709	6.82	194898	8.24	341947	9.69	336364	12.72	332942	14.33
10M79395.D	SMB83612(MS)	52170	2.60	89670	5.81	340329	6.82	187063	8.24	327962	9.69	320935	12.72	320735	14.33
10M79396.D	AD15779-001	60372	2.62	102729	5.81	397704	6.81	219179	8.23	384899	9.68	360831	12.72	369302	14.33
10M79397.D	AD15775-001	59766	2.63	102602	5.81	392472	6.81	214808	8.24	378299	9.68	359827	12.72	365275	14.33
10M79398.D	AD15775-002	51532	2.63	88189	5.81	336239	6.81	185426	8.23	323533	9.68	303786	12.72	304247	14.32
10M79399.D	AD15775-003	58952	2.63	102118	5.81	394262	6.81	214438	8.23	374946	9.68	354119	12.72	357107	14.33
10M79400.D	AD15775-004	62105	2.63	104840	5.81	402525	6.81	221657	8.24	388634	9.68	363109	12.72	367841	14.32
10M79401.D	AD15777-007	57301	2.63	96121	5.81	368495	6.81	201165	8.23	356088	9.68	329435	12.72	333246	14.33
10M79402.D	AD15777-008	59825	2.63	102089	5.81	391344	6.81	213706	8.23	376847	9.68	352894	12.72	361176	14.33
10M79403.D	AD15777-009	57943	2.63	99899	5.81	382173	6.81	210126	8.24	367106	9.69	343860	12.72	351381	14.33
10M79404.D	AD15777-010	58606	2.63	99399	5.81	382071	6.81	209007	8.24	365327	9.68	345299	12.72	346905	14.32
10M79405.D	AD15777-011	53615	2.63	91570	5.81	353338	6.81	194224	8.23	338684	9.68	312523	12.72	316216	14.32
10M79406.D	AD15777-001	47574	2.63	81843	5.81	316176	6.81	173663	8.23	299343	9.68	282872	12.72	287409	14.32
10M79407.D	AD15777-002	43323	2.64	74865	5.81	289102	6.81	159298	8.24	271299	9.69	255096	12.71	260476	14.32

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105344.D Method: EPA 8270D

Analysis Date/Time: 02/24/20 08:01

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	46966	2.59	84943	5.82	323677	6.82	192399	8.25	350117	9.70	335413	12.75	335352	14.37
Eval File Area Limit:	23483-93932		42472-169886		161838-647354		96200-384798		175058-700234		167706-670826		167676-670704	
Eval File Rt Limit:	2.09-3.09		5.32-6.32		6.32-7.32		7.75-8.75		9.2-10.2		12.25-13.25		13.87-14.87	

Data File	Sample#														
7M105345.D	AD15748-008	62541	2.60	114591	5.82	443084	6.82	253936	8.25	455124	9.70	411808	12.75	400043	14.37
7M105346.D	AD15748-009	59734	2.60	110026	5.82	412232	6.82	240041	8.25	430518	9.70	378498	12.75	363668	14.37
7M105347.D	AD15750-003	74930	2.60	138953	5.82	529415	6.82	302956	8.25	531905	9.70	468563	12.75	458413	14.37
7M105348.D	AD15750-011	63661	2.60	117446	5.82	440242	6.82	248568	8.25	437482	9.70	386747	12.75	387494	14.37
7M105349.D	AD15755-006	53807	2.59	102855	5.82	384125	6.82	225398	8.25	386389	9.70	339231	12.75	339265	14.37
7M105350.D	AD15715-001	47760	2.59	94351	5.82	350483	6.82	201378	8.25	350584	9.70	289669	12.75	289414	14.36
7M105351.D	AD15715-002	50104	2.59	91886	5.82	351678	6.82	200641	8.25	351300	9.70	295233	12.75	290324	14.37
7M105352.D	AD15718-002	50295	2.58	97155	5.82	368883	6.82	209454	8.25	366433	9.70	312320	12.75	313979	14.37
7M105353.D	AD15713-003(3X)	63011	2.60	119393	5.82	440691	6.82	249205	8.25	430067	9.70	368821	12.75	371916	14.37
7M105354.D	AD15627-002(3X)	63615	2.60	119586	5.82	453211	6.82	255843	8.25	446907	9.70	372280	12.75	373222	14.37
7M105355.D	AD15627-001(10X)	60321	2.60	117069	5.82	441794	6.82	248356	8.25	426078	9.70	366542	12.75	356028	14.37
7M105356.D	AD15803-001(3X)	52664	2.60	99562	5.82	375594	6.82	210216	8.25	362429	9.70	305375	12.75	305327	14.37
7M105357.D	AD15803-002(3X)	49931	2.60	111943	5.83	356111	6.82	218607	8.25	383106	9.70	304897	12.75	301063	14.37
7M105358.D	15714-001(3X)	60872	2.60	115857	5.82	449968	6.82	253459	8.25	441304	9.70	364301	12.75	361423	14.37
7M105359.D	AD15736-001	53555	2.59	106365	5.82	403244	6.82	231549	8.25	402752	9.70	335214	12.75	322296	14.37
7M105360.D	AD15713-001(3X)	58886	2.60	110394	5.82	407893	6.82	229875	8.25	399790	9.70	345080	12.75	331097	14.37
7M105361.D	AD15713-005	50818	2.60	96057	5.82	361174	6.82	198588	8.25	354532	9.71	315930	12.76	291523	14.37
7M105362.D	AD15715-003	46321	2.58	90392	5.82	332242	6.82	188100	8.25	329935	9.70	303094	12.75	277836	14.37
7M105363.D	AD15715-004	43693	2.59	84634	5.82	318259	6.82	180923	8.25	316770	9.70	264656	12.75	239984	14.37
7M105364.D	AD15714-001(3X)	55674	2.60	105028	5.82	401650	6.82	230335	8.25	395060	9.70	341897	12.75	312343	14.37
7M105365.D	AD15586-002(20X)	51469	2.60	95528	5.82	365339	6.82	214882	8.25	370889	9.70	327114	12.75	285899	14.37
7M105366.D	AD15803-002(3X)(MS)	52979	2.60	121257	5.83	357487	6.82	223034	8.25	386247	9.70	333378	12.75	287488	14.37
7M105367.D	AD15803-002(3X)(MS	51597	2.60	127929	5.83	375582	6.82	230548	8.25	404443	9.70	344667	12.75	297247	14.37

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 5M112162.D Method: EPA 8270D

Analysis Date/Time: 02/24/20 08:09

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	40400	2.53	65478	5.76	245563	6.77	153785	8.19	314866	9.64	366533	12.69	361294	14.30
Eval File Area Limit:	20200-80800		32739-130956		122782-491126		76892-307570		157433-629732		183266-733066		180647-722588	
Eval File Rt Limit:	2.03-3.03		5.26-6.26		6.27-7.27		7.69-8.69		9.14-10.14		12.19-13.19		13.8-14.8	

Data File	Sample#														
5M112163.D	MBS-1	41348	2.53	67422	5.76	251419	6.77	160360	8.18	324297	9.64	380247	12.69	361118	14.30
5M112164.D	AD15699-004	47562	2.53	80204	5.76	291110	6.76	191364	8.18	383990	9.64	430002	12.68	425495	14.30
5M112165.D	AD15796-002	45815	2.52	78127	5.76	281932	6.76	183255	8.18	368978	9.64	405048	12.68	404584	14.30
5M112166.D	WMB83616	36218	2.53	58440	5.76	215437	6.76	140671	8.18	279327	9.64	305295	12.68	303797	14.30
5M112167.D	WMB83618	46082	2.53	76307	5.76	287892	6.76	181174	8.18	371347	9.64	403560	12.68	403123	14.30
5M112168.D	MBS83616-2	39598	2.53	65463	5.76	241915	6.77	155983	8.18	320307	9.64	375503	12.69	354130	14.30
5M112169.D	MBS-3	40024	2.53	67840	5.76	252416	6.77	160177	8.18	316102	9.64	386513	12.69	356625	14.30
5M112170.D	MBS-4	38732	2.53	65652	5.76	239116	6.77	156140	8.18	312784	9.64	364328	12.69	336350	14.30
5M112171.D	MBS-5	40513	2.53	67466	5.76	246090	6.77	159192	8.18	316355	9.64	371030	12.69	352397	14.30
5M112172.D	AD15777-003	37019	2.53	62026	5.76	229267	6.76	148432	8.18	291365	9.64	333978	12.68	338354	14.30
5M112173.D	OMB83632(MS)	45225	2.52	77740	5.76	291713	6.77	186455	8.18	374553	9.64	424317	12.69	427975	14.30
5M112174.D	OMB83632	48152	2.52	80328	5.76	297584	6.76	192120	8.18	388476	9.64	432312	12.68	419584	14.30
5M112175.D	AD15777-004	35177	2.52	57390	5.76	218715	6.76	141678	8.18	272682	9.64	307153	12.68	310054	14.30
5M112176.D	AD15777-005	36432	2.52	58723	5.76	213245	6.76	138148	8.18	274566	9.64	300177	12.68	299802	14.30
5M112177.D	AD15713-007	43151	2.52	75173	5.76	277688	6.76	179170	8.18	360876	9.64	413104	12.68	409834	14.30
5M112178.D	AD15713-009	50382	2.52	81791	5.76	309447	6.76	196905	8.18	397015	9.64	445341	12.68	438673	14.30
5M112179.D	AD15865-001	44043	2.52	75451	5.76	271368	6.76	174807	8.18	350065	9.64	385263	12.68	394282	14.30
5M112180.D	WMB83638(MS)	48126	2.53	84661	5.76	308412	6.77	200807	8.18	399037	9.64	468627	12.69	450491	14.30
5M112181.D	WMB83638	43923	2.53	74350	5.76	278674	6.76	184438	8.18	347405	9.64	394329	12.68	386245	14.30
5M112182.D	SMB82174	40251	2.50	68554	5.76	253072	6.76	164173	8.18	319736	9.64	360110	12.68	347650	14.30
5M112183.D	AD15777-006	37288	2.52	65852	5.76	238128	6.76	149447	8.18	290498	9.64	322537	12.68	324055	14.30
5M112184.D	AD15805-001	50707	2.53	84108	5.76	308665	6.76	197812	8.18	394198	9.64	434698	12.68	430185	14.30
5M112185.D	AD15805-009	43639	2.53	74110	5.76	274049	6.76	172076	8.18	342052	9.64	374380	12.68	369601	14.30
5M112186.D	AD15805-011	46016	2.53	77011	5.76	288935	6.76	180939	8.18	368713	9.64	401581	12.68	401243	14.30
5M112187.D	AD15805-013	46492	2.53	77210	5.76	290198	6.76	179808	8.18	357842	9.64	397157	12.68	400808	14.30
5M112188.D	AD15805-015	47071	2.52	79188	5.76	289155	6.76	192519	8.18	379656	9.64	411585	12.68	401351	14.30
5M112189.D	AD15806-009	44212	2.53	72464	5.76	269263	6.76	166960	8.18	338148	9.64	364194	12.68	365244	14.30

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 9M98444.D Method: EPA 8270D

Analysis Date/Time: 02/24/20 08:04

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	54940	2.65	108986	5.86	415833	6.87	234614	8.30	418021	9.77	408366	12.82	394974	14.45
Eval File Area Limit:	27470-109880		54493-217972		207916-831666		117307-469228		209010-836042		204183-816732		197487-789948	
Eval File Rt Limit:	2.15-3.15		5.36-6.36		6.37-7.37		7.8-8.8		9.27-10.27		12.32-13.32		13.95-14.95	
Data File / Sample#														
9M98445.D AD15751-004	62039	2.63	123047	5.86	462289	6.87	265938	8.30	462833	9.76	423921	12.82	418026	14.45
9M98446.D AD15751-002	67914	2.65	133583	5.86	506302	6.87	281955	8.30	499989	9.77	457281	12.82	449993	14.45
9M98447.D AD15752-002	63671	2.65	126495	5.86	471527	6.87	263363	8.30	464585	9.76	424252	12.82	412416	14.45
9M98448.D AD15752-004	61403	2.63	121780	5.86	462018	6.87	258576	8.30	454969	9.76	410523	12.82	402147	14.45
9M98449.D AD15753-004	68720	2.64	135258	5.86	517265	6.87	288639	8.30	506568	9.76	458194	12.82	452300	14.45
9M98450.D AD15754-002	58008	2.64	117684	5.86	442308	6.87	247095	8.30	437603	9.76	395588	12.82	386504	14.45
9M98451.D AD15754-004	68393	2.65	138063	5.86	510124	6.87	286702	8.30	498388	9.77	453311	12.82	439654	14.45
9M98452.D AD15754-006	74662	2.64	151362	5.86	571605	6.87	319886	8.30	560582	9.76	506424	12.82	491177	14.45
9M98453.D AD15755-002	69830	2.65	137577	5.86	520782	6.87	291188	8.30	513988	9.77	455914	12.82	445579	14.45
9M98454.D AD15755-004	70345	2.64	140623	5.86	528396	6.87	292752	8.30	511866	9.76	456893	12.82	454166	14.45
9M98455.D AD15752-006	65204	2.65	134170	5.86	497095	6.87	279581	8.30	491423	9.77	437758	12.82	430137	14.45
9M98456.D AD15753-002	69426	2.65	140129	5.86	518529	6.87	289335	8.30	507424	9.77	449761	12.82	444019	14.45
9M98457.D AD15750-005	80801	2.67	158225	5.86	587534	6.87	322691	8.30	572405	9.76	511202	12.82	498046	14.45
9M98458.D AD15747-006(R)	80888	2.66	162344	5.86	606586	6.87	344258	8.30	596748	9.76	533275	12.82	524393	14.45
9M98459.D AD15748-007	88262	2.66	173844	5.86	648992	6.87	362379	8.30	629475	9.77	564649	12.82	552965	14.45
9M98460.D AD15748-010	82436	2.66	164651	5.86	617808	6.87	341981	8.30	593788	9.77	529185	12.82	523863	14.45
9M98461.D AD15718-005	78342	2.64	158826	5.86	598017	6.87	330228	8.30	580305	9.77	516605	12.82	498775	14.45
9M98462.D AD15718-008	60600	2.65	119938	5.86	455000	6.87	251091	8.30	447547	9.76	383493	12.82	365018	14.45
9M98463.D AD15713-011(MS)	58561	2.65	115438	5.86	434940	6.87	241492	8.30	419146	9.77	380891	12.82	356040	14.45
9M98464.D AD15713-011(MSD)	54531	2.64	108179	5.86	404215	6.87	224505	8.30	392307	9.77	354648	12.82	334071	14.45
9M98465.D AD15751-006(MS)	63674	2.64	129405	5.86	485059	6.87	269915	8.30	469980	9.77	426800	12.82	408170	14.45
9M98466.D AD15751-006(MSD)	71728	2.64	144053	5.86	543532	6.87	300437	8.30	534415	9.77	479311	12.82	463549	14.45

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

PCB Data

Form1

ORGANICS PCB REPORT

Sample Number: AD15713-001
Client Id: TB-101-1 COMP
Data File: 2G144502.D
Analysis Date: 02/19/20 13:33
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	**11097-69-1**	**Aroclor-1254**	**0.027**	**0.31**
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	**1336-36-3**	**Aroclor (Total)**	**0.027**	**0.31**

Worksheet #: 547861

Total Target Concentration 0.31

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144502.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 13:33
Operator : MS/MLC
Sample : AD15713-001
Misc : S,PCB
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 21 12:49:59 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.894	3.955	508979	1184273	92.977	75.446
31)Aroclor-1254 {2}	7.000	6.929	260976	134952	541.789	520.857
32)Aroclor-1254 {3}	7.160	7.324	209714	368068	686.967	500.669 #
33)Aroclor-1254 {4}	7.278	7.841	204778	176578	493.813m	449.236
45)DCB-Surrogate	10.272	10.957	676993	1276525	103.519	88.514m

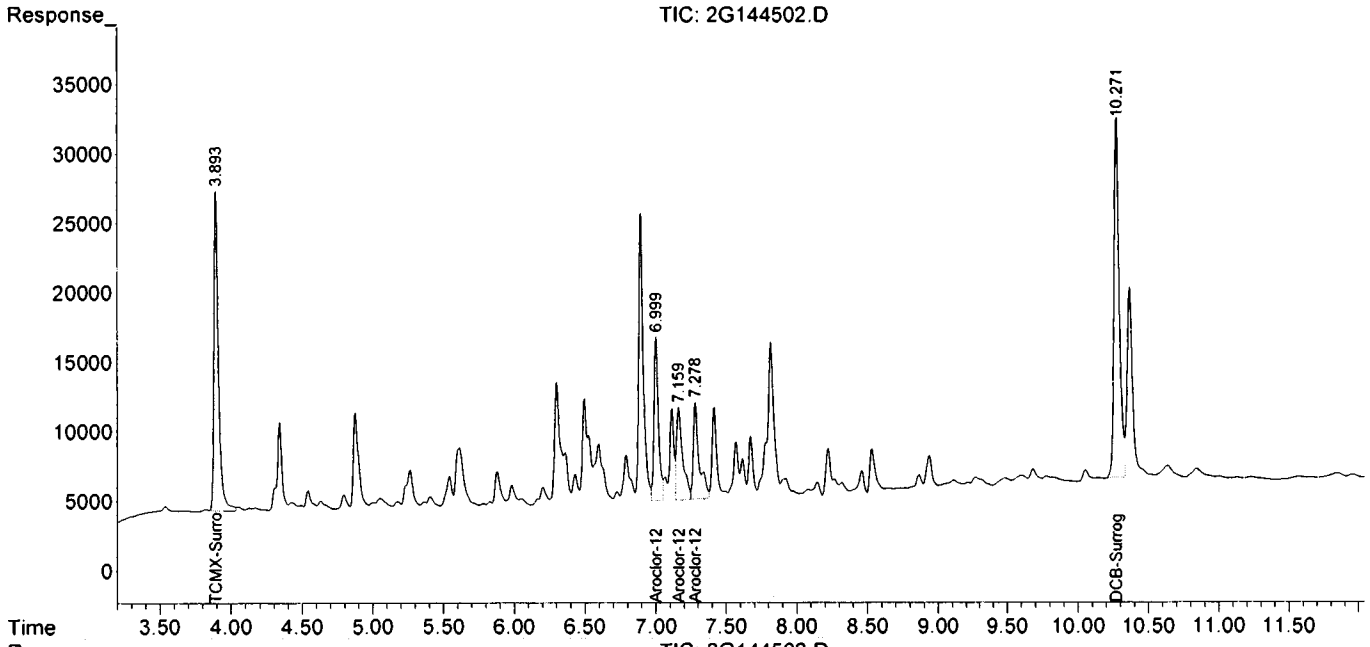
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

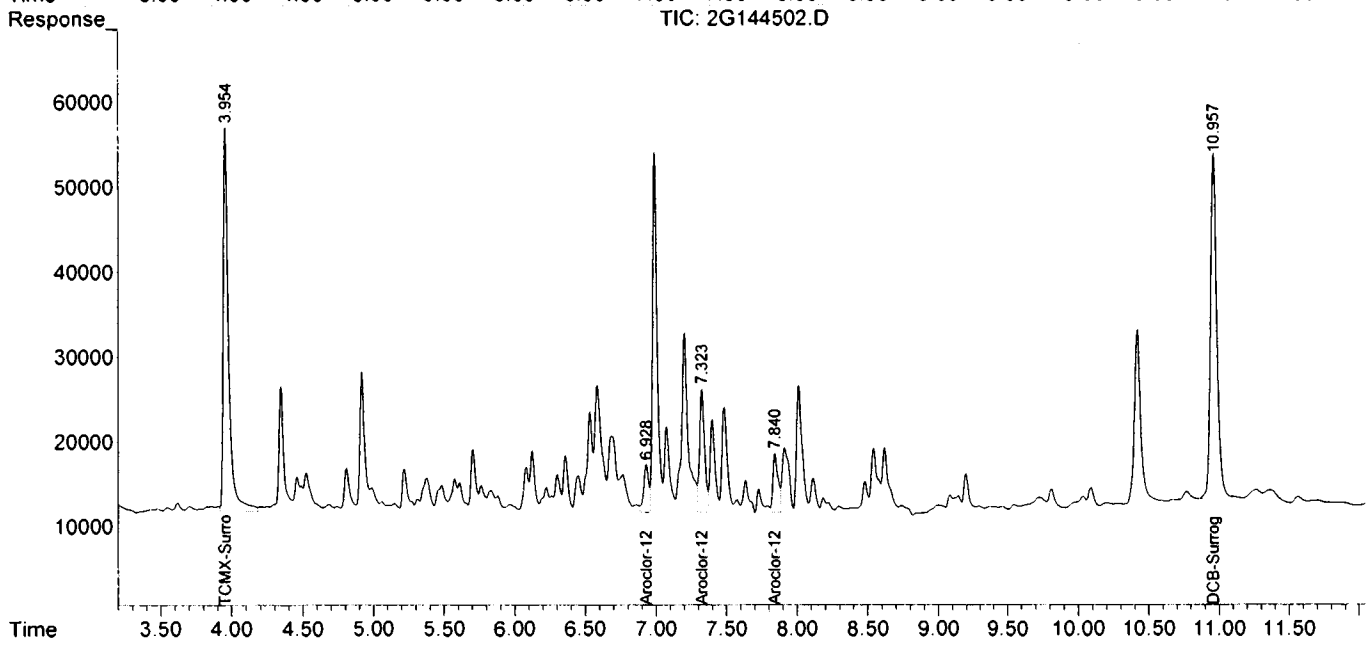
3

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144502.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 13:33
Operator : MS/MLC
Sample : AD15713-001
Misc : S,PCB
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 21 12:49:59 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: AD15713-003
Client Id: TB-101-2 COMP
Data File: 2G144503.D
Analysis Date: 02/19/20 13:48
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.027	U	**11097-69-1**	**Aroclor-1254**	**0.027**	**0.13**
11104-28-2	Aroclor-1221	0.027	U	11096-82-5	Aroclor-1260	0.027	U
11141-16-5	Aroclor-1232	0.027	U	37324-23-5	Aroclor-1262	0.027	U
53469-21-9	Aroclor-1242	0.027	U	11100-14-4	Aroclor-1268	0.027	U
12672-29-6	Aroclor-1248	0.027	U	**1336-36-3**	**Aroclor (Total)**	**0.027**	**0.13**

Worksheet #: 547861

Total Target Concentration 0.13

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144503.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 13:48
Operator : MS/MLC
Sample : AD15713-003
Misc : S,PCB
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:23:09 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.894	3.955	522128	1239873	95.379	78.989
31)Aroclor-1254 {2}	7.000	6.928	121113	70297	251.432	271.317
32)Aroclor-1254 {3}	7.161	7.324	87848	186055	287.766	253.084
33)Aroclor-1254 {4}	7.279	7.843	83283	76606	200.835m	194.895
45)DCB-Surrogate	10.273	10.959	654419	1297348	100.067	89.958

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

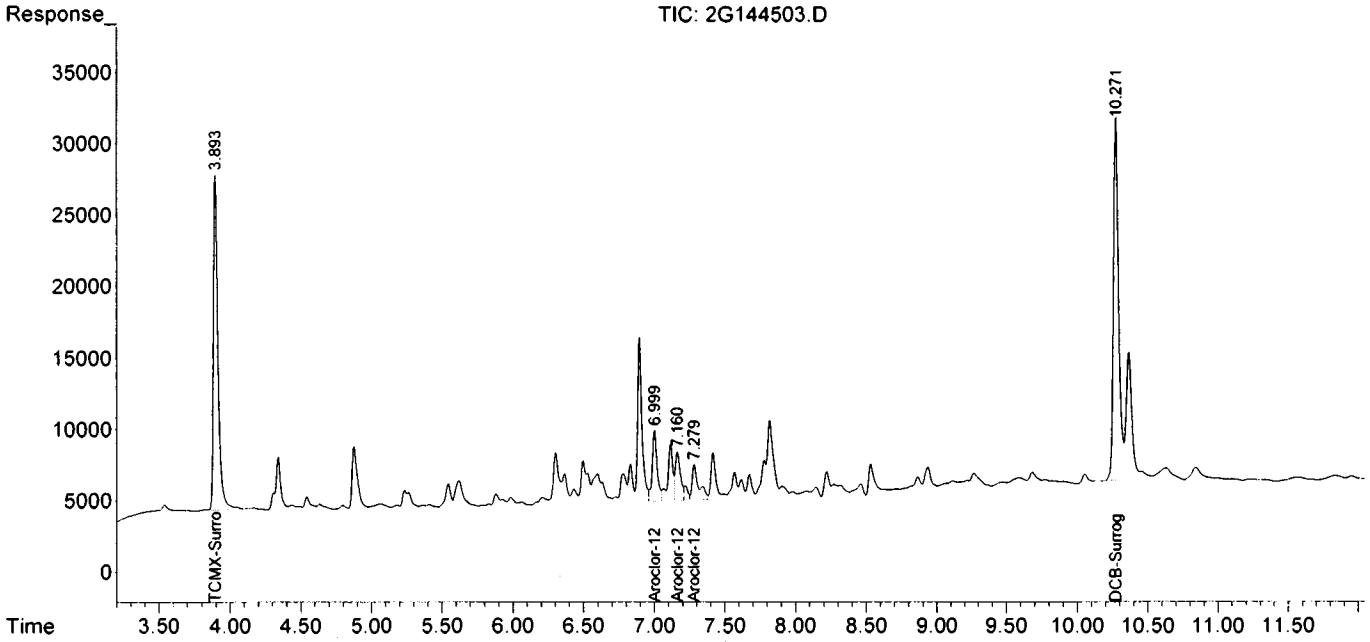
3

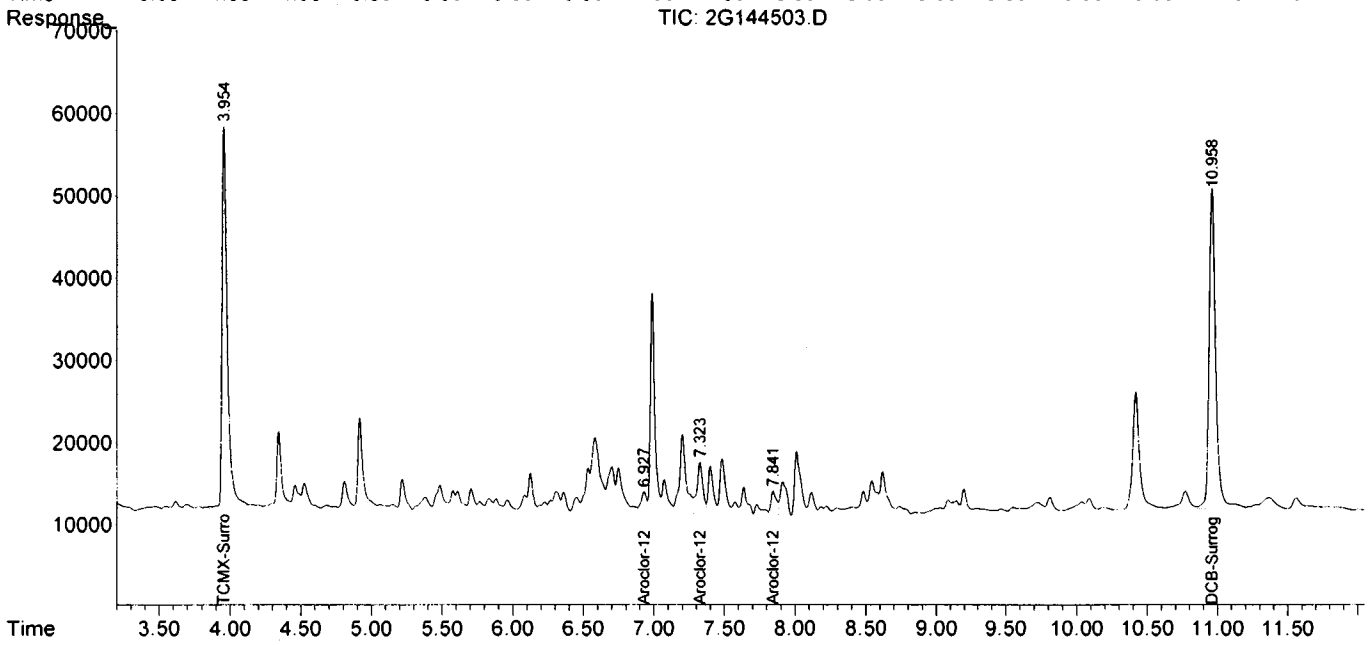
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144503.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 13:48
Operator : MS/MLC
Sample : AD15713-003
Misc : S,PCB
ALS Vial : 23 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:23:09 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: AD15713-005
Client Id: TB-101-3 COMP
Data File: 2G144504.D
Analysis Date: 02/19/20 14:03
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 87

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.029	U	**11097-69-1**	**(^)Aroclor-1254**	**0.029**	**0.20**
11104-28-2	Aroclor-1221	0.029	U	11096-82-5	Aroclor-1260	0.029	U
11141-16-5	Aroclor-1232	0.029	U	37324-23-5	Aroclor-1262	0.029	U
53469-21-9	Aroclor-1242	0.029	U	11100-14-4	Aroclor-1268	0.029	U
12672-29-6	Aroclor-1248	0.029	U	**1336-36-3**	**Aroclor (Total)**	**0.029**	**0.20**

Worksheet #: 547861

Total Target Concentration 0.2

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144504.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:03
Operator : MS/MLC
Sample : AD15713-005
Misc : S,PCB
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:23:48 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

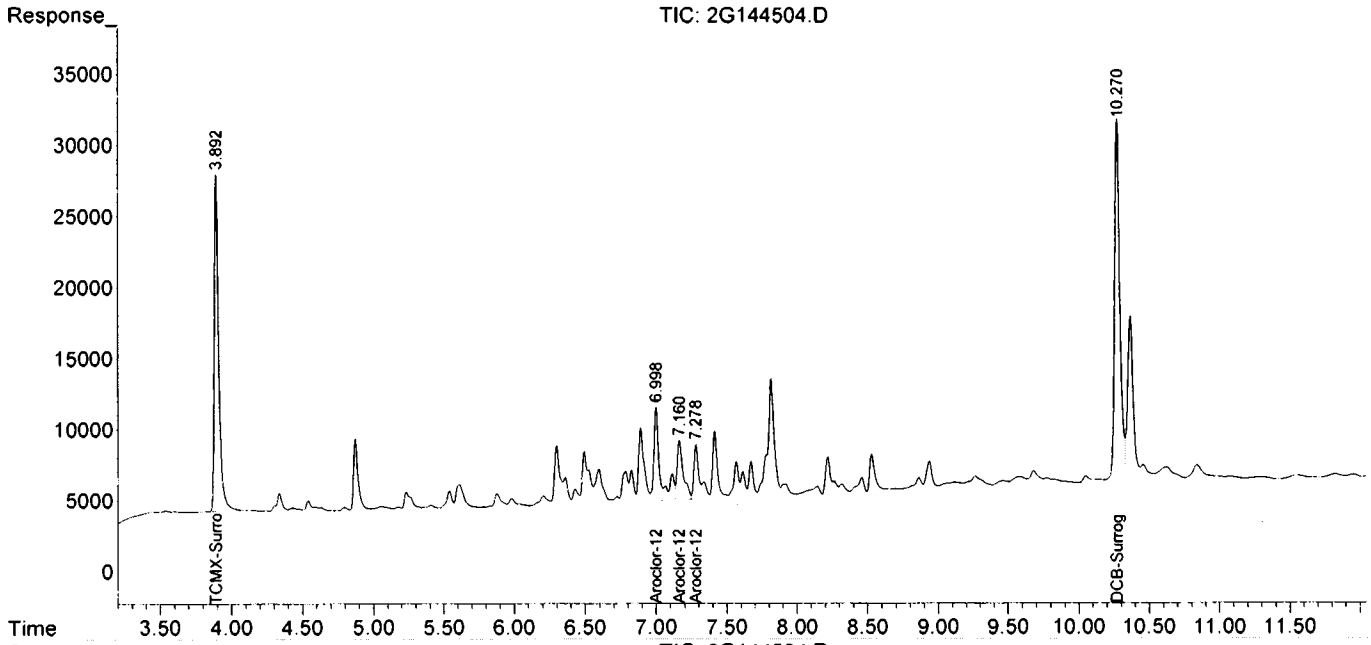
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.894	3.954	506422	1150340	92.510	73.285
31)Aroclor-1254 {2}	7.000	6.928	149998	102449	311.397	395.412 #
32)Aroclor-1254 {3}	7.162	7.323	128329	249102	420.371	338.845
33)Aroclor-1254 {4}	7.278	7.840	113808	114388	274.443m	291.019
45)DCB-Surrogate	10.271	10.958	665333	1251958	101.736	86.811

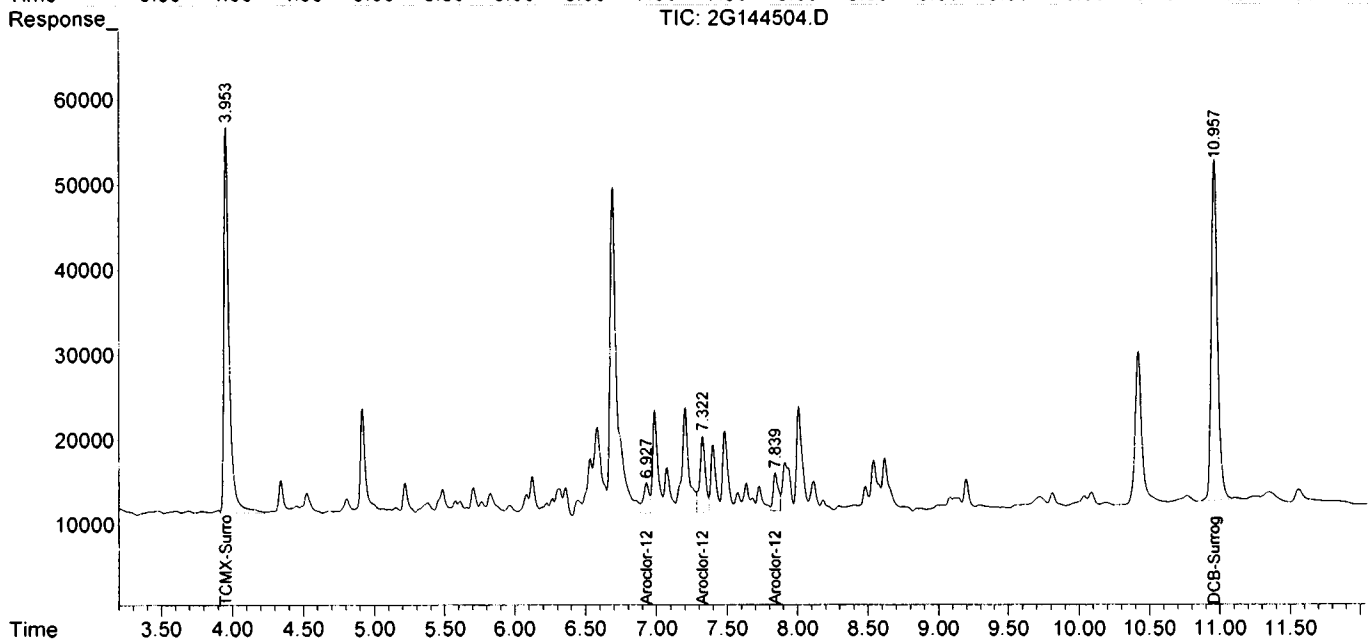
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144504.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:03
Operator : MS/MLC
Sample : AD15713-005
Misc : S,PCB
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:23:48 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: AD15713-007
Client Id: TB-101-4 COMP
Data File: 2G144505.D
Analysis Date: 02/19/20 14:19
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.029	U	11097-69-1	Aroclor-1254	0.029	U
11104-28-2	Aroclor-1221	0.029	U	11096-82-5	Aroclor-1260	0.029	U
11141-16-5	Aroclor-1232	0.029	U	37324-23-5	Aroclor-1262	0.029	U
53469-21-9	Aroclor-1242	0.029	U	11100-14-4	Aroclor-1268	0.029	U
12672-29-6	Aroclor-1248	0.029	U	1336-36-3	Aroclor (Total)	0.029	U

Worksheet #: 547861 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144505.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:19
Operator : MS/MLC
Sample : AD15713-007
Misc : S,PCB
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:43:39 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.894	3.955	677379	1661656	123.739	105.859
45)DCB-Surrogate	10.273	10.961	771372	1582826	117.951m	109.753m

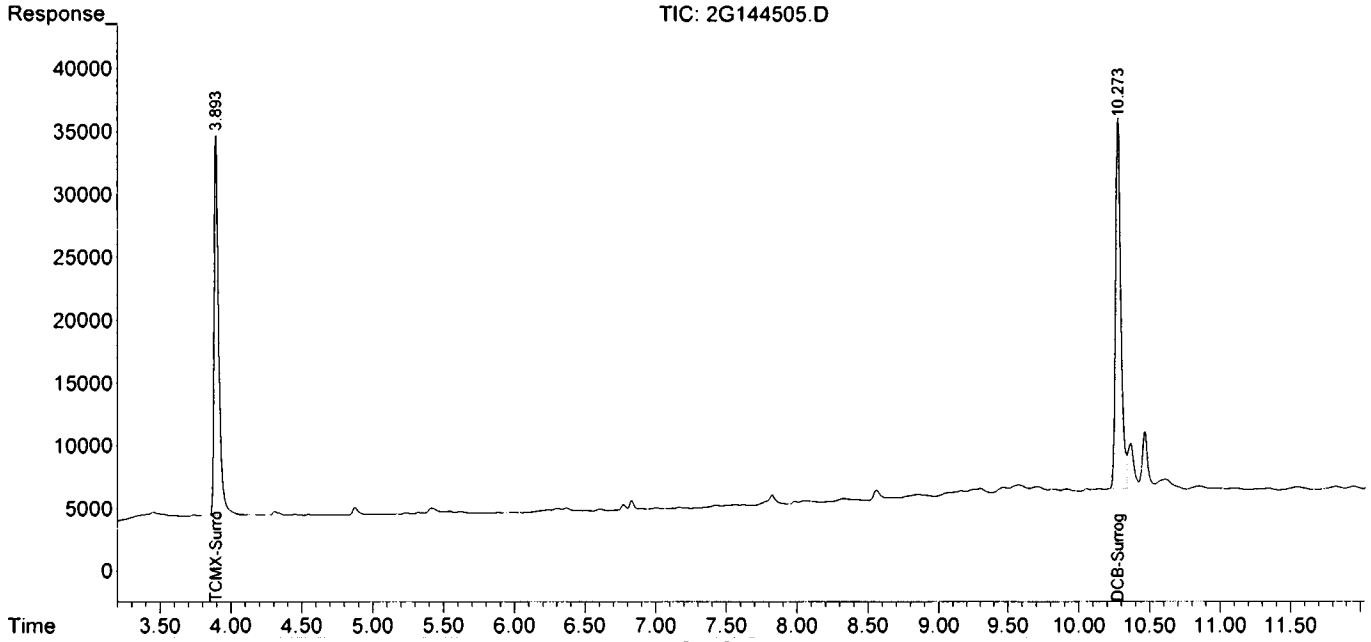
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

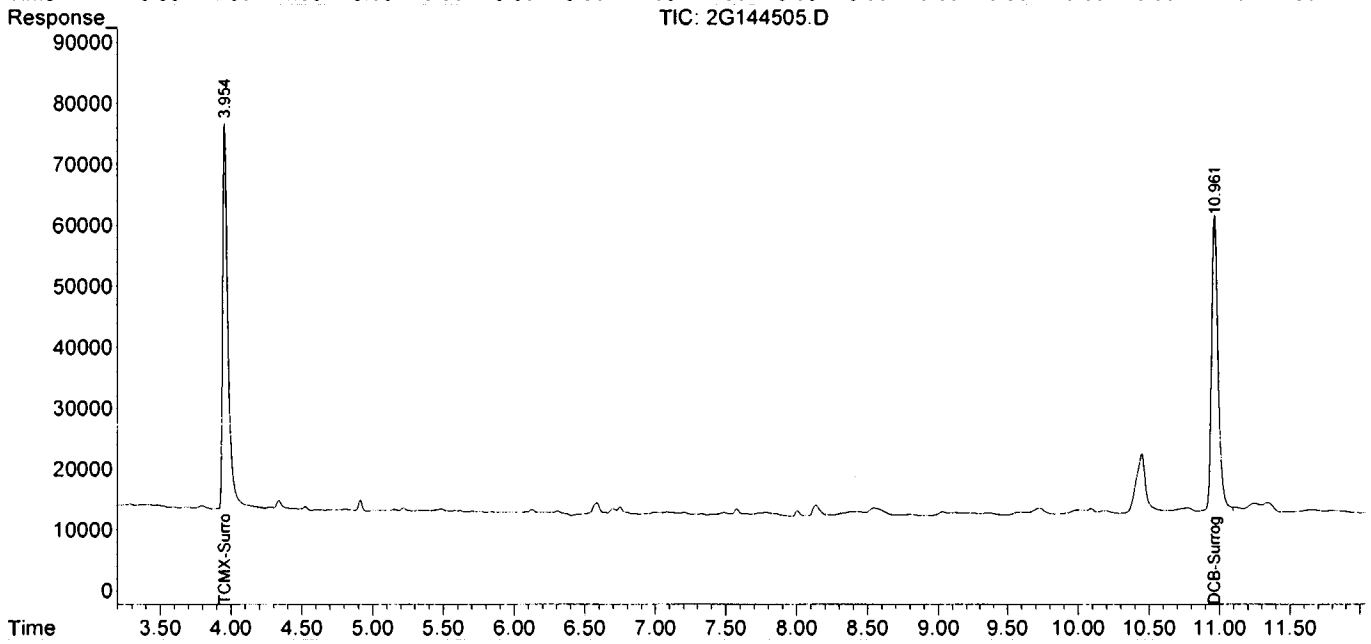
3

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144505.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:19
Operator : MS/MLC
Sample : AD15713-007
Misc : S,PCB
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:43:39 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: AD15713-009
Client Id: TB-101-5 COMP
Data File: 2G144506.D
Analysis Date: 02/19/20 14:36
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.029	U	11097-69-1	Aroclor-1254	0.029	U
11104-28-2	Aroclor-1221	0.029	U	11096-82-5	Aroclor-1260	0.029	U
11141-16-5	Aroclor-1232	0.029	U	37324-23-5	Aroclor-1262	0.029	U
53469-21-9	Aroclor-1242	0.029	U	11100-14-4	Aroclor-1268	0.029	U
12672-29-6	Aroclor-1248	0.029	U	1336-36-3	Aroclor (Total)	0.029	U

Worksheet #: 547861 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144506.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:36
Operator : MS/MLC
Sample : AD15713-009
Misc : S,PCB
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:45:30 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.897	3.956	607131	1488771	110.906	94.845
45)DCB-Surrogate	10.275	10.961	752800	1446897	115.111	100.328m

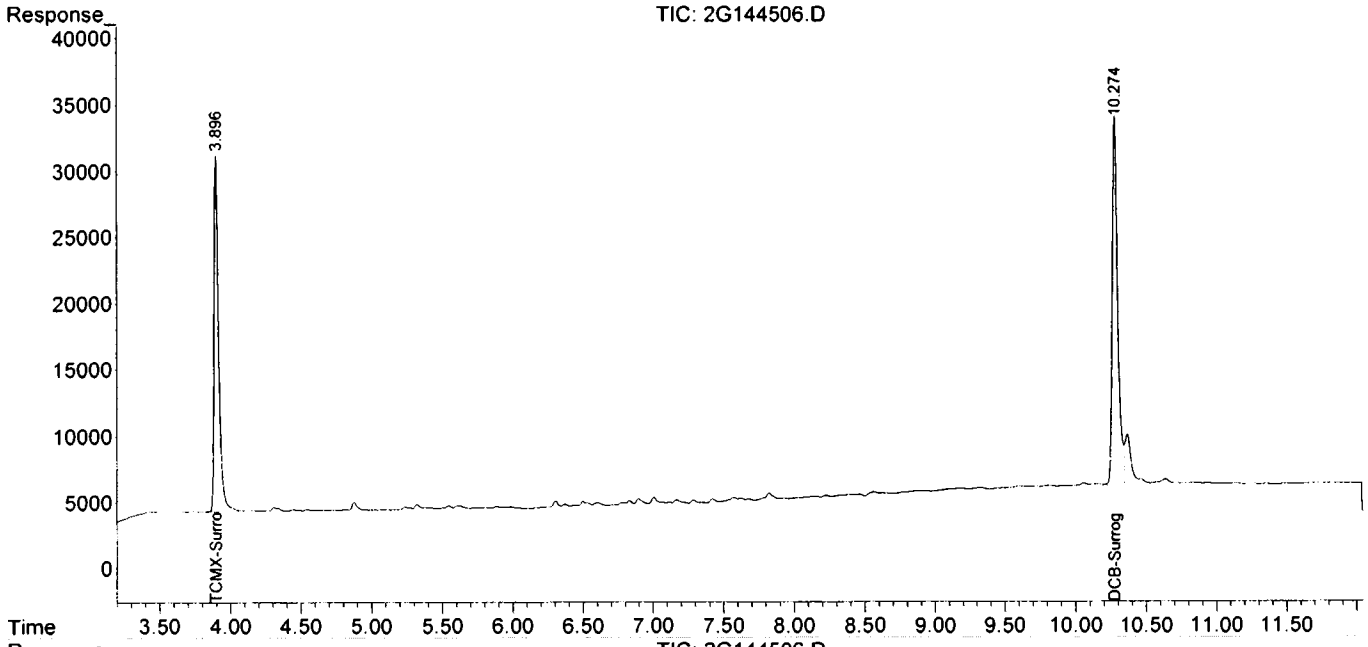
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

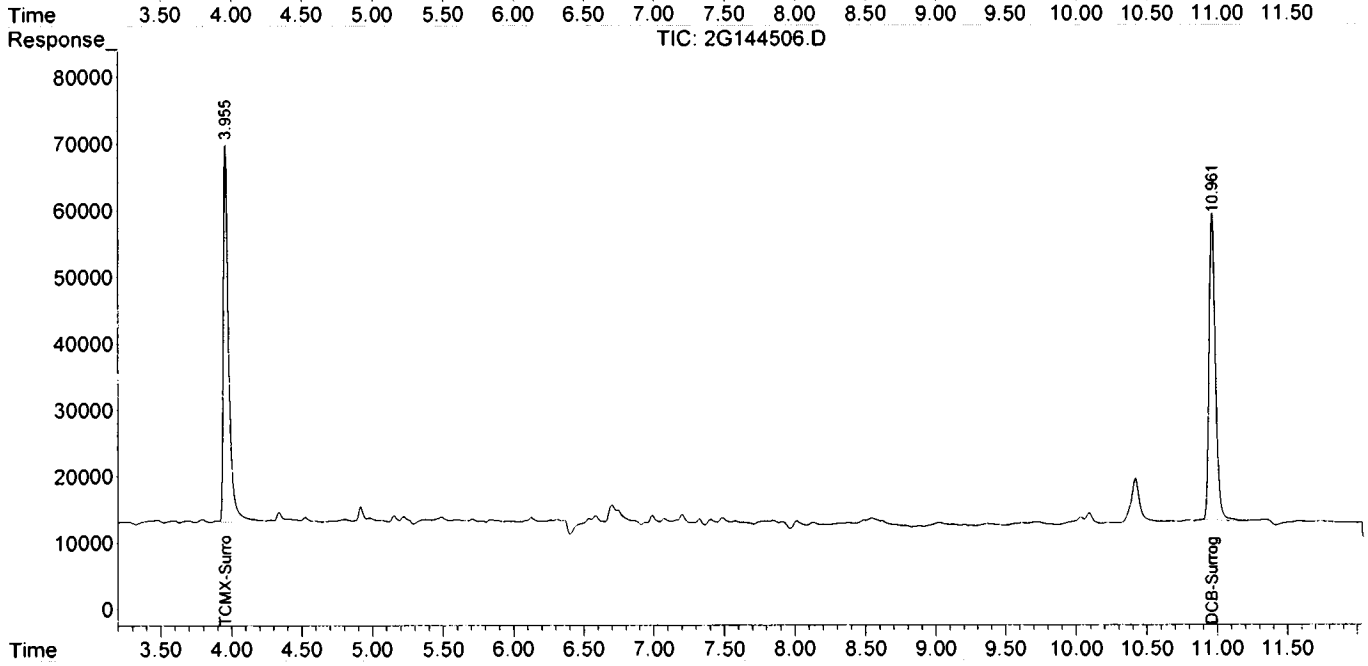
3

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144506.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:36
Operator : MS/MLC
Sample : AD15713-009
Misc : S,PCB
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:45:30 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: AD15713-011
Client Id: TB-101-6 COMP
Data File: 2G144507.D
Analysis Date: 02/19/20 14:51
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.030	U	11097-69-1	Aroclor-1254	0.030	U
11104-28-2	Aroclor-1221	0.030	U	11096-82-5	Aroclor-1260	0.030	U
11141-16-5	Aroclor-1232	0.030	U	37324-23-5	Aroclor-1262	0.030	U
53469-21-9	Aroclor-1242	0.030	U	11100-14-4	Aroclor-1268	0.030	U
12672-29-6	Aroclor-1248	0.030	U	1336-36-3	Aroclor (Total)	0.030	U

Worksheet #: 547861

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144507.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:51
Operator : MS/MLC
Sample : AD15713-011
Misc : S,PCB
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:46:03 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.892	3.953	607175	1507773	110.914	96.056
45)DCB-Surrogate	10.273	10.961	686393	1453132	104.957	100.760

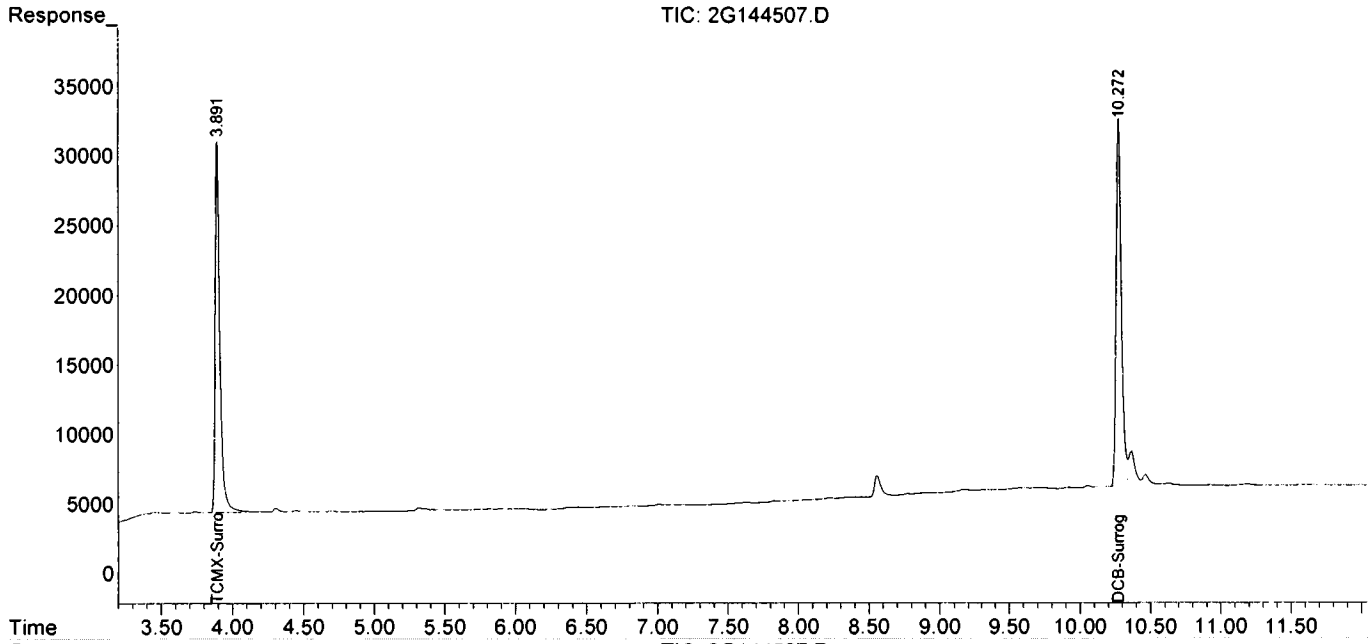
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

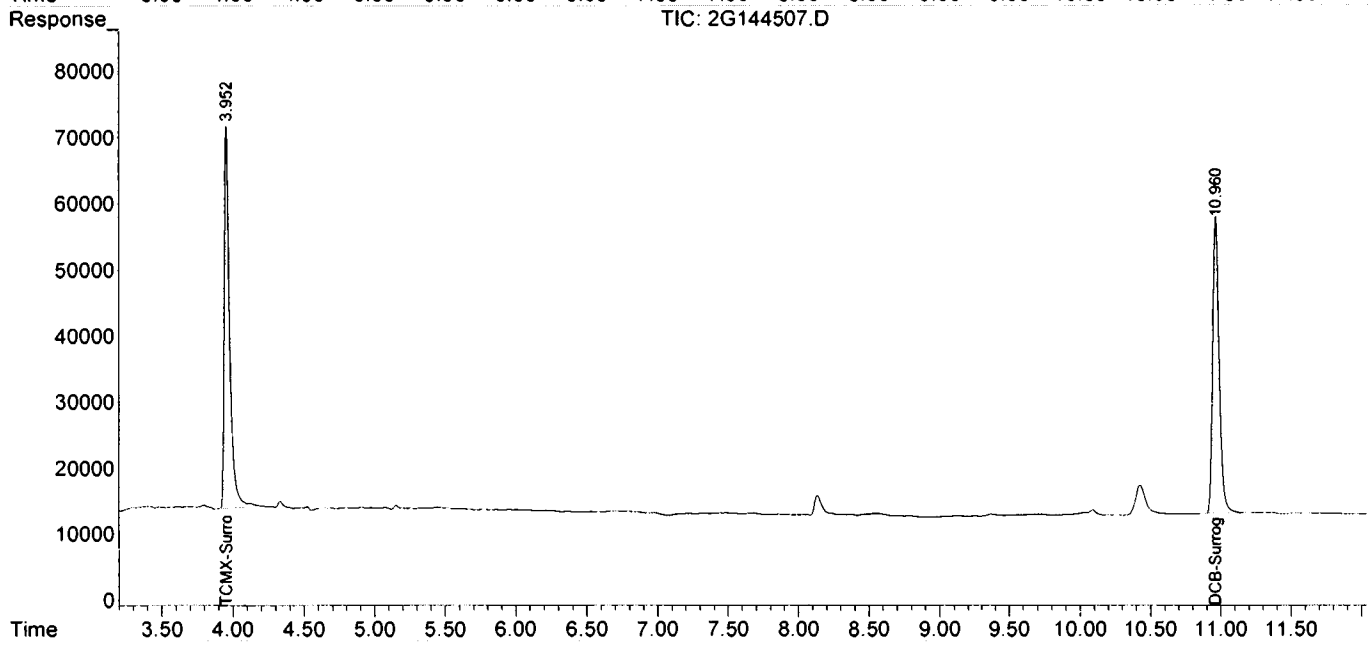
3

Data Path : G:\Gcdata\2020\GC_2\Data\02-19-20\
Data File : 2G144507.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 14:51
Operator : MS/MLC
Sample : AD15713-011
Misc : S,PCB
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Feb 20 10:46:03 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: SMB82151
Client Id:
Data File: 3G121499.D
Analysis Date: 02/19/20 09:14
Date Rec/Extracted: NA-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 547861

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_3\Data\02-19-20\
Data File : 3G121499.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 9:14
Operator : MS/MLC
Sample : SMB82151
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 12:14:41 2020
Quant Method : G:\GCDATA\2020\GC_3\METHODQT\3G_C0106A.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Wed Jan 08 10:11:00 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.739	3.896	985053	753016	92.282	103.178
45)DCB-Surrogate	9.881	10.778	882128	702304	82.675	91.748

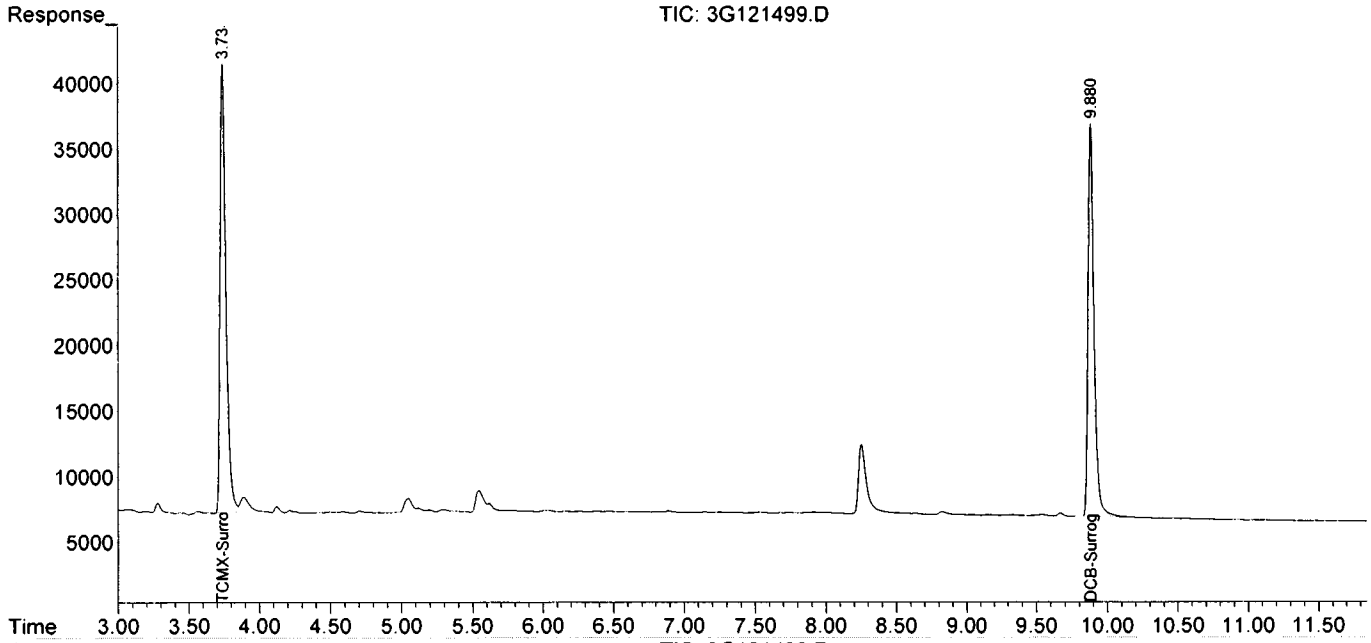
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

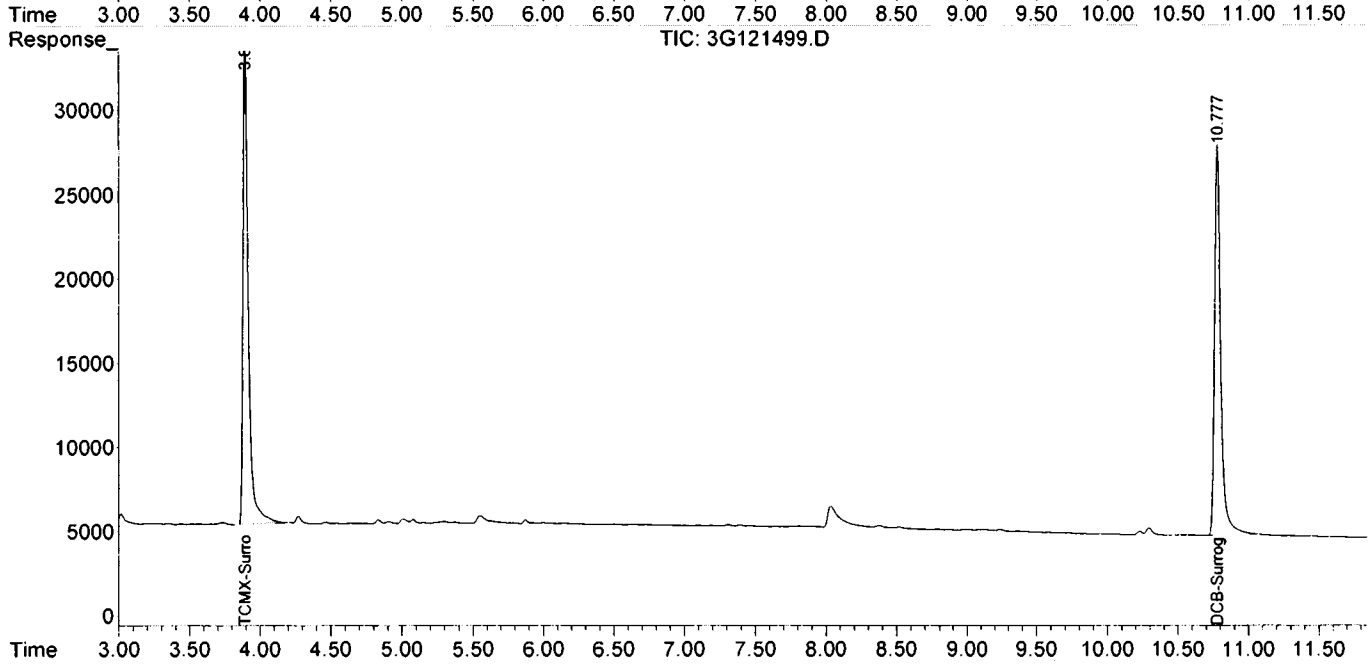
B

Data Path : G:\Gcdata\2020\GC_3\Data\02-19-20\
Data File : 3G121499.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19 Feb 2020 9:14
Operator : MS/MLC
Sample : SMB82151
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 19 12:14:41 2020
Quant Method : G:\GCDATA\2020\GC_3\METHODQT\3G_C0106A.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Wed Jan 08 10:11:00 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8082A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
3G121499.D	SMB82151	S	02/19/20 09:14	1		92	103	83	92		
2G144502.D	AD15713-001	S	02/19/20 13:33	1		93	75	104	89		
2G144503.D	AD15713-003	S	02/19/20 13:48	1		95	79	100	90		
2G144504.D	AD15713-005	S	02/19/20 14:03	1		93	73	102	87		
2G144505.D	AD15713-007	S	02/19/20 14:19	1		124	106	118	110		
2G144506.D	AD15713-009	S	02/19/20 14:36	1		111	95	115	100		
2G144507.D	AD15713-011	S	02/19/20 14:51	1		111	96	105	101		
2G144500.D	AD15713-001(MS)	S	02/19/20 13:02	1		95	70	106	91		
2G144501.D	AD15713-001(MSD)	S	02/19/20 13:18	1		91	69	106	88		
3G121500.D	SMB82151(MS)	S	02/19/20 09:29	1		92	101	84	93		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8082A

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82151

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3G121500.D	SMB82151(MS)	2/19/2020 9:29:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	1148.49	0	1000	115	30	163
Aroclor-1260 -Total	1	1015.71	0	1000	102	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82151

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144500.D	AD15713-001(MS)	2/19/2020 1:02:00 PM
Non Spike(If applicable):	2G144502.D	AD15713-001	2/19/2020 1:33:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	1050.952	0	1000	105	30	163
Aroclor-1260 -Total	1	1084.226	0	1000	108	25	166

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144501.D	AD15713-001(MSD)	2/19/2020 1:18:00 PM
Non Spike(If applicable):	2G144502.D	AD15713-001	2/19/2020 1:33:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	1009.352	0	1000	101	30	163
Aroclor-1260 -Total	1	991.896	0	1000	99	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB82151

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144501.D	AD15713-001(MSD)	2/19/2020 1:18:00 PM
Duplicate(If applicable):	2G144500.D	AD15713-001(MS)	2/19/2020 1:02:00 PM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	1009.352	1050.952	4	40
Aroclor-1260 -Total	1	991.896	1084.226	8.9	37

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB82151
Blank Data File: 3G121499.D
Matrix: Soil

Blank Analysis Date: 02/19/20 09:14
Blank Extraction Date: 02/18/20
(If Applicable)
Method: EPA 8082A

Sample Number	Data File	Analysis Date
AD15713-001	2G144502.D	02/19/20 13:33
AD15713-003	2G144503.D	02/19/20 13:48
AD15713-005	2G144504.D	02/19/20 14:03
AD15713-007	2G144505.D	02/19/20 14:19
AD15713-009	2G144506.D	02/19/20 14:36
AD15713-011	2G144507.D	02/19/20 14:51
SMB82151(MS)	3G121500.D	02/19/20 09:29
AD15713-001(MSD	2G144501.D	02/19/20 13:18
AD15713-001(MS)	2G144500.D	02/19/20 13:02

Form 5

Method: EPA 8082A

Instrument: GC_3

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G120841.D	1000PPB	01/06/20 08:31	Soil					
3G120849.D	CAL 3268@500PPB	01/06/20 15:56	Soil	3G12085	9.8916	0.0131	10.7813	0.0139
3G120850.D	CAL 1242@500PPB	01/06/20 16:12	Soil	3G12085	9.8939	0.0101	10.7831	0.0028
3G120851.D	CAL 1248@500PPB	01/06/20 16:27	Soil	3G12085	9.8942	0.0131	10.7836	0.0074
3G120852.D	CAL 2154@500PPB	01/06/20 16:42	Soil	3G12085	9.8936	0.0071	10.7830	0.0019
3G120853.D	CAL 1262@500PPB	01/06/20 16:57	Soil	3G12085	9.8939	0.0101	10.7822	0.0056
3G120854.D	CAL 1660@50PPB	01/06/20 17:12	Soil	3G12085	9.8929	0	10.7828	0
3G120855.D	CAL 1660@200PPB	01/06/20 17:26	Soil	3G12085	9.8919	0.0101	10.7819	0.0083
3G120856.D	CAL 1660@500PPB	01/06/20 17:41	Soil	3G12085	9.8916	0.0131	10.7827	0.0009
3G120857.D	CAL 1660@1000PPB	01/06/20 17:56	Soil	3G12085	9.8926	0.003	10.7830	0.0019
3G120858.D	CAL 1660@2000PPB	01/06/20 18:11	Soil	3G12085	9.8921	0.0081	10.7818	0.0093
3G120859.D	CAL 1660@4000PPB	01/06/20 18:26	Soil	3G12085	9.8908	0.0212	10.7806	0.0204
3G120860.D	ICV	01/06/20 18:41	Soil	3G12085	9.8928	0.001	10.7838	0.0093
3G120861.D	PEST WS	01/06/20 18:56	Soil	3G12085	0.0000	200*	0.0000	200*

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G144203.D	CAL 2154@500PPB	02/06/20 09:19	Soil	2G14420	10.2896	0.0622	10.9676	0.0109
2G144204.D	CAL 3268@500PPB	02/06/20 09:53	Soil	2G14420	10.2912	0.0778	10.9683	0.0173
2G144205.D	CAL 1242@500PPB	02/06/20 10:10	Soil	2G14420	10.2866	0.0331	10.9672	0.0073
2G144206.D	CAL 1248@500PPB	02/06/20 10:26	Soil	2G14420	10.2833	0.001	10.9662	0.0018
2G144207.D	CAL 1262@500PPB	02/06/20 10:43	Soil	2G14420	10.2864	0.0311	10.9696	0.0292
2G144208.D	CAL 1660@50PPB	02/06/20 10:58	Soil	2G14420	10.2832	0	10.9664	0
2G144209.D	CAL 1660@200PPB	02/06/20 11:14	Soil	2G14420	10.2855	0.0224	10.9692	0.0255
2G144210.D	CAL 1660@500PPB	02/06/20 11:29	Soil	2G14420	10.2849	0.0165	10.9687	0.021
2G144211.D	CAL 1660@1000PPB	02/06/20 11:44	Soil	2G14420	10.2856	0.0233	10.9709	0.041
2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	Soil	2G14420	10.2869	0.036	10.9706	0.0383
2G144213.D	CAL 1660@4000PPB	02/06/20 12:18	Soil	2G14420	10.2853	0.0204	10.9709	0.041
2G144214.D	ICV	02/06/20 12:33	Soil	2G14420	10.2852	0.0194	10.9698	0.031
2G144215.D	PEST WS	02/06/20 12:48	Soil	2G14420	0.0000	200*	0.0000	200*

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082A
Instrument: GC_3 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G121496.D	CAL 1660@2000PPB	02/19/20 07:57	Soil	3G12149	9.8895	0	10.7795	0
3G121497.D	SMB82149	02/19/20 08:44	Soil	3G12149	9.8917	0.0222	10.7813	0.0167
3G121498.D	SMB82149(MS)	02/19/20 08:59	Soil	3G12149	9.8827	0.0688	10.7787	0.0074
3G121499.D	SMB82151	02/19/20 09:14	Soil	3G12149	9.8809	0.087	10.7780	0.0139
3G121500.D	SMB82151(MS)	02/19/20 09:29	Soil	3G12149	9.8805	0.091	10.7779	0.0148
3G121501.D	AD15687-013(MS)	02/19/20 09:44	Soil	3G12149	9.8806	0.09	10.7780	0.0139
3G121502.D	AD15687-013(MSD)	02/19/20 09:58	Soil	3G12149	9.8798	0.0981	10.7784	0.0102
3G121503.D	AD15687-013	02/19/20 10:13	Soil	3G12149	9.8800	0.0961	10.7776	0.0176
3G121504.D	AD15687-001	02/19/20 10:28	Soil	3G12149	9.8775	0.1214	10.7775	0.0186
3G121505.D	AD15687-003	02/19/20 10:43	Soil	3G12149	9.8786	0.1103	10.7770	0.0232
3G121506.D	AD15687-005	02/19/20 10:58	Soil	3G12149	9.8783	0.1133	10.7768	0.025
3G121507.D	AD15687-007	02/19/20 11:13	Soil	3G12149	9.8792	0.1042	10.7775	0.0186
3G121508.D	AD15687-009	02/19/20 11:28	Soil	3G12149	9.8804	0.0921	10.7797	0.0019
3G121509.D	AD15687-011	02/19/20 11:42	Soil	3G12149	9.8792	0.1042	10.7779	0.0148
3G121510.D	AD15687-015	02/19/20 11:57	Soil	3G12149	9.8798	0.0981	10.7783	0.0111
3G121511.D	AD15687-017	02/19/20 12:12	Soil	3G12149	9.8796	0.1002	10.7792	0.0028
3G121512.D	AD15687-019	02/19/20 12:27	Soil	3G12149	9.8795	0.1012	10.7785	0.0093
3G121513.D	AD15658-001	02/19/20 12:42	Soil	3G12149	9.8786	0.1103	10.7766	0.0269
3G121514.D	AD15698-001	02/19/20 12:57	Soil	3G12149	9.8792	0.1042	10.7770	0.0232
3G121515.D	CAL 1660@2000PPB	02/19/20 13:11	Soil	3G12149	9.8804	0.0921	10.7779	0.0148

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G144488.D	CAL 1660@1000PPB	02/19/20 07:59	Soil	2G14448	10.2838	0	10.9650	0
2G144489.D	WMB82157	02/19/20 08:35	Aqueous	2G14448	10.2859	0.0204	10.9688	0.0346
2G144490.D	WMB82157(MS)	02/19/20 08:50	Aqueous	2G14448	10.2798	0.0389	10.9678	0.0255
2G144491.D	AD15700-008	02/19/20 09:07	Aqueous	2G14448	10.2805	0.0321	10.9643	0.0064
2G144492.D	AD15700-009	02/19/20 09:23	Aqueous	2G14448	10.2890	0.0505	10.9697	0.0429
2G144493.D	AD15700-002	02/19/20 09:38	Soil	2G14448	10.2889	0.0496	10.9699	0.0447
2G144494.D	AD15700-005	02/19/20 09:53	Soil	2G14448	10.3225	0.3756	11.0003	0.3214
2G144495.D	AD15700-005(2X)	02/19/20 10:51	Soil	2G14448	10.3141	0.2942	10.9901	0.2286
2G144496.D	1000PPB	02/19/20 11:37	Soil	2G14448	10.2787	0.0496	10.9616	0.031
2G144497.D	CAL 1660@1000PPB	02/19/20 12:09	Soil	2G14448	10.2751	0.0846	10.9622	0.0255
2G144498.D	AD15737-001	02/19/20 12:32	Soil	2G14449	10.2786	0.0341	10.9628	0.0055
2G144499.D	AD15734-001	02/19/20 12:47	Soil	2G14449	10.2712	0.038	10.9578	0.0401
2G144500.D	AD15713-001(MS)	02/19/20 13:02	Soil	2G14449	10.2702	0.0477	10.9576	0.042
2G144501.D	AD15713-001(MSD)	02/19/20 13:18	Soil	2G14449	10.2728	0.0224	10.9601	0.0192
2G144502.D	AD15713-001	02/19/20 13:33	Soil	2G14449	10.2717	0.0331	10.9572	0.0456
2G144503.D	AD15713-003	02/19/20 13:48	Soil	2G14449	10.2725	0.0253	10.9591	0.0283
2G144504.D	AD15713-005	02/19/20 14:03	Soil	2G14449	10.2707	0.0428	10.9580	0.0383
2G144505.D	AD15713-007	02/19/20 14:19	Soil	2G14449	10.2729	0.0214	10.9612	0.0091
2G144506.D	AD15713-009	02/19/20 14:36	Soil	2G14449	10.2751	0	10.9606	0.0146
2G144507.D	AD15713-011	02/19/20 14:51	Soil	2G14449	10.2726	0.0243	10.9608	0.0128
2G144508.D	AD15736-001	02/19/20 15:06	Soil	2G14449	10.2714	0.036	10.9583	0.0356
2G144509.D	AD15751-002	02/19/20 15:21	Soil	2G14449	10.2706	0.0438	10.9575	0.0429
2G144510.D	AD15751-004	02/19/20 15:37	Soil	2G14449	10.2713	0.037	10.9591	0.0283
2G144511.D	AD15751-006	02/19/20 15:54	Soil	2G14449	10.2750	0.001	10.9604	0.0164
2G144512.D	AD15704-001	02/19/20 16:09	Soil	2G14449	10.2712	0.038	10.9582	0.0365
2G144513.D	AD15704-003	02/19/20 16:24	Soil	2G14449	10.2725	0.0253	10.9592	0.0274
2G144514.D	AD15704-005	02/19/20 16:39	Soil	2G14449	10.2721	0.0292	10.9600	0.0201
2G144515.D	AD15714-001	02/19/20 16:55	Soil	2G14449	10.2716	0.0341	10.9591	0.0283
2G144516.D	AD15714-002	02/19/20 17:10	Soil	2G14449	10.2721	0.0292	10.9606	0.0146
2G144517.D	1000PPB	02/19/20 17:25	Soil	2G14449	10.2728	0.0224	10.9618	0.0037
2G144518.D	CAL 1660@2000PPB	02/19/20 17:40	Soil	2G14449	10.2699	0.0506	10.9593	0.0265

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G120854.D	CAL 1660@50PPB	01/06/20 17:12	2	3G120855.D	CAL 1660@200PPB	01/06/20 17:26
3	3G120856.D	CAL 1660@500PPB	01/06/20 17:41	4	3G120857.D	CAL 1660@1000PPB	01/06/20 17:56
5	3G120858.D	CAL 1660@2000PPB	01/06/20 18:11	6	3G120859.D	CAL 1660@4000PPB	01/06/20 18:26
7	3G120849.D	CAL 3268@500PPB	01/06/20 15:56	8	3G120850.D	CAL 1242@500PPB	01/06/20 16:12
9	3G120851.D	CAL 1248@500PPB	01/06/20 16:27	10	3G120852.D	CAL 2154@500PPB	01/06/20 16:42
11	3G120853.D	CAL 1262@500PPB	01/06/20 16:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	1.3035	1.0171	1.0179	1.0168	1.0160	1.0330	----	----	1.07	3.74	1.00	1.00	11	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Avg	0.0186	0.0187	0.0220	0.0227	0.0226	0.0221	----	----	0.0212	4.23	1.00	1.00	9.2	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Avg	0.0490	0.0437	0.0445	0.0437	0.0421	0.0402	----	----	0.0439	4.59	0.999	1.00	6.7	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Avg	0.1024	0.0907	0.0930	0.0916	0.0886	0.0853	----	----	0.0920	5.05	0.999	1.00	6.3	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Avg	0.0311	0.0273	0.0278	0.0287	0.0288	0.0284	----	----	0.0287	5.29	1.00	1.00	4.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	0.0758	0.0619	0.0625	0.0629	0.0620	0.0590	----	----	0.0640	5.40	0.999	1.00	9.2	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Avg	0.0580	0.0566	0.0601	0.0562	0.0554	0.0526	----	----	0.0565	6.89	0.999	1.00	4.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Avg	0.0697	0.0638	0.0697	0.0655	0.0639	0.0610	----	----	0.0656	7.15	0.999	1.00	5.3	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0302	0.0321	0.0390	0.0375	0.0387	0.0383	----	----	0.0360	7.34	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	0.0427	0.0388	0.0458	0.0438	0.0429	0.0417	----	----	0.0427	7.92	1.00	1.00	5.5	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.0741	0.0654	0.0744	0.0715	0.0712	0.0721	----	----	0.0715	8.64	1.00	1.00	4.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.00991	4.03	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.00578	4.17	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0287	4.23	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0187	4.23	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0171	4.59	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0364	5.05	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.0146	5.18	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0167	5.64	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0335	4.23	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0613	4.59	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.132	5.05	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0879	5.40	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0575	5.64	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0162	4.59	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0418	5.05	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.0763	5.40	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0459	5.74	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0517	6.33	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0227	6.53	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.0790	6.74	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0469	6.90	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.0634	7.02	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0277	7.40	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.0763	7.57	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0403	8.57	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 6.98 Avg Rsd Col 2: 5.02

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0256

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G120854.D	CAL 1660@50PPB	01/06/20 17:12	2	3G120855.D	CAL 1660@200PPB	01/06/20 17:26
3	3G120856.D	CAL 1660@500PPB	01/06/20 17:41	4	3G120857.D	CAL 1660@1000PPB	01/06/20 17:56
5	3G120858.D	CAL 1660@2000PPB	01/06/20 18:11	6	3G120859.D	CAL 1660@4000PPB	01/06/20 18:26
7	3G120849.D	CAL 3268@500PPB	01/06/20 15:56	8	3G120850.D	CAL 1242@500PPB	01/06/20 16:12
9	3G120851.D	CAL 1248@500PPB	01/06/20 16:27	10	3G120852.D	CAL 2154@500PPB	01/06/20 16:42
11	3G120853.D	CAL 1262@500PPB	01/06/20 16:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.0855	8.64	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0386	9.34	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.0135	9.68	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.0132	7.92	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.00972	8.24	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.0960	8.82	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0266	8.91	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.300	9.68	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	1.1887	1.0586	1.0990	1.0457	1.0049	1.0047	----	----	1.07	9.89	1.00	1.00	6.5	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	0.6708	0.6596	0.7212	0.7419	0.7688	0.8164	----	----	0.730	3.89	0.999	1.00	8.1	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Avg	0.0141	0.0130	0.0142	0.0134	0.0141	0.0144	----	----	0.0139	4.49	1.00	1.00	4.0	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Avg	0.0331	0.0312	0.0325	0.0312	0.0305	0.0304	----	----	0.0315	4.92	1.00	1.00	3.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Avg	0.0600	0.0547	0.0616	0.0601	0.0594	0.0601	----	----	0.0594	5.30	1.00	1.00	4.0	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Avg	0.0291	0.0251	0.0270	0.0261	0.0257	0.0258	----	----	0.0265	5.63	1.00	1.00	5.4	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Avg	0.0184	0.0169	0.0185	0.0182	0.0185	0.0188	----	----	0.0183	6.00	1.00	1.00	3.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Avg	0.0441	0.0401	0.0433	0.0413	0.0409	0.0407	----	----	0.0418	7.31	1.00	1.00	3.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Avg	0.0461	0.0440	0.0480	0.0458	0.0460	0.0465	----	----	0.0461	7.39	1.00	1.00	2.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Avg	0.0205	0.0192	0.0231	0.0215	0.0232	0.0245	----	----	0.0221	8.02	0.999	1.00	8.9	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.0369	0.0338	0.0385	0.0374	0.0385	0.0403	----	----	0.0376	8.38	0.999	1.00	5.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	0.0336	0.0312	0.0342	0.0345	0.0351	0.0372	----	----	0.0344	9.08	0.999	1.00	5.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.00779	4.27	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.00392	4.43	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0147	4.49	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0101	4.49	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0130	4.92	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.0217	5.30	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.00845	6.00	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.00683	6.14	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0204	4.49	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.0453	4.92	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.0876	5.30	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0382	5.63	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0309	6.00	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.0112	4.92	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.0281	5.30	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0240	5.63	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 6.98 Avg Rsd Col 2: 5.02

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0257

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G120854.D	CAL 1660@50PPB	01/06/20 17:12	2	3G120855.D	CAL 1660@200PPB	01/06/20 17:26
3	3G120856.D	CAL 1660@500PPB	01/06/20 17:41	4	3G120857.D	CAL 1660@1000PPB	01/06/20 17:56
5	3G120858.D	CAL 1660@2000PPB	01/06/20 18:11	6	3G120859.D	CAL 1660@4000PPB	01/06/20 18:26
7	3G120849.D	CAL 3268@500PPB	01/06/20 15:56	8	3G120850.D	CAL 1242@500PPB	01/06/20 16:12
9	3G120851.D	CAL 1248@500PPB	01/06/20 16:27	10	3G120852.D	CAL 2154@500PPB	01/06/20 16:42
11	3G120853.D	CAL 1262@500PPB	01/06/20 16:57				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.0225	6.14	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.0263	6.27	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.0427	6.50	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.0124	6.84	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.0336	7.23	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0150	7.75	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0158	8.44	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.0343	7.81	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.0289	8.97	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.0377	9.08	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.0357	9.68	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.00878	10.23	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.00558	8.48	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.00992	8.52	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.0701	9.42	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.0181	9.58	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.223	10.23	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	0.7953	0.7128	0.7610	0.7548	0.7597	0.8090	----	----	0.765	10.78	0.999	1.00	4.4	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 6.98 Avg Rsd Col 2: 5.02

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0258

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G144208.D	CAL 1660@50PPB	02/06/20 10:58	2	2G144209.D	CAL 1660@200PPB	02/06/20 11:14
3	2G144210.D	CAL 1660@500PPB	02/06/20 11:29	4	2G144211.D	CAL 1660@1000PPB	02/06/20 11:44
5	2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	6	2G144213.D	CAL 1660@4000PPB	02/06/20 12:18
7	2G144204.D	CAL 3268@500PPB	02/06/20 09:53	8	2G144205.D	CAL 1242@500PPB	02/06/20 10:10
9	2G144206.D	CAL 1248@500PPB	02/06/20 10:26	10	2G144203.D	CAL 2154@500PPB	02/06/20 09:19
11	2G144207.D	CAL 1262@500PPB	02/06/20 10:43				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.5421	0.5381	0.5593	0.5649	0.5531	0.5268	----	----	0.547	3.90	0.999	1.00	2.6	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Avg	0.0166	0.0157	0.0149	0.0140	0.0126	0.0114	----	----	0.0143	4.43	0.996	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Avg	0.0343	0.0311	0.0294	0.0272	0.0245	0.0210	----	----	0.0280	4.80	0.991	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Avg	0.0645	0.0569	0.0550	0.0521	0.0481	0.0433	----	----	0.0534	5.27	0.996	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Avg	0.0193	0.0171	0.0174	0.0168	0.0161	0.0149	----	----	0.0170	5.52	0.998	1.00	8.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	0.0474	0.0408	0.0398	0.0373	0.0344	0.0308	----	----	0.0384	5.64	0.996	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Avg	0.0431	0.0359	0.0355	0.0332	0.0303	0.0271	----	----	0.0342	7.17	0.996	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Avg	0.0498	0.0415	0.0408	0.0382	0.0351	0.0316	----	----	0.0395	7.42	0.996	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0276	0.0209	0.0212	0.0209	0.0202	0.0193	----	----	0.0217	7.62	0.999	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	0.0328	0.0307	0.0280	0.0269	0.0253	0.0233	----	----	0.0279	8.22	0.998	1.00	12	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.0492	0.0396	0.0464	0.0440	0.0417	0.0397	----	----	0.0435	8.95	0.999	1.00	8.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.00692	4.22	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.00448	4.37	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0186	4.44	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0135	4.44	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0123	4.81	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0219	5.28	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.00990	5.42	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0104	5.90	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0221	4.43	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0404	4.80	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.0771	5.28	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0251	5.64	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0351	5.89	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0114	4.81	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0280	5.28	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.0486	5.63	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0262	6.00	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0288	6.61	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0144	6.80	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.0482	7.01	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0305	7.18	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.0415	7.29	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0251	7.69	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.0448	7.85	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0271	8.87	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 12.33 Avg Rsd Col 2: 16.61

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number

Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)

Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000

Initial Calibration Criteria: either %RSD <=20 or Corr >= .995

Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0259

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G144208.D	CAL 1660@50PPB	02/06/20 10:58	2	2G144209.D	CAL 1660@200PPB	02/06/20 11:14
3	2G144210.D	CAL 1660@500PPB	02/06/20 11:29	4	2G144211.D	CAL 1660@1000PPB	02/06/20 11:44
5	2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	6	2G144213.D	CAL 1660@4000PPB	02/06/20 12:18
7	2G144204.D	CAL 3268@500PPB	02/06/20 09:53	8	2G144205.D	CAL 1242@500PPB	02/06/20 10:10
9	2G144206.D	CAL 1248@500PPB	02/06/20 10:26	10	2G144203.D	CAL 2154@500PPB	02/06/20 09:19
11	2G144207.D	CAL 1262@500PPB	02/06/20 10:43				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.0545	8.94	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0242	9.69	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.00980	10.06	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.00719	8.21	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.00739	8.54	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.0624	9.12	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0199	9.23	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.185	10.07	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	0.7669	0.6719	0.6738	0.6444	0.6046	0.5621	----	----	0.654	10.28	0.998	1.00	11	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	1.7006	1.4886	1.6088	1.6361	1.5706	1.4131	----	----	1.57	3.96	0.996	1.00	6.6	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Avg	0.0386	0.0352	0.0380	0.0336	0.0317	0.0276	----	----	0.0342	4.57	0.993	1.00	12	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	LinF	0.0927	0.0801	0.0770	0.0674	0.0601	0.0517	----	----	0.0715	4.99	0.992	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Avg	0.1969	0.1643	0.1597	0.1423	0.1301	0.1140	----	----	0.151	5.38	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Avg	0.0807	0.0682	0.0666	0.0592	0.0532	0.0470	----	----	0.0625	5.71	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Avg	0.0595	0.0487	0.0481	0.0435	0.0397	0.0349	----	----	0.0458	6.08	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	LinF	0.1219	0.0980	0.0920	0.0837	0.0745	0.0655	----	----	0.0893	7.40	0.994	1.00	22	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	LinF	0.1315	0.1025	0.1003	0.0888	0.0813	0.0728	----	----	0.0962	7.49	0.996	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	LinF	0.0608	0.0472	0.0432	0.0400	0.0369	0.0340	----	----	0.0437	8.12	0.998	1.00	22	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.0946	0.0802	0.0799	0.0746	0.0726	0.0636	----	----	0.0776	8.48	0.995	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	0.0738	0.0704	0.0706	0.0668	0.0624	0.0576	----	----	0.0670	9.20	0.998	1.00	9.0	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.0166	4.35	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.00977	4.50	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0333	4.57	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0259	4.57	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0296	4.99	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.0570	5.38	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0255	5.71	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.0169	6.23	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0510	4.57	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.0962	4.99	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.199	5.38	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0835	5.71	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0704	6.08	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.0258	5.00	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.0726	5.38	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0539	5.71	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 12.33 Avg Rsd Col 2: 16.61

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 · Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0260

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G144208.D	CAL 1660@50PPB	02/06/20 10:58	2	2G144209.D	CAL 1660@200PPB	02/06/20 11:14
3	2G144210.D	CAL 1660@500PPB	02/06/20 11:29	4	2G144211.D	CAL 1660@1000PPB	02/06/20 11:44
5	2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	6	2G144213.D	CAL 1660@4000PPB	02/06/20 12:18
7	2G144204.D	CAL 3268@500PPB	02/06/20 09:53	8	2G144205.D	CAL 1242@500PPB	02/06/20 10:10
9	2G144206.D	CAL 1248@500PPB	02/06/20 10:26	10	2G144203.D	CAL 2154@500PPB	02/06/20 09:19
11	2G144207.D	CAL 1262@500PPB	02/06/20 10:43				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.0544	6.23	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.0651	6.36	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.0854	6.59	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.0259	6.93	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.0735	7.33	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0393	7.85	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0328	8.55	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.0776	7.91	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.0612	9.08	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.0699	9.20	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.0719	9.82	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.0221	10.39	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.0104	8.58	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.0211	8.62	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.120	9.55	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.0327	9.72	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.373	10.39	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	1.8060	1.5222	1.4882	1.3780	1.2809	1.1774	----	----	1.44	10.97	0.998	1.00	15	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 12.33 Avg Rsd Col 2: 16.61

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 · Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0261

Form7
Continuing Calibration

Method: EPA 8082A

Data File:				2G144497.D			2G144518.D			3G121496.D			3G121515.D						
Method:				8082			8082			8082			8082						
Calibration Name:				CAL 1660@1000PP			CAL 1660@2000PP			CAL 1660@2000PP			CAL 1660@2000PP						
Calibration Date/Time				02/19/20 12:09			02/19/20 17:40			02/19/20 07:57			02/19/20 13:11						
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	20	1	0	100.7	100	0.7	212.8	200	6.4	198.3	200	0.9	207.7	200	3.9			
Aroclor-1016	20	1	1	998.1	1000	0.2	1950	2000	2.5	2627	2000	31.3*	2677	2000	33.9*			
Aroclor-1016	20	1	2	960.9	1000	3.9	1867	2000	6.6	2187	2000	9.4	2272	2000	13.6			
Aroclor-1016	20	1	3	949	1000	5.1	1912	2000	4.4	2061	2000	3.1	2168	2000	8.4			
Aroclor-1016	20	1	4	970.1	1000	3.0	2031	2000	1.5	2202	2000	10.1	2321	2000	16.1			
Aroclor-1016	20	1	5	952.6	1000	4.7	1913	2000	4.4	2147	2000	7.3	2313	2000	15.7			
Aroclor-1260	20	1	1	928.3	1000	7.2	1895	2000	5.2	2006	2000	0.3	2164	2000	8.2			
Aroclor-1260	20	1	2	924.7	1000	7.5	1906	2000	4.7	1967	2000	1.7	2118	2000	5.9			
Aroclor-1260	20	1	3	916.8	1000	8.3	2022	2000	1.1	2117	2000	5.9	2324	2000	16.2			
Aroclor-1260	20	1	4	903.9	1000	9.6	1927	2000	3.7	2012	2000	0.6	2144	2000	7.2			
Aroclor-1260	20	1	5	923.8	1000	7.6	2025	2000	1.2	1822	2000	8.9	2047	2000	2.3			
DCB-Surrogate	20	1	0	96.4	100	3.6	204.6	200	2.3	145.3	200	27.4*	172.8	200	13.6			
Average Difference	20	1	0			5.1			3.7			8.9			12.1			
TCMX-Surrogate	20	2	0	85.44	100	14.6	197.1	200	1.4	200.4	200	0.2	230.6	200	15.3			
Aroclor-1016	20	2	1	865.9	1000	13.4	1924	2000	3.8	2266	2000	13.3	2502	2000	25.1*			
Aroclor-1016	20	2	2	1104	1000	10.4	2276	2000	13.8	2033	2000	1.6	2399	2000	19.9			
Aroclor-1016	20	2	3	829.6	1000	17.0	1766	2000	11.7	1955	2000	2.2	2346	2000	17.3			
Aroclor-1016	20	2	4	816.9	1000	18.3	1767	2000	11.7	1935	2000	3.3	2287	2000	14.3			
Aroclor-1016	20	2	5	826.0	1000	17.4	1792	2000	10.4	2081	2000	4.1	2409	2000	20.4			
Aroclor-1260	20	2	1	1042	1000	4.2	2293	2000	14.6	1901	2000	5.0	2245	2000	12.3			
Aroclor-1260	20	2	2	1043	1000	4.3	2316	2000	15.8	1896	2000	5.2	2287	2000	14.4			
Aroclor-1260	20	2	3	1014	1000	1.4	2410	2000	20.5*	1693	2000	15.4	2230	2000	11.5			
Aroclor-1260	20	2	4	803.0	1000	19.7	1858	2000	7.1	2059	2000	2.9	2293	2000	14.6			
Aroclor-1260	20	2	5	801.7	1000	19.8	2036	2000	1.8	1893	2000	5.4	2263	2000	13.2			
DCB-Surrogate	20	2	0	89.09	100	10.9	202.4	200	1.2	164.6	200	17.7	192.1	200	4.0			
Average Difference	20	2	0			12.6			9.5			6.4			15.2			

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
RtWindow Summary

Method: EPA 8082A

Data File:			2G144208.D		3G120854.D		2G144497.D		3G121496.D			
Calibration Name:			CAL 1660@50PPB		CAL 1660@50PPB		CAL 1660@1000PPB		CAL 1660@2000PPB			
Calibration Date/Time			2/6/2020 10:58:00 AM		1/6/2020 5:12:00 PM		2/19/2020 12:09:00 PM		2/19/2020 7:57:00 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	3.90	(3.84 - 3.96)	3.74	(3.68 - 3.80)	3.90	(3.84 - 3.96)	3.74	(3.68 - 3.80)		
Aroclor-1016	1	1	4.43	(4.39 - 4.47)	4.23	(4.19 - 4.27)	4.42	(4.38 - 4.46)	4.23	(4.19 - 4.27)		
Aroclor-1016	1	2	4.80	(4.76 - 4.84)	4.59	(4.55 - 4.63)	4.80	(4.76 - 4.84)	4.59	(4.55 - 4.63)		
Aroclor-1016	1	3	5.27	(5.23 - 5.31)	5.05	(5.01 - 5.09)	5.27	(5.23 - 5.31)	5.05	(5.01 - 5.09)		
Aroclor-1016	1	4	5.53	(5.49 - 5.57)	5.29	(5.25 - 5.33)	5.52	(5.48 - 5.56)	5.29	(5.25 - 5.33)		
Aroclor-1016	1	5	5.64	(5.60 - 5.68)	5.40	(5.36 - 5.44)	5.64	(5.60 - 5.68)	5.40	(5.36 - 5.44)		
Aroclor-1260	1	1	7.17	(7.13 - 7.21)	6.89	(6.85 - 6.93)	7.16	(7.12 - 7.20)	6.89	(6.85 - 6.93)		
Aroclor-1260	1	2	7.42	(7.38 - 7.46)	7.15	(7.11 - 7.19)	7.41	(7.37 - 7.45)	7.14	(7.10 - 7.18)		
Aroclor-1260	1	3	7.62	(7.58 - 7.66)	7.34	(7.30 - 7.38)	7.62	(7.58 - 7.66)	7.34	(7.30 - 7.38)		
Aroclor-1260	1	4	8.22	(8.18 - 8.26)	7.92	(7.88 - 7.96)	8.21	(8.17 - 8.25)	7.92	(7.88 - 7.96)		
Aroclor-1260	1	5	8.95	(8.91 - 8.99)	8.64	(8.60 - 8.68)	8.94	(8.90 - 8.98)	8.64	(8.60 - 8.68)		
Aroclor-1221	1	1	4.22	(4.18 - 4.26)	4.03	(3.99 - 4.07)	4.21	(4.17 - 4.25)				
Aroclor-1221	1	2	4.37	(4.33 - 4.41)	4.17	(4.13 - 4.21)	4.36	(4.32 - 4.40)				
Aroclor-1221	1	3	4.44	(4.40 - 4.48)	4.23	(4.19 - 4.27)	4.42	(4.38 - 4.46)				
Aroclor-1232	1	1	4.44	(4.40 - 4.48)	4.23	(4.19 - 4.27)	4.42	(4.38 - 4.46)				
Aroclor-1232	1	2	4.81	(4.77 - 4.85)	4.59	(4.55 - 4.63)	4.80	(4.76 - 4.84)				
Aroclor-1232	1	3	5.28	(5.24 - 5.32)	5.05	(5.01 - 5.09)	5.27	(5.23 - 5.31)				
Aroclor-1232	1	4	5.42	(5.38 - 5.46)	5.18	(5.14 - 5.22)	5.41	(5.37 - 5.45)				
Aroclor-1232	1	5	5.89	(5.85 - 5.93)	5.64	(5.60 - 5.68)	5.88	(5.84 - 5.92)				
Aroclor-1242	1	1	4.43	(4.39 - 4.47)	4.23	(4.19 - 4.27)	4.42	(4.38 - 4.46)				
Aroclor-1242	1	2	4.80	(4.76 - 4.84)	4.59	(4.55 - 4.63)	4.80	(4.76 - 4.84)				
Aroclor-1242	1	3	5.28	(5.24 - 5.32)	5.05	(5.01 - 5.09)	5.27	(5.23 - 5.31)				
Aroclor-1242	1	4	5.64	(5.60 - 5.68)	5.40	(5.36 - 5.44)	5.64	(5.60 - 5.68)				
Aroclor-1242	1	5	5.89	(5.85 - 5.93)	5.64	(5.60 - 5.68)	5.88	(5.84 - 5.92)				
Aroclor-1248	1	1	4.80	(4.76 - 4.84)	4.59	(4.55 - 4.63)	4.80	(4.76 - 4.84)				
Aroclor-1248	1	2	5.27	(5.23 - 5.31)	5.05	(5.01 - 5.09)	5.27	(5.23 - 5.31)				
Aroclor-1248	1	3	5.62	(5.58 - 5.66)	5.40	(5.36 - 5.44)	5.64	(5.60 - 5.68)				
Aroclor-1248	1	4	5.99	(5.95 - 6.03)	5.74	(5.70 - 5.78)	5.98	(5.94 - 6.02)				
Aroclor-1248	1	5	6.60	(6.56 - 6.64)	6.33	(6.29 - 6.37)	6.60	(6.56 - 6.64)				
Aroclor-1254	1	1	6.80	(6.76 - 6.84)	6.53	(6.49 - 6.57)	6.79	(6.75 - 6.83)				
Aroclor-1254	1	2	7.01	(6.97 - 7.05)	6.74	(6.70 - 6.78)	7.00	(6.96 - 7.04)				
Aroclor-1254	1	3	7.18	(7.14 - 7.22)	6.90	(6.86 - 6.94)	7.16	(7.12 - 7.20)				
Aroclor-1254	1	4	7.29	(7.25 - 7.33)	7.02	(6.98 - 7.06)	7.29	(7.24 - 7.32)				
Aroclor-1254	1	5	7.69	(7.65 - 7.73)	7.40	(7.36 - 7.44)	7.75	(7.71 - 7.79)				
Aroclor-1262	1	1	7.85	(7.81 - 7.89)	7.57	(7.53 - 7.61)	7.84	(7.80 - 7.88)				
Aroclor-1262	1	2	8.87	(8.83 - 8.91)	8.57	(8.53 - 8.61)	8.86	(8.82 - 8.90)				
Aroclor-1262	1	3	8.94	(8.90 - 8.98)	8.64	(8.60 - 8.68)	8.94	(8.90 - 8.98)				
Aroclor-1262	1	4	9.69	(9.65 - 9.73)	9.34	(9.30 - 9.38)	9.68	(9.64 - 9.72)				
Aroclor-1262	1	5	10.06	(10.02 - 10.10)	9.68	(9.64 - 9.72)	10.05	(10.01 - 10.09)				
Aroclor-1268	1	1	8.22	(8.18 - 8.26)	7.92	(7.88 - 7.96)	8.27	(8.23 - 8.31)				
Aroclor-1268	1	2	8.54	(8.50 - 8.58)	8.24	(8.20 - 8.28)						
Aroclor-1268	1	3	9.12	(9.08 - 9.16)	8.82	(8.78 - 8.86)						
Aroclor-1268	1	4	9.23	(9.19 - 9.27)	8.91	(8.87 - 8.95)	9.32	(9.28 - 9.36)				
Aroclor-1268	1	5	10.07	(10.03 - 10.11)	9.68	(9.64 - 9.72)						
DCB-Surrogate	1	0	10.29	(10.23 - 10.35)	9.89	(9.83 - 9.95)	10.28	(10.22 - 10.34)	9.89	(9.83 - 9.95)		
TCMX-Surrogate	2	0	3.96	(3.90 - 4.02)	3.89	(3.83 - 3.95)	3.96	(3.90 - 4.02)	3.90	(3.84 - 3.96)		
Aroclor-1016	2	1	4.57	(4.53 - 4.61)	4.49	(4.45 - 4.53)	4.56	(4.52 - 4.60)	4.49	(4.45 - 4.53)		
Aroclor-1016	2	2	4.99	(4.95 - 5.03)	4.92	(4.88 - 4.96)	4.99	(4.95 - 5.03)	4.92	(4.88 - 4.96)		
Aroclor-1016	2	3	5.38	(5.34 - 5.42)	5.30	(5.26 - 5.34)	5.37	(5.33 - 5.41)	5.30	(5.26 - 5.34)		
Aroclor-1016	2	4	5.71	(5.67 - 5.75)	5.62	(5.58 - 5.66)	5.70	(5.66 - 5.74)	5.63	(5.59 - 5.67)		
Aroclor-1016	2	5	6.08	(6.04 - 6.12)	6.00	(5.96 - 6.04)	6.08	(6.04 - 6.12)	6.00	(5.96 - 6.04)		
Aroclor-1260	2	1	7.40	(7.36 - 7.44)	7.31	(7.27 - 7.35)	7.40	(7.36 - 7.44)	7.31	(7.27 - 7.35)		
Aroclor-1260	2	2	7.49	(7.45 - 7.53)	7.39	(7.35 - 7.43)	7.48	(7.44 - 7.52)	7.39	(7.35 - 7.43)		
Aroclor-1260	2	3	8.12	(8.08 - 8.16)	8.02	(7.98 - 8.06)	8.12	(8.08 - 8.16)	8.02	(7.98 - 8.06)		
Aroclor-1260	2	4	8.49	(8.45 - 8.53)	8.38	(8.34 - 8.42)	8.48	(8.44 - 8.52)	8.38	(8.34 - 8.42)		
Aroclor-1260	2	5	9.20	(9.16 - 9.24)	9.08	(9.04 - 9.12)	9.20	(9.16 - 9.24)	9.08	(9.04 - 9.12)		
Aroclor-1221	2	1	4.35	(4.31 - 4.39)	4.27	(4.23 - 4.31)	4.34	(4.30 - 4.38)				
Aroclor-1221	2	2	4.50	(4.46 - 4.54)	4.43	(4.39 - 4.47)	4.49	(4.45 - 4.53)				
Aroclor-1221	2	3	4.57	(4.53 - 4.61)	4.49	(4.45 - 4.53)	4.56	(4.52 - 4.60)				
Aroclor-1232	2	1	4.57	(4.53 - 4.61)	4.49	(4.45 - 4.53)	4.56	(4.52 - 4.60)				
Aroclor-1232	2	2	4.99	(4.95 - 5.03)	4.92	(4.88 - 4.96)	4.99	(4.95 - 5.03)				
Aroclor-1232	2	3	5.38	(5.34 - 5.42)	5.30	(5.26 - 5.34)	5.37	(5.33 - 5.41)				
Aroclor-1232	2	4	5.71	(5.67 - 5.75)	6.00	(5.96 - 6.04)	5.70	(5.66 - 5.74)				
Aroclor-1232	2	5	6.23	(6.19 - 6.27)	6.14	(6.10 - 6.18)	6.22	(6.18 - 6.26)				
Aroclor-1242	2	1	4.57	(4.53 - 4.61)	4.49	(4.45 - 4.53)	4.56	(4.52 - 4.60)				
Aroclor-1242	2	2	4.99	(4.95 - 5.03)	4.92	(4.88 - 4.96)	4.99	(4.95 - 5.03)				
Aroclor-1242	2	3	5.38	(5.34 - 5.42)	5.30	(5.26 - 5.34)	5.37	(5.33 - 5.41)				
Aroclor-1242	2	4	5.71	(5.67 - 5.75)	5.63	(5.59 - 5.67)	5.70	(5.66 - 5.74)				
Aroclor-1242	2	5	6.08	(6.04 - 6.12)	6.00	(5.96 - 6.04)	6.08	(6.04 - 6.12)				
Aroclor-1248	2	1	4.99	(4.95 - 5.03)	4.92	(4.88 - 4.96)	4.99	(4.95 - 5.03)				
Aroclor-1248	2	2	5.38	(5.34 - 5.42)	5.30	(5.26 - 5.34)	5.37	(5.33 - 5.41)				
Aroclor-1248	2	3	5.71	(5.67 - 5.75)	5.63	(5.59 - 5.67)	5.70	(5.66 - 5.74)				
Aroclor-1248	2	4	6.23	(6.19 - 6.27)	6.14	(6.10 - 6.18)	6.22	(6.18 - 6.26)				
Aroclor-1248	2	5	6.36	(6.32 - 6.40)	6.27	(6.23 - 6.31)	6.36	(6.32 - 6.40)				
Aroclor-1254	2	1	6.59	(6.55 - 6.63)	6.50	(6.46 - 6.54)	6.58	(6.54 - 6.62)				
Aroclor-1254	2	2	6.93	(6.89 - 6.97)	6.84	(6.80 - 6.88)	6.93	(6.89 - 6.97)				
Aroclor-1254	2	3	7.33	(7.29 - 7.37)	7.23	(7.19 - 7.27)	7.32	(7.28 - 7.36)				
Aroclor-1254	2	4	7.85	(7.81 - 7.89)	7.75	(7.71 - 7.79)	7.91	(7.87 - 7.95)				
Aroclor-1254	2	5	8.54	(8.50 - 8.58)	8.44	(8.40 - 8.48)	8.48	(8.44 - 8.52)				
Aroclor-1262	2	1	7.91	(7.87 - 7.95)	7.81	(7.77 - 7.85)	7.91	(7.87 - 7.95)				
Aroclor-1262	2	2	9.08	(9.04 - 9.12)	8.97	(8.93 - 9.01)	9.08	(9.04 - 9.12)				
Aroclor-1262	2	3	9.20	(9.16 - 9.24)	9.08	(9.04 - 9.12)	9.20	(9.16 - 9.24)				
Aroclor-1262	2	4	9.82	(9.78 - 9.86)	9.68	(9.64 - 9.72)	9.81	(9.77 - 9.85)				
Aroclor-1262	2	5	10.39	(10.35 - 10.43)	10.23	(10.19 - 10.27)	10.39	(10.35 - 10.43)				
Aroclor-1268	2	1	8.58	(8.54 - 8.62)	8.48	(8.44 - 8.52)	8.62	(8.58 - 8.66)				
Aroclor-1268	2	2	8.62	(8.58 - 8.66)	8.52	(8.48 - 8.56)	8.62	(8.58 - 8.66)				
Aroclor-1268	2	3	9.55	(9.51 - 9.59)	9.42	(9.38 - 9.46)	9.55	(9.51 - 9.59)				
Aroclor-1268	2	4	9.72	(9.68 - 9.76)	9.58	(9.54 - 9.62)	9.71	(9.67 - 9.75)				
Aroclor-1268	2	5	10.39	(10.35 - 10.43)	10.23	(10.19 - 10.27)	10.39	(10.35 - 10.43)				
DCB-Surrogate	2	0	10.97	(10.91 - 11.03)	10.78	(10.72 - 10.84)	10.96	(10.90 - 11.02)	10.78	(10.72 - 10.84)		

Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15713-001
Client Id: TB-101-1 COMP
Data File: 6G106814.D
Analysis Date: 02/20/20 04:00
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 92

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0054	U	53494-70-5	Endrin Ketone	0.0054	U
309-00-2	Aldrin	0.0054	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0054	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0054	U
319-86-8	delta-BHC	0.0054	U	72-43-5	Methoxychlor	0.0054	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0027	U
959-98-8	Endosulfan I	0.0054	U	**72-55-9**	**(^)p,p'-DDE**	**0.0027**	**0.031 d**
33213-65-9	Endosulfan II	0.0054	U	50-29-3	p,p'-DDT	0.0027	U
1031-07-8	Endosulfan Sulfate	0.0054	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0054	U	5103-74-2	y-chlordane	0.0054	U
7421-93-4	Endrin Aldehyde	0.0054	U	57-74-9	Chlordane (Total)	0.0054	U

Worksheet #: 547864

Total Target Concentration 0.031

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\02-20-20\
Data File : 6G106814.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20 Feb 2020 4:00
Operator : MS/MLC
Sample : AD15713-001
Misc : S,PEST
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 20 12:25:58 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0108.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jan 10 12:24:02 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

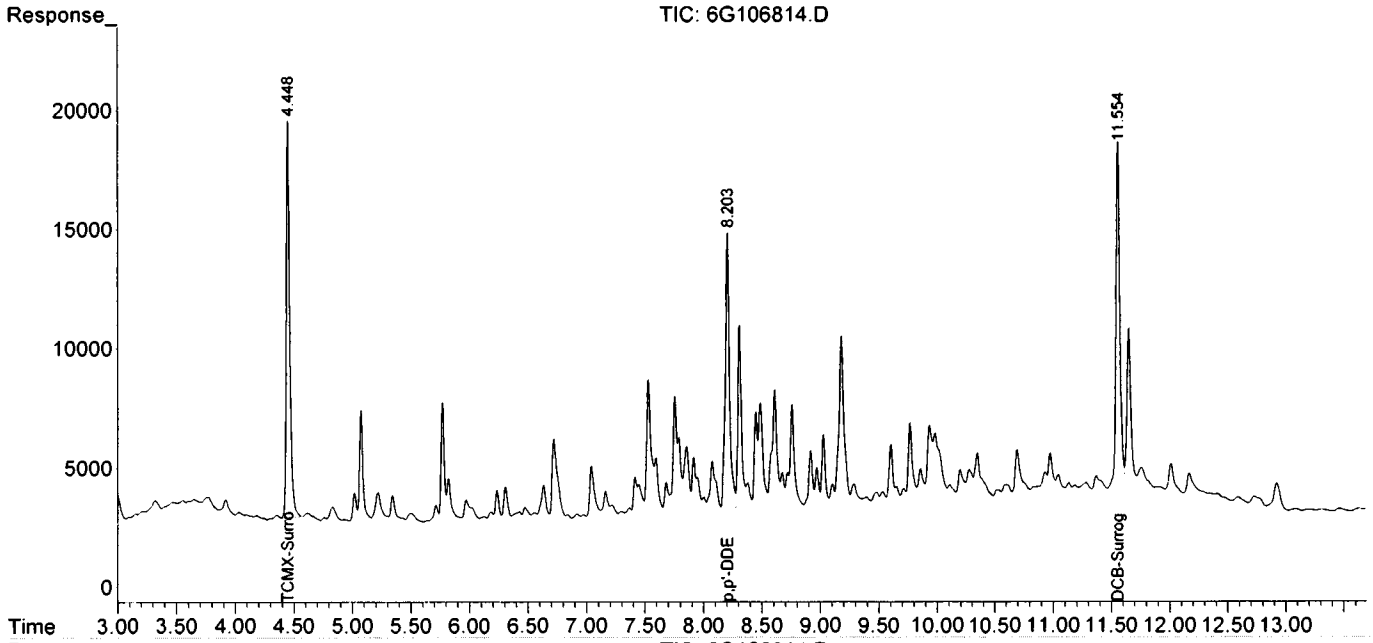
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.449	4.642	342251	810361	95.823	89.571
12)p,p'-DDE	8.204	8.477	288815	609988	87.716	56.232m#
22)DCB-Surrogate	11.555	12.414	343586	850408	102.108	88.031

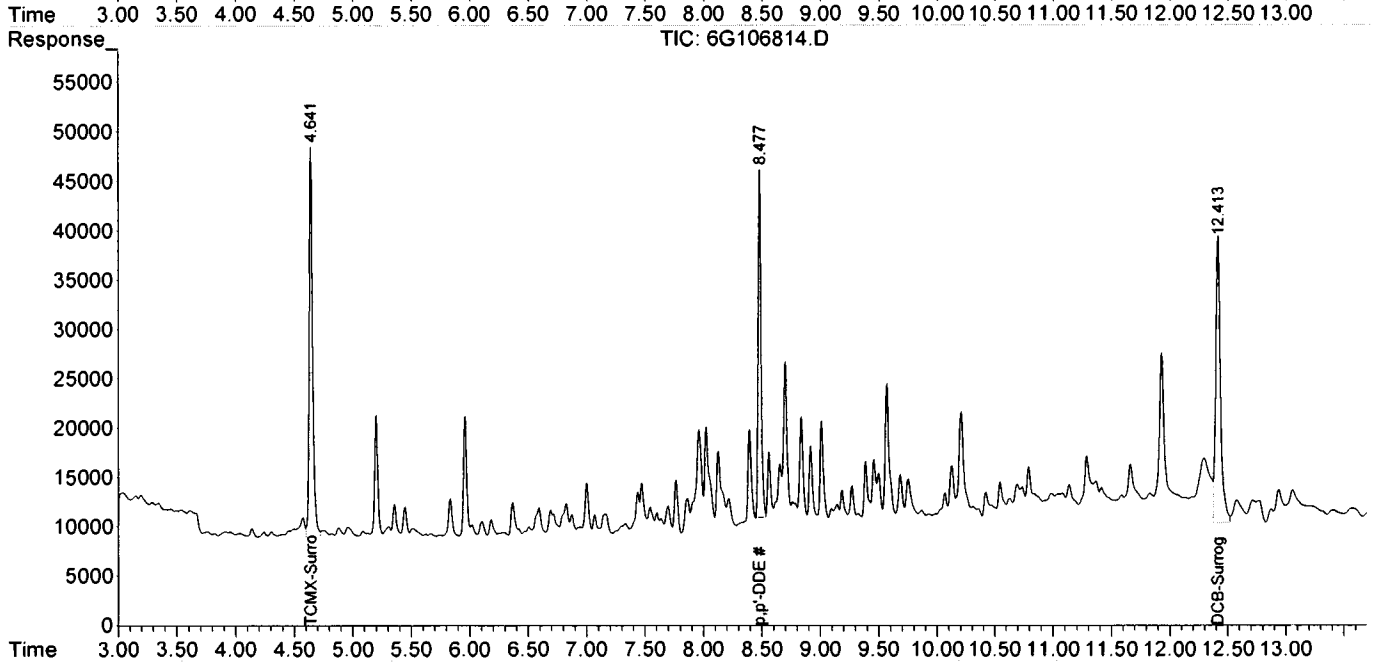
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_6\Data\02-20-20\
Data File : 6G106814.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20 Feb 2020 4:00
Operator : MS/MLC
Sample : AD15713-001
Misc : S,PEST
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 20 12:25:58 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0108.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jan 10 12:24:02 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15713-003
Client Id: TB-101-2 COMP
Data File: 6G106842.D
Analysis Date: 02/21/20 04:48
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 93

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0054	U	53494-70-5	Endrin Ketone	0.0054	U
309-00-2	Aldrin	0.0054	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0054	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0054	U
319-86-8	delta-BHC	0.0054	U	72-43-5	Methoxychlor	0.0054	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0027	U
959-98-8	Endosulfan I	0.0054	U	**72-55-9**	**p,p'-DDE**	**0.0027**	**0.025**
33213-65-9	Endosulfan II	0.0054	U	50-29-3	p,p'-DDT	0.0027	U
1031-07-8	Endosulfan Sulfate	0.0054	U	8001-35-2	Toxaphene	0.027	U
72-20-8	Endrin	0.0054	U	5103-74-2	y-chlordane	0.0054	U
7421-93-4	Endrin Aldehyde	0.0054	U	57-74-9	Chlordane (Total)	0.0054	U

Worksheet #: 547864

Total Target Concentration 0.025

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\02-21-20\
Data File : 6G106842.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Feb 2020 4:48
Operator : MS/MLC
Sample : AD15713-003
Misc : S,PEST
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 21 11:27:14 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0108.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jan 10 12:24:02 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.449	4.642	371489	943200	104.009	104.254
12)p,p'-DDE	8.203	8.476	153186	406724	46.524m	37.494m
22)DCB-Surrogate	11.554	12.414	367765	894380	109.293	92.583

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

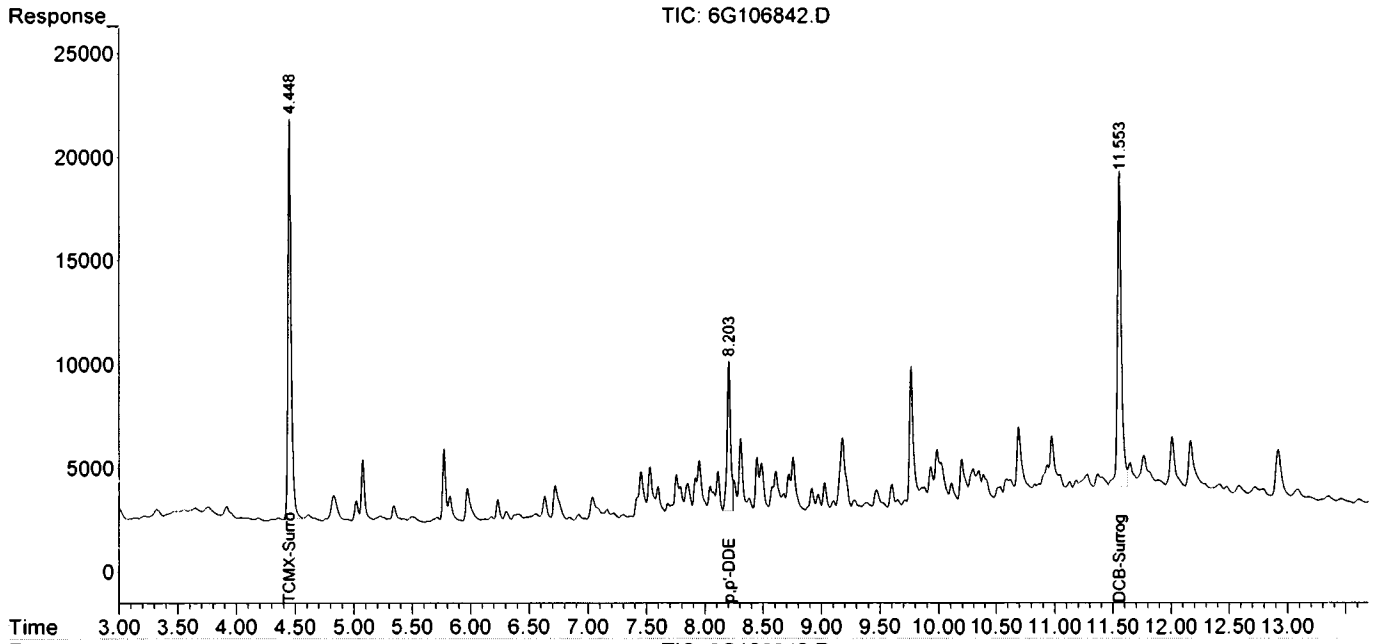
13

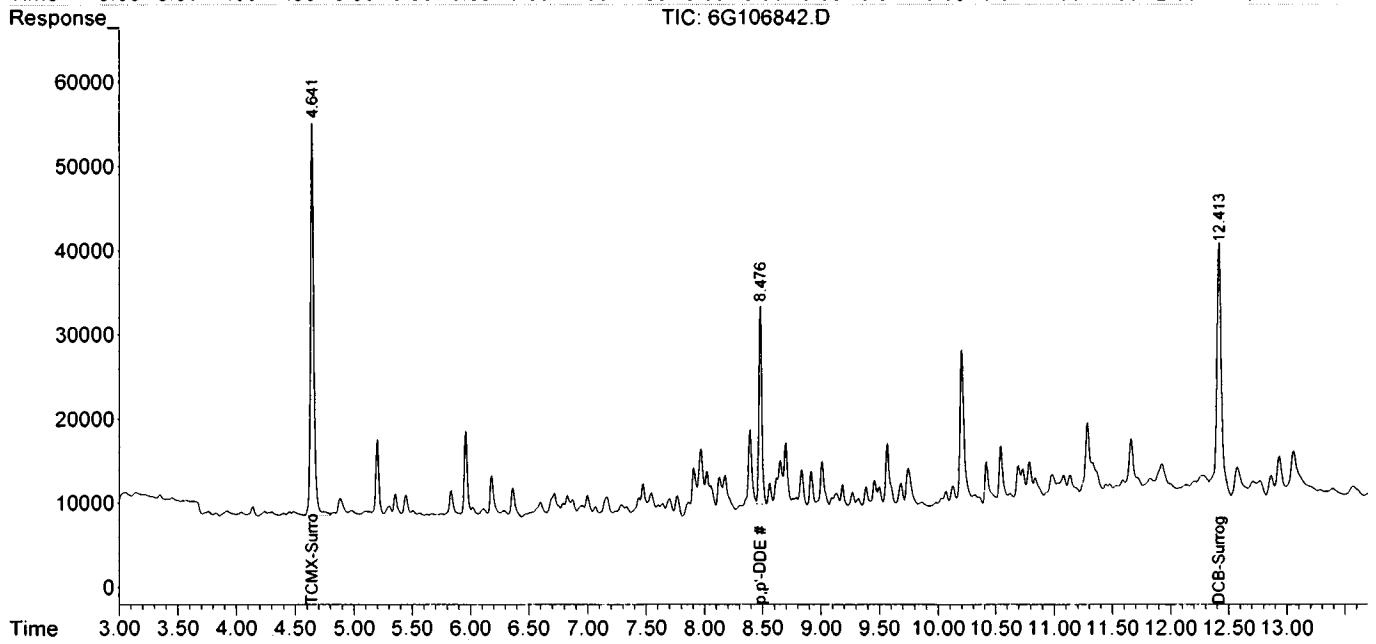
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\02-21-20\
Data File : 6G106842.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Feb 2020 4:48
Operator : MS/MLC
Sample : AD15713-003
Misc : S,PEST
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 21 11:27:14 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0108.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jan 10 12:24:02 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15713-005
Client Id: TB-101-3 COMP
Data File: 6G106889.D
Analysis Date: 02/24/20 13:47
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 87

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0057	U	53494-70-5	Endrin Ketone	0.0057	U
309-00-2	Aldrin	0.0057	U	58-89-9	gamma-BHC	0.0011	U
319-84-6	alpha-BHC	0.0011	U	76-44-8	Heptachlor	0.0057	U
319-85-7	beta-BHC	0.0011	U	1024-57-3	Heptachlor Epoxide	0.0057	U
319-86-8	delta-BHC	0.0057	U	72-43-5	Methoxychlor	0.0057	U
60-57-1	Dieldrin	0.0011	U	72-54-8	p,p'-DDD	0.0029	U
959-98-8	Endosulfan I	0.0057	U	72-55-9	p,p'-DDE	0.0029	U
33213-65-9	Endosulfan II	0.0057	U	50-29-3	p,p'-DDT	0.0029	U
1031-07-8	Endosulfan Sulfate	0.0057	U	8001-35-2	Toxaphene	0.029	U
72-20-8	Endrin	0.0057	U	5103-74-2	y-chlordane	0.0057	U
7421-93-4	Endrin Aldehyde	0.0057	U	57-74-9	Chlordane (Total)	0.0057	U

Worksheet #: 547864

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\02-24-20\
Data File : 6G106889.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Feb 2020 13:47
Operator : MS/MLC
Sample : AD15713-005
Misc : S,PEST
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 24 15:05:33 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0108.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jan 10 12:24:02 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

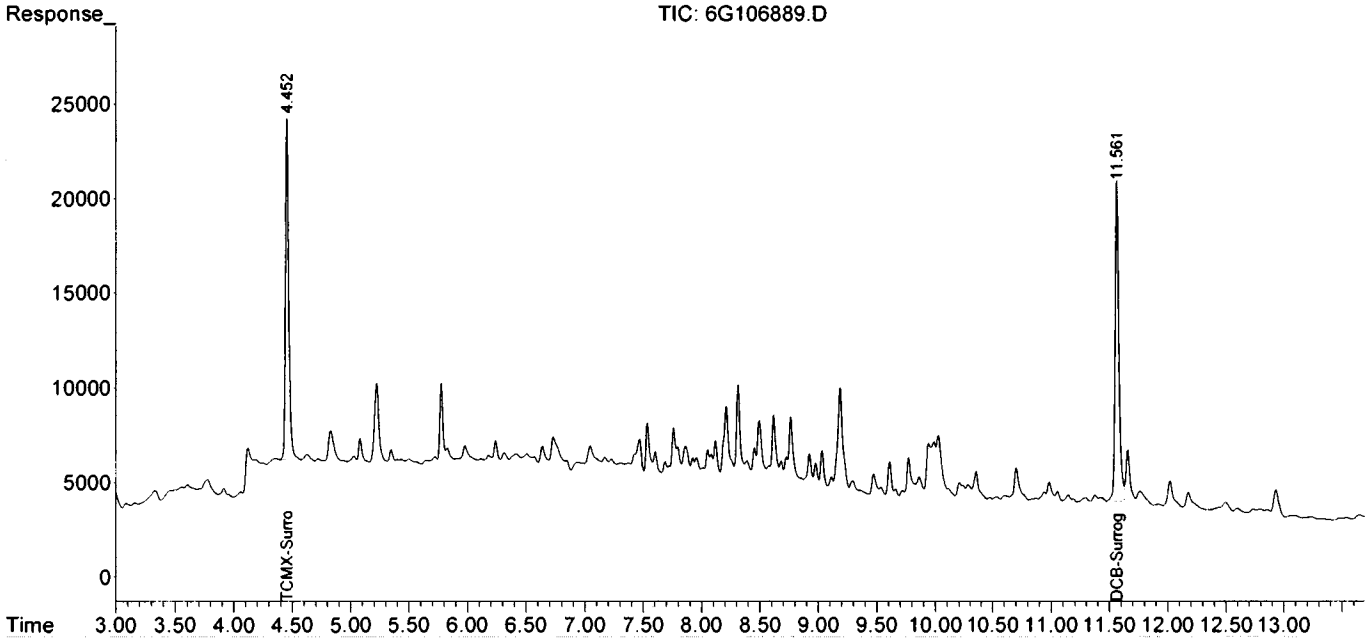
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.452	4.646	355847	949006	99.629m	104.896
22)DCB-Surrogate	11.561	12.424	383861	1021726	114.077m	105.765m

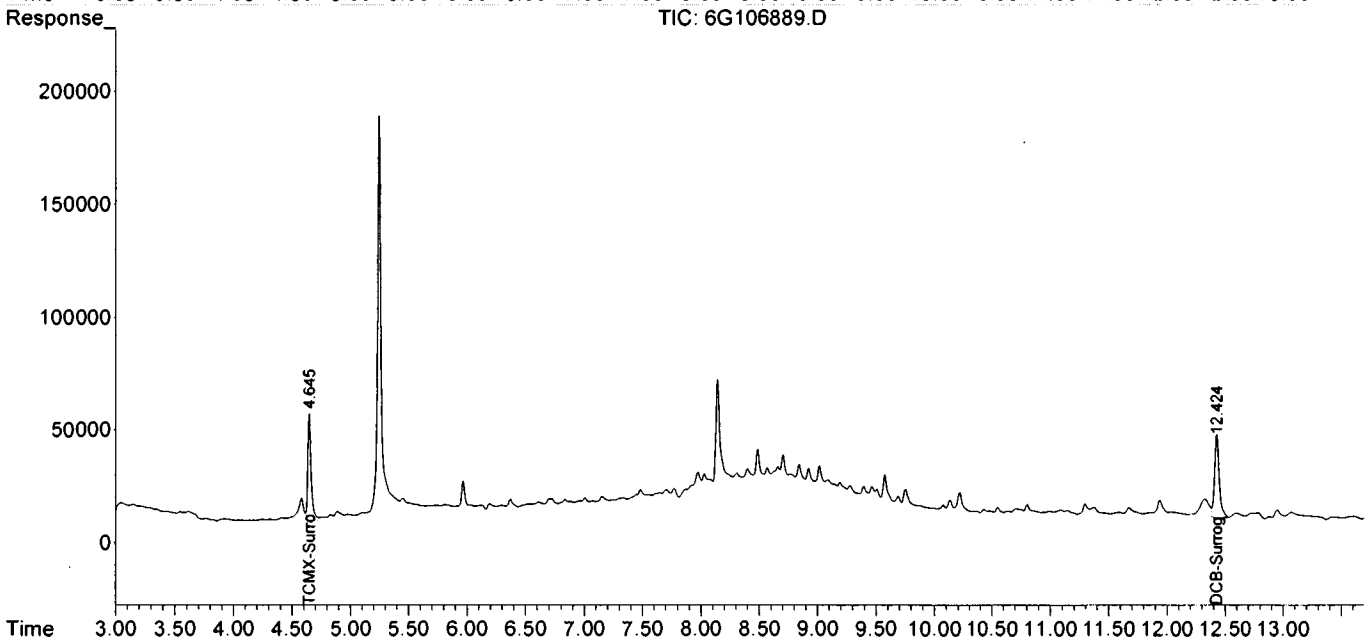
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_6\Data\02-24-20\
Data File : 6G106889.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 24 Feb 2020 13:47
Operator : MS/MLC
Sample : AD15713-005
Misc : S,PEST
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 24 15:05:33 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0108.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Jan 10 12:24:02 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15713-007
Client Id: TB-101-4 COMP
Data File: 5G88929.D
Analysis Date: 02/20/20 04:40
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 86

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0058	U	53494-70-5	Endrin Ketone	0.0058	U
309-00-2	Aldrin	0.0058	U	58-89-9	gamma-BHC	0.0012	U
319-84-6	alpha-BHC	0.0012	U	76-44-8	Heptachlor	0.0058	U
319-85-7	beta-BHC	0.0012	U	1024-57-3	Heptachlor Epoxide	0.0058	U
319-86-8	delta-BHC	0.0058	U	72-43-5	Methoxychlor	0.0058	U
60-57-1	Dieldrin	0.0012	U	72-54-8	p,p'-DDD	0.0029	U
959-98-8	Endosulfan I	0.0058	U	72-55-9	p,p'-DDE	0.0029	U
33213-65-9	Endosulfan II	0.0058	U	50-29-3	p,p'-DDT	0.0029	U
1031-07-8	Endosulfan Sulfate	0.0058	U	8001-35-2	Toxaphene	0.029	U
72-20-8	Endrin	0.0058	U	5103-74-2	y-chlordane	0.0058	U
7421-93-4	Endrin Aldehyde	0.0058	U	57-74-9	Chlordane (Total)	0.0058	U

Worksheet #: 547864

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_5\Data\02-20-20\
Data File : 5G88929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Feb-20, 04:40:20
Operator : MS/MLC
Sample : AD15713-007
Misc : S,PEST
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 20 12:02:16 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

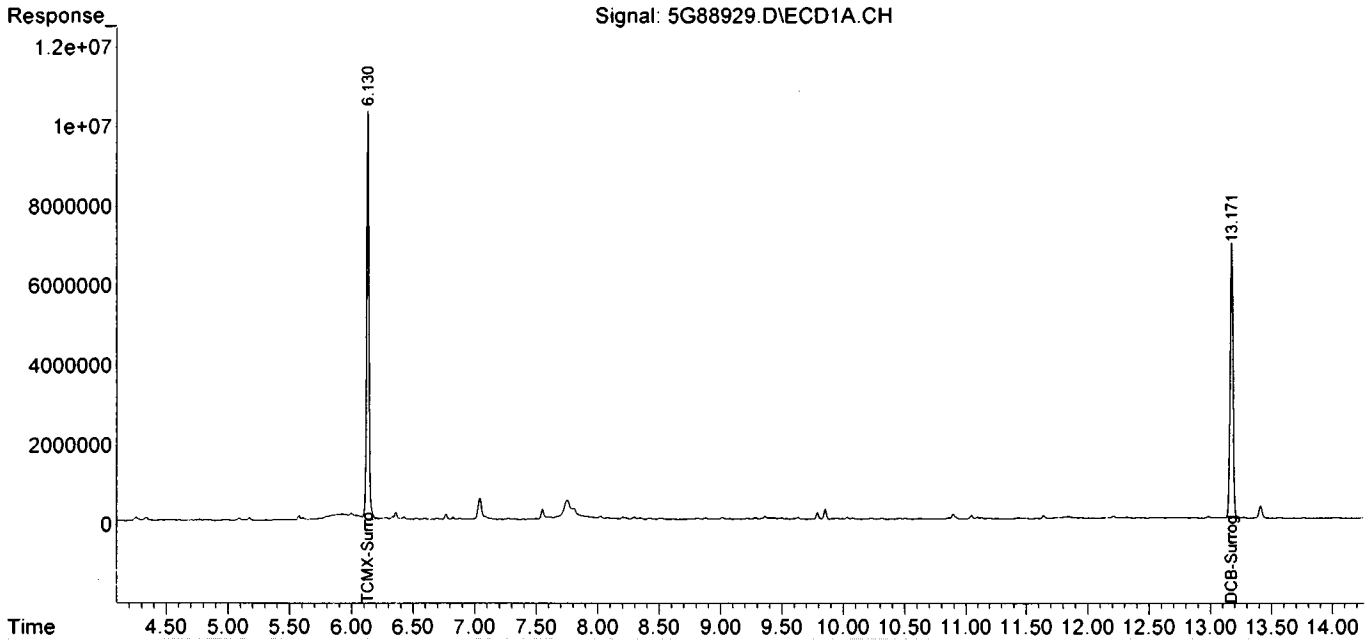
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.130	6.078	137.5E6	66162655	101.875	99.447
22)DCB-Surrogate	13.171	13.557	116.7E6	60122814	101.592	98.001

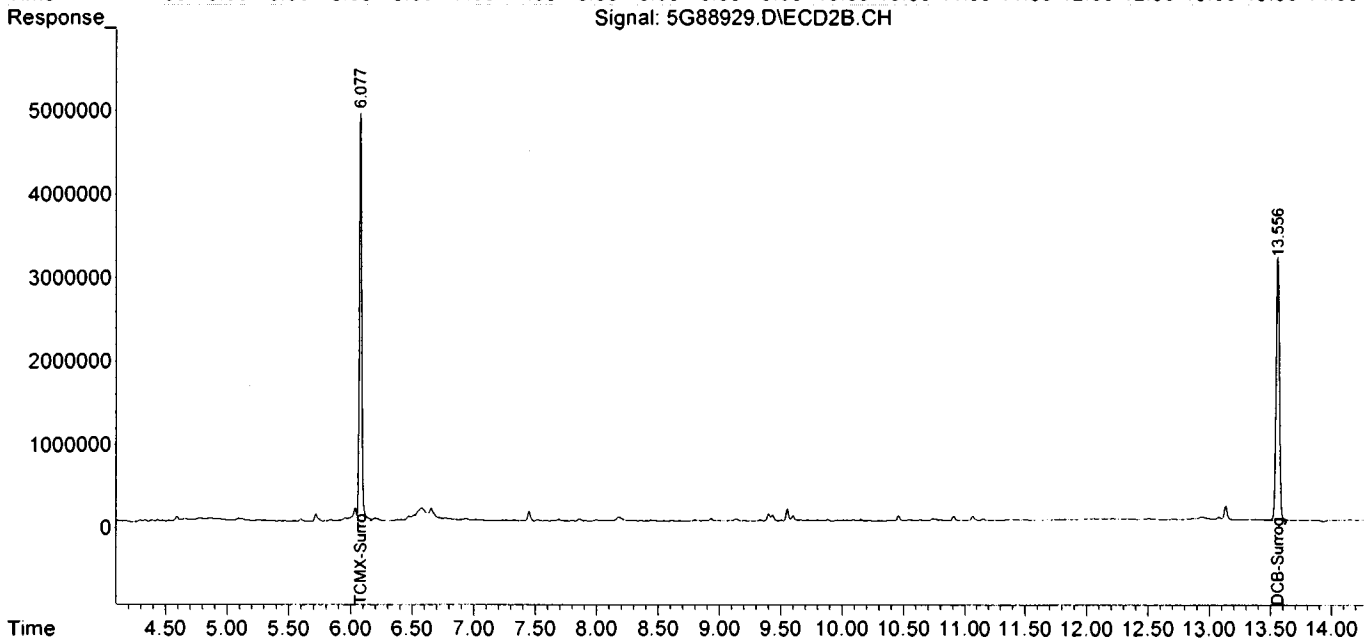
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_5\Data\02-20-20\
Data File : 5G88929.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Feb-20, 04:40:20
Operator : MS/MLC
Sample : AD15713-007
Misc : S,PEST
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 20 12:02:16 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15713-009
Client Id: TB-101-5 COMP
Data File: 5G88930.D
Analysis Date: 02/20/20 04:58
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 85

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0059	U	53494-70-5	Endrin Ketone	0.0059	U
309-00-2	Aldrin	0.0059	U	58-89-9	gamma-BHC	0.0012	U
319-84-6	alpha-BHC	0.0012	U	76-44-8	Heptachlor	0.0059	U
319-85-7	beta-BHC	0.0012	U	1024-57-3	Heptachlor Epoxide	0.0059	U
319-86-8	delta-BHC	0.0059	U	72-43-5	Methoxychlor	0.0059	U
60-57-1	Dieldrin	0.0012	U	72-54-8	p,p'-DDD	0.0029	U
959-98-8	Endosulfan I	0.0059	U	72-55-9	p,p'-DDE	0.0029	U
33213-65-9	Endosulfan II	0.0059	U	50-29-3	p,p'-DDT	0.0029	U
1031-07-8	Endosulfan Sulfate	0.0059	U	8001-35-2	Toxaphene	0.029	U
72-20-8	Endrin	0.0059	U	5103-74-2	y-chlordane	0.0059	U
7421-93-4	Endrin Aldehyde	0.0059	U	57-74-9	Chlordane (Total)	0.0059	U

Worksheet #: 547864

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_5\Data\02-20-20\
Data File : 5G88930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Feb-20, 04:58:31
Operator : MS/MLC
Sample : AD15713-009
Misc : S,PEST
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 20 12:02:40 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.130	6.077	129.5E6	61273782	95.965	92.099
22)DCB-Surrogate	13.171	13.557	106.8E6	54906580	93.041	89.499

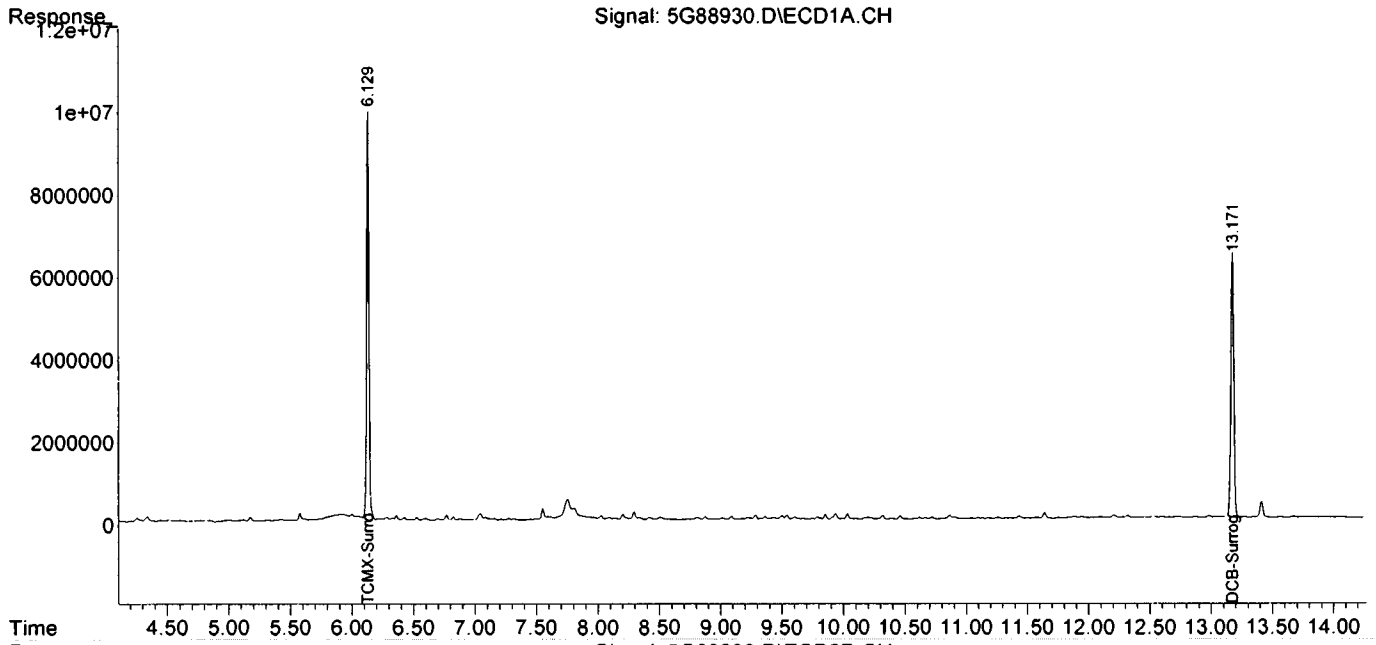
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

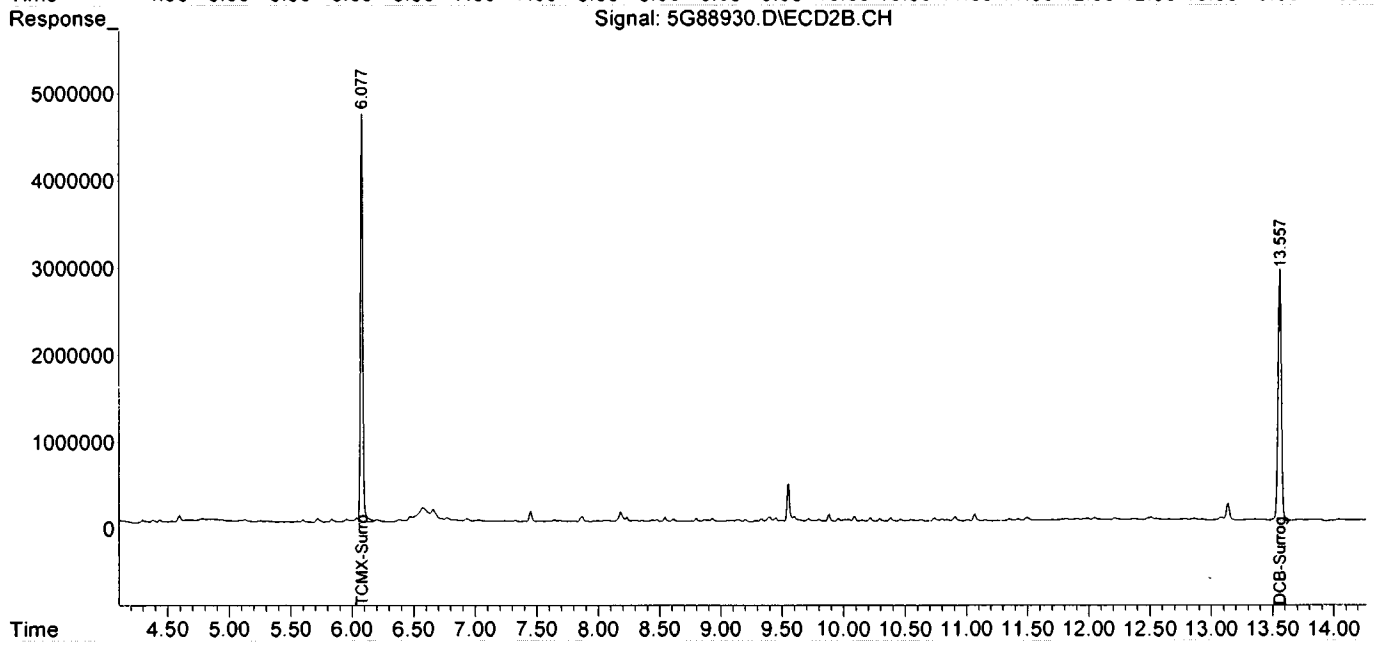
3

Data Path : G:\Gcdata\2020\GC_5\Data\02-20-20\
Data File : 5G88930.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Feb-20, 04:58:31
Operator : MS/MLC
Sample : AD15713-009
Misc : S,PEST
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 20 12:02:40 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15713-011
Client Id: TB-101-6 COMP
Data File: 5G88931.D
Analysis Date: 02/20/20 05:16
Date Rec/Extracted: 02/14/20-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 82

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0061	U	53494-70-5	Endrin Ketone	0.0061	U
309-00-2	Aldrin	0.0061	U	58-89-9	gamma-BHC	0.0012	U
319-84-6	alpha-BHC	0.0012	U	76-44-8	Heptachlor	0.0061	U
319-85-7	beta-BHC	0.0012	U	1024-57-3	Heptachlor Epoxide	0.0061	U
319-86-8	delta-BHC	0.0061	U	72-43-5	Methoxychlor	0.0061	U
60-57-1	Dieldrin	0.0012	U	72-54-8	p,p'-DDD	0.0030	U
959-98-8	Endosulfan I	0.0061	U	72-55-9	p,p'-DDE	0.0030	U
33213-65-9	Endosulfan II	0.0061	U	50-29-3	p,p'-DDT	0.0030	U
1031-07-8	Endosulfan Sulfate	0.0061	U	8001-35-2	Toxaphene	0.030	U
72-20-8	Endrin	0.0061	U	5103-74-2	y-chlordane	0.0061	U
7421-93-4	Endrin Aldehyde	0.0061	U	57-74-9	Chlordane (Total)	0.0061	U

Worksheet #: 547864

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_5\Data\02-20-20\
Data File : 5G88931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Feb-20, 05:16:50
Operator : MS/MLC
Sample : AD15713-011
Misc : S,PEST
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 20 12:03:03 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

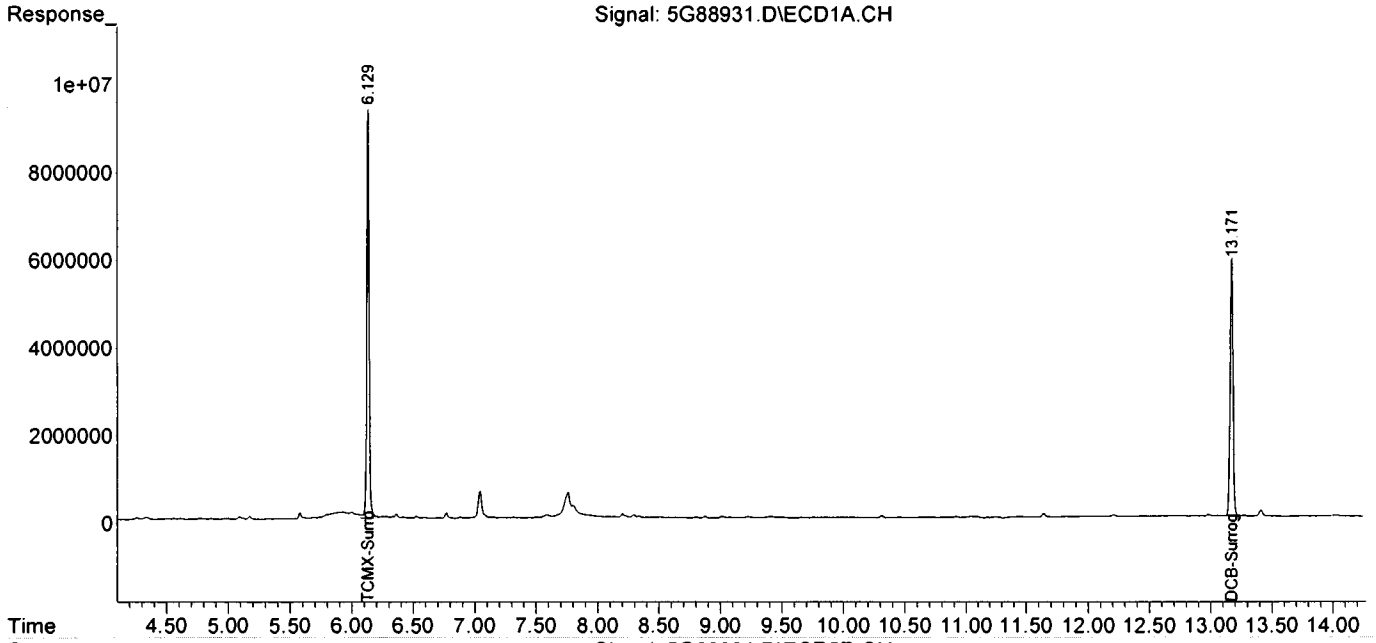
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.130	6.077	124.4E6	58902553	92.174	88.535
22)DCB-Surrogate	13.171	13.556	96935381	48817235	84.416	79.573

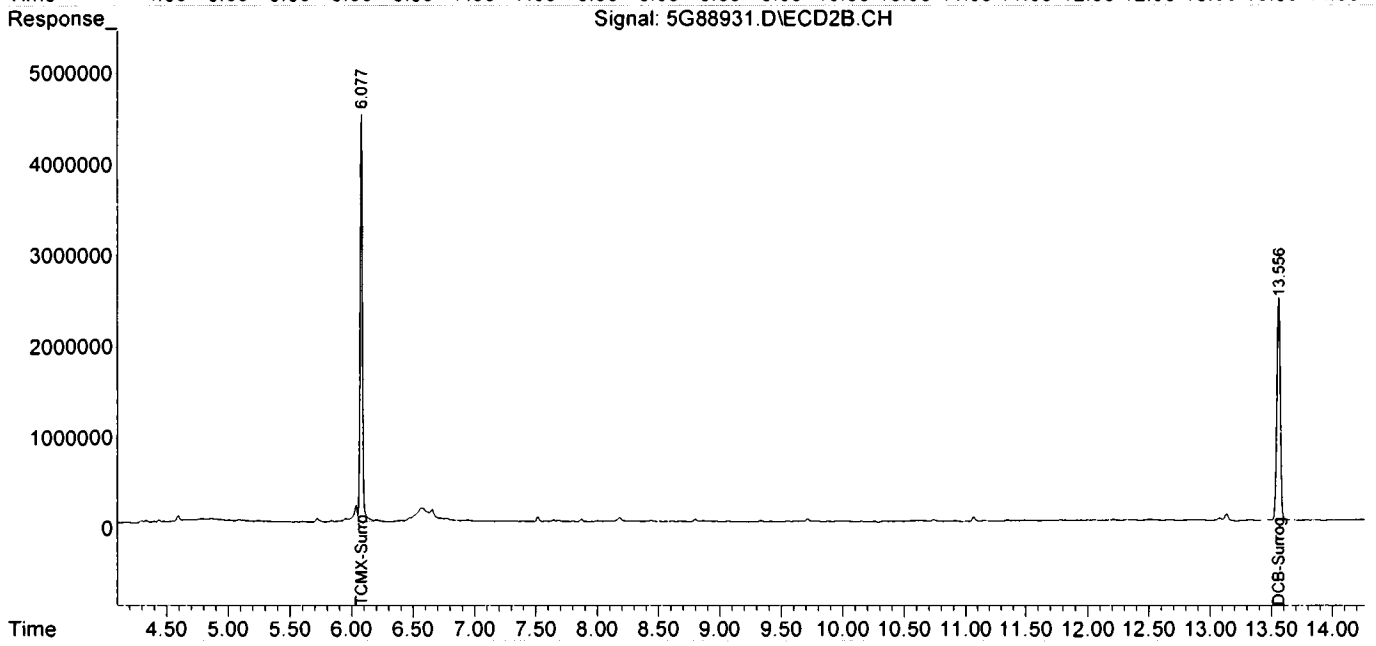
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_5\Data\02-20-20\
Data File : 5G88931.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 20-Feb-20, 05:16:50
Operator : MS/MLC
Sample : AD15713-011
Misc : S,PEST
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 20 12:03:03 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: SMB82150
Client Id:
Data File: 5G88907.D
Analysis Date: 02/19/20 12:45
Date Rec/Extracted: NA-02/18/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0050	U	53494-70-5	Endrin Ketone	0.0050	U
309-00-2	Aldrin	0.0050	U	58-89-9	gamma-BHC	0.0010	U
319-84-6	alpha-BHC	0.0010	U	76-44-8	Heptachlor	0.0050	U
319-85-7	beta-BHC	0.0010	U	1024-57-3	Heptachlor Epoxide	0.0050	U
319-86-8	delta-BHC	0.0050	U	72-43-5	Methoxychlor	0.0050	U
60-57-1	Dieldrin	0.0010	U	72-54-8	p,p'-DDD	0.0025	U
959-98-8	Endosulfan I	0.0050	U	72-55-9	p,p'-DDE	0.0025	U
33213-65-9	Endosulfan II	0.0050	U	50-29-3	p,p'-DDT	0.0025	U
1031-07-8	Endosulfan Sulfate	0.0050	U	8001-35-2	Toxaphene	0.025	U
72-20-8	Endrin	0.0050	U	5103-74-2	y-chlordane	0.0050	U
7421-93-4	Endrin Aldehyde	0.0050	U				

Worksheet #: 547864 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_5\Data\02-19-20\
Data File : 5G88907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19-Feb-20, 12:45:19
Operator : MS/MLC
Sample : SMB82150
Misc : S,PEST
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 19 14:31:35 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

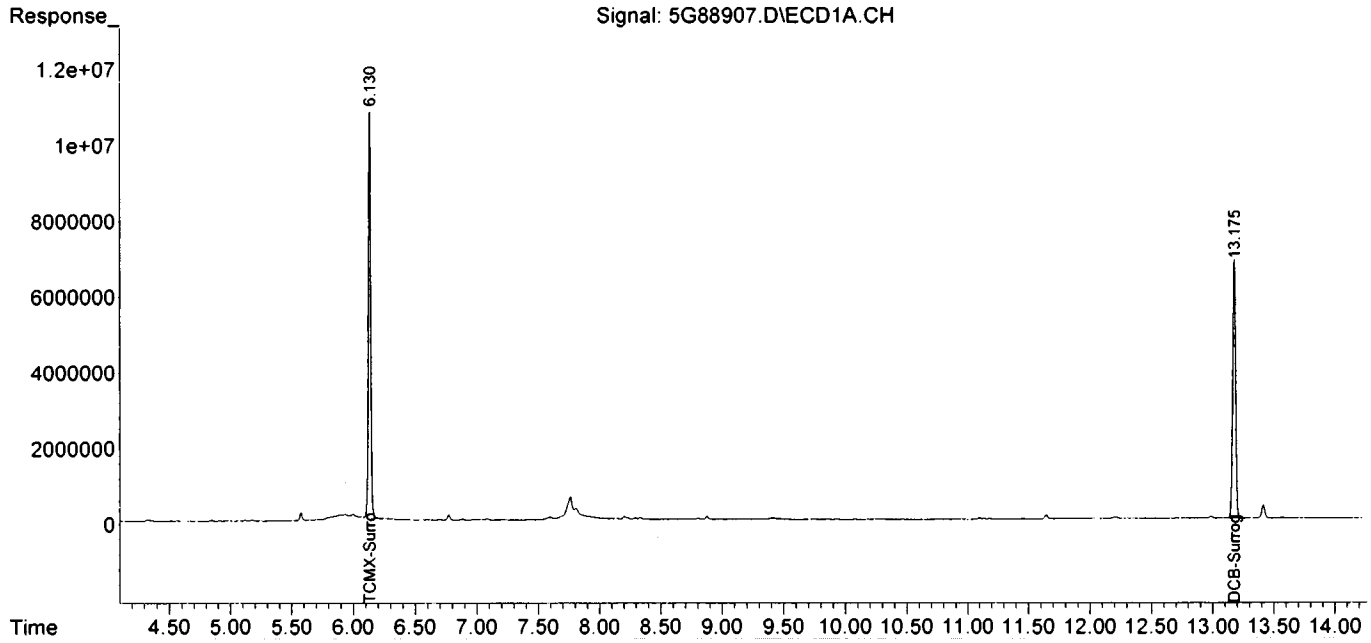
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.130	6.077	139.4E6	68249659	103.271	102.584
22)DCB-Surrogate	13.175	13.558	114.6E6	60749072	99.836	99.022

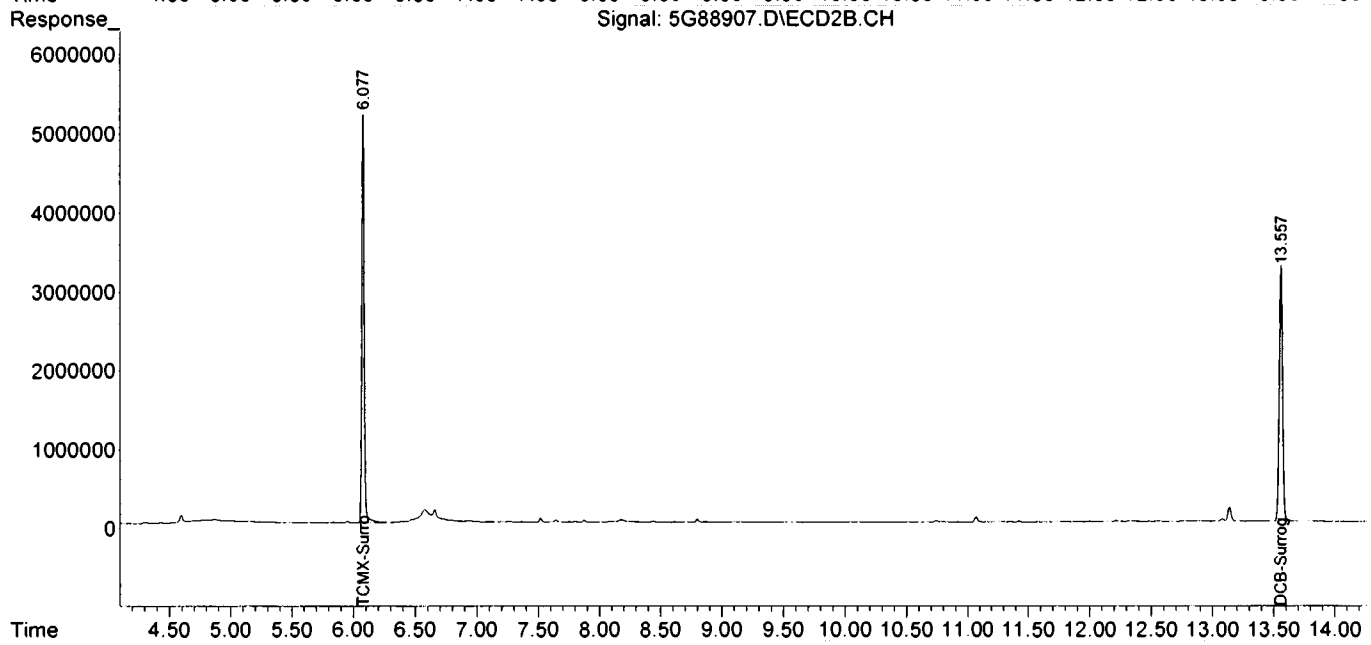
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_5\Data\02-19-20\
Data File : 5G88907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 19-Feb-20, 12:45:19
Operator : MS/MLC
Sample : SMB82150
Misc : S,PEST
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Feb 19 14:31:35 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Wed Jan 22 14:24:32 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
5G88907.D	SMB82150	S	02/19/20 12:45	1		103	103	100	99		
6G106814.D	AD15713-001	S	02/20/20 04:00	1		96	90	102	88		
6G106842.D	AD15713-003	S	02/21/20 04:48	1		104	104	109	93		
6G106889.D	AD15713-005	S	02/24/20 13:47	1		100	105	114	106		
5G88929.D	AD15713-007	S	02/20/20 04:40	1		102	99	102	98		
5G88930.D	AD15713-009	S	02/20/20 04:58	1		96	92	93	90		
5G88931.D	AD15713-011	S	02/20/20 05:16	1		92	89	84	80		
5G88909.D	SMB82150(MS)	S	02/19/20 13:21	1		98	97	94	94		
6G106815.D	AD15713-001(MS)	S	02/20/20 04:18	1		98	91	100	81		
6G106816.D	AD15713-001(MSD)	S	02/20/20 04:36	1		98	87	114	92		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081B

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	33-146
S4=DCB-Surrogate	100	33-146

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82150

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5G88909.D	SMB82150(MS)	2/19/2020 1:21:47 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	1	99.61	0	100	100	60	130
gamma-BHC	1	105.31	0	100	105	60	130
beta-BHC	1	87.91	0	100	88	60	130
Heptachlor	1	101.32	0	100	101	60	130
delta-BHC	1	90.16	0	100	90	60	130
Aldrin	1	102.7	0	100	103	70	130
Heptachlor Epoxide	1	120.52	0	100	121	70	130
y-chlordane	1	100.73	0	100	101	70	130
a-chlordane	1	98.92	0	100	99	70	130
Endosulfan I	1	99.72	0	100	100	70	130
p,p'-DDE	1	104.34	0	100	104	70	130
Dieldrin	1	102.67	0	100	103	70	130
Endrin	1	103.84	0	100	104	70	130
p,p'-DDD	1	102.49	0	100	102	70	130
Endosulfan II	1	97.12	0	100	97	70	130
p,p'-DDT	1	108.29	0	100	108	70	130
Endrin Aldehyde	1	89.86	0	100	90	10	130
Endosulfan Sulfate	1	98.59	0	100	99	70	130
Methoxychlor	1	105.34	0	100	105	60	130
Endrin Ketone	1	91.55	0	100	92	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB82150

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G106815.D	AD15713-001(MS)	2/20/2020 4:18:00 AM
Non Spike(If applicable):	6G106814.D	AD15713-001	2/20/2020 4:00:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	1	98.96	0	100	99	60	130
gamma-BHC	1	95.58	0	100	96	60	130
beta-BHC	1	93.15	0	100	93	60	130
Heptachlor	1	80.03	0	100	80	60	130
delta-BHC	1	99.86	0	100	100	60	130
Aldrin	1	97.74	0	100	98	70	130
Heptachlor Epoxide	1	102.05	0	100	102	70	130
y-chlordane	1	97.28	0	100	97	70	130
a-chlordane	1	93.79	0	100	94	70	130
Endosulfan I	1	98.06	0	100	98	70	130
p,p'-DDE	1	154.99	87.72	100	67*	70	130
Dieldrin	1	126.45	0	100	126	70	130
Endrin	1	101.41	0	100	101	70	130
p,p'-DDD	1	171.83	0	100	172*	70	130
Endosulfan II	1	98.14	0	100	98	70	130
p,p'-DDT	1	29.84	0	100	30*	70	130
Endrin Aldehyde	1	90.15	0	100	90	10	130
Endosulfan Sulfate	1	75.37	0	100	75	70	130
Methoxychlor	1	28.43	0	100	28*	60	130
Endrin Ketone	1	77.72	0	100	78	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G106816.D	AD15713-001(MSD)	2/20/2020 4:36:00 AM
Non Spike(If applicable):	6G106814.D	AD15713-001	2/20/2020 4:00:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	1	99.93	0	100	100	60	130
gamma-BHC	1	100.5	0	100	100	60	130
beta-BHC	1	99.59	0	100	100	60	130
Heptachlor	1	86.66	0	100	87	60	130
delta-BHC	1	101.18	0	100	101	60	130
Aldrin	1	95.3	0	100	95	70	130
Heptachlor Epoxide	1	105.07	0	100	105	70	130
y-chlordane	1	101.87	0	100	102	70	130
a-chlordane	1	99.1	0	100	99	70	130
Endosulfan I	1	94.79	0	100	95	70	130
p,p'-DDE	1	184.9	87.72	100	97	70	130
Dieldrin	1	145.84	0	100	146*	70	130
Endrin	1	109.48	0	100	109	70	130
p,p'-DDD	1	191.07	0	100	191*	70	130
Endosulfan II	1	101.55	0	100	102	70	130
p,p'-DDT	1	38.11	0	100	38*	70	130
Endrin Aldehyde	1	84.07	0	100	84	10	130
Endosulfan Sulfate	1	77.54	0	100	78	70	130
Methoxychlor	1	34.07	0	100	34*	60	130
Endrin Ketone	1	81.53	0	100	82	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB82150

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G106816.D	AD15713-001(MSD)	2/20/2020 4:36:00 AM
Duplicate(If applicable):	6G106815.D	AD15713-001(MS)	2/20/2020 4:18:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	1	99.93	98.96	0.98	40
gamma-BHC	1	100.5	95.58	5	40
beta-BHC	1	99.59	93.15	6.7	40
Heptachlor	1	86.66	80.03	8	40
delta-BHC	1	101.18	99.86	1.3	40
Aldrin	1	95.3	97.74	2.5	40
Heptachlor Epoxide	1	105.07	102.05	2.9	40
y-chlordane	1	101.87	97.28	4.6	40
a-chlordane	1	99.1	93.79	5.5	40
Endosulfan I	1	94.79	98.06	3.4	40
p,p'-DDE	1	184.9	154.99	18	40
Dieldrin	1	145.84	126.45	14	40
Endrin	1	109.48	101.41	7.7	40
p,p'-DDD	1	191.07	171.83	11	40
Endosulfan II	1	101.55	98.14	3.4	40
p,p'-DDT	1	38.11	29.84	24	40
Endrin Aldehyde	1	84.07	90.15	7	40
Endosulfan Sulfate	1	77.54	75.37	2.8	40
Methoxychlor	1	34.07	28.43	18	40
Endrin Ketone	1	81.53	77.72	4.8	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB82150
Blank Data File: 5G88907.D
Matrix: Soil

Blank Analysis Date: 02/19/20 12:45
Blank Extraction Date: 02/18/20
(If Applicable)
Method: EPA 8081B

Sample Number	Data File	Analysis Date
AD15713-001	6G106814.D	02/20/20 04:00
AD15713-003	6G106842.D	02/21/20 04:48
AD15713-005	6G106889.D	02/24/20 13:47
AD15713-007	5G88929.D	02/20/20 04:40
AD15713-009	5G88930.D	02/20/20 04:58
AD15713-011	5G88931.D	02/20/20 05:16
AD15713-001(MSD	6G106816.D	02/20/20 04:36
AD15713-001(MS)	6G106815.D	02/20/20 04:18
SMB82150(MS)	5G88909.D	02/19/20 13:21

Form 5

Method: EPA 8081B

Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G105793.D	CAL EVAL	01/08/20 07:25	Aqueous					
6G105794.D	CAL PEST@50PPB	01/08/20 07:50	Aqueous	6G10579	11.5683	0.0147	12.4242	0.004
6G105795.D	CAL PEST@10PPB	01/08/20 08:08	Aqueous	6G10579	11.5662	0.0035	12.4233	0.0032
6G105796.D	CAL PEST@2PPB	01/08/20 08:25	Aqueous	6G10579	11.5666	0	12.4237	0
6G105797.D	CAL PEST@100PPB	01/08/20 08:43	Aqueous	6G10579	11.5658	0.0069	12.4248	0.0089
6G105798.D	CAL PEST@200PPB	01/08/20 09:00	Aqueous	6G10579	11.5657	0.0078	12.4239	0.0016
6G105799.D	CAL PEST@400PPB	01/08/20 09:18	Aqueous	6G10579	11.5651	0.013	12.4237	0
6G105800.D	CAL CHLOR@100PPB	01/08/20 09:36	Aqueous	6G10579	11.5665	0.0009	12.4243	0.0048
6G105802.D	TOX@50PPB	01/08/20 10:56	Aqueous	6G10579	0.0000		0.0000	200*
6G105803.D	TOX@100PPB	01/08/20 11:13	Aqueous	6G10579	0.0000	200*	0.0000	200*
6G105804.D	TOX@200PPB	01/08/20 11:31	Aqueous	6G10580	0.0000		0.0000	
6G105805.D	TOX@500PPB	01/08/20 11:49	Aqueous	6G10580	0.0000		0.0000	
6G105806.D	TOX@1000PPB	01/08/20 12:06	Aqueous	6G10580	0.0000		0.0000	
6G105807.D	TOX@2000PPB	01/08/20 12:24	Aqueous	6G10580	0.0000		0.0000	
6G105808.D	TOX@4000PPB	01/08/20 12:41	Aqueous	6G10580	0.0000		0.0000	
6G105809.D	TOX V	01/08/20 12:59	Aqueous	6G10580	0.0000		0.0000	
6G105810.D	ICV	01/08/20 13:17	Aqueous	6G10580	11.5650	200*	12.4226	200*

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G88265.D	CAL EVAL	01/16/20 09:32	Soil					
5G88266.D	CAL PEST@200PPB	01/16/20 09:57	Soil	5G88269.	13.2039	0.0053	13.5753	0.0022
5G88267.D	CAL PEST@400PPB	01/16/20 10:20	Soil	5G88269.	13.2041	0.0038	13.5757	0.0052
5G88268.D	CAL PEST@50PPB	01/16/20 10:49	Soil	5G88269.	13.2056	0.0076	13.5760	0.0074
5G88269.D	CAL PEST@2PPB	01/16/20 11:16	Soil	5G88269.	13.2046	0	13.5750	0
5G88270.D	CAL PEST@10PPB	01/16/20 11:34	Soil	5G88269.	13.1996	0.0379	13.5752	0.0015
5G88271.D	CAL PEST@100PPB	01/16/20 11:52	Soil	5G88269.	13.1986	0.0455	13.5742	0.0059
5G88272.D	CAL CHLOR@100PPB	01/16/20 12:11	Soil	5G88269.	13.1991	0.0417	13.5751	0.0007
5G88273.D	TOX@500PPB	01/16/20 12:29	Soil	5G88269.	13.1981	0.0492	13.5747	0.0022
5G88274.D	TOX@50PPB	01/16/20 12:47	Soil	5G88269.	0.0000		0.0000	200*
5G88275.D	TOX@100PPB	01/16/20 13:05	Soil	5G88269.	0.0000	200*	0.0000	200*
5G88276.D	TOX@200PPB	01/16/20 13:24	Soil	5G88274.	0.0000		0.0000	
5G88277.D	TOX@500PPB	01/16/20 13:42	Soil	5G88274.	0.0000		0.0000	
5G88278.D	TOX@1000PPB	01/16/20 14:00	Soil	5G88274.	0.0000		0.0000	
5G88279.D	TOX@2000PPB	01/16/20 14:18	Soil	5G88274.	0.0000		0.0000	
5G88280.D	TOX@4000PPB	01/16/20 14:36	Soil	5G88274.	0.0000		0.0000	
5G88281.D	TOX V	01/16/20 14:55	Soil	5G88274.	0.0000		0.0000	
5G88282.D	ICV	01/16/20 15:13	Soil	5G88274.	13.1966	200*	13.5734	200*

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G88893.D	CAL EVAL	02/19/20 08:05	Soil					
5G88894.D	CAL PEST@100PPB	02/19/20 08:28	Soil	5G88894.	13.1810	0	13.5603	0
5G88895.D	WMB82156	02/19/20 08:47	Aqueous	5G88894.	13.1774	0.0273	13.5593	0.0074
5G88896.D	WMB82156(MS)	02/19/20 09:05	Aqueous	5G88894.	13.1772	0.0288	13.5597	0.0044
5G88897.D	AD15700-002(T)(MS)	02/19/20 09:24	Aqueous	5G88894.	13.1763	0.0357	13.5603	0
5G88898.D	AD15700-002(T)(MSD)	02/19/20 09:42	Aqueous	5G88894.	13.1763	0.0357	13.5581	0.0162
5G88899.D	AD15700-002(T)	02/19/20 10:00	Aqueous	5G88894.	13.1752	0.044	13.5593	0.0074
5G88900.D	EF-1-V-320648(2/11)	02/19/20 10:37	Aqueous	5G88894.	13.1847	0.0281	13.5610	0.0052
5G88901.D	EF-1-V-320648(2/14)	02/19/20 10:55	Aqueous	5G88894.	13.1785	0.019	13.5601	0.0015
5G88902.D	AD15644-002(T)	02/19/20 11:14	Aqueous	5G88894.	13.1767	0.0326	13.5601	0.0015
5G88903.D	AD15652-001(T)	02/19/20 11:32	Aqueous	5G88894.	13.1762	0.0364	13.5589	0.0103
5G88904.D	AD15645-002(T)	02/19/20 11:50	Aqueous	5G88894.	13.1778	0.0243	13.5601	0.0015
5G88905.D	AD15596-001	02/19/20 12:08	Aqueous	5G88894.	13.1758	0.0395	13.5586	0.0125
5G88906.D	SMB82147	02/19/20 12:27	Soil	5G88894.	13.1765	0.0341	13.5586	0.0125
5G88907.D	SMB82150	02/19/20 12:45	Soil	5G88894.	13.1748	0.047	13.5580	0.017
5G88908.D	SMB82147(MS)	02/19/20 13:03	Soil	5G88894.	13.1754	0.0425	13.5591	0.0088
5G88909.D	SMB82150(MS)	02/19/20 13:21	Soil	5G88894.	13.1749	0.0463	13.5576	0.0199
5G88910.D	CAL PEST@100PPB	02/19/20 14:39	Soil	5G88894.	13.1768	0.0319	13.5586	0.0125

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G106797.D	CAL EVAL	02/19/20 23:02	Soil					
6G106798.D	TEST	02/19/20 23:20	Soil					
6G106799.D	100PPB	02/19/20 23:37	Soil					
6G106800.D	CAL PEST@200PPB	02/19/20 23:55	Soil	6G10680	11.5531	0	12.4126	0
6G106801.D	AD15683-001	02/20/20 00:12	Soil	6G10680	11.5531	0	12.4124	0.0016
6G106802.D	AD15669-006	02/20/20 00:30	Soil	6G10680	11.5524	0.0061	12.4114	0.0097
6G106803.D	AD15658-001	02/20/20 00:48	Soil	6G10680	11.5523	0.0069	12.4125	0.0008
6G106804.D	AD15687-001	02/20/20 01:05	Soil	6G10680	11.5537	0.0052	12.4124	0.0016
6G106805.D	AD15687-003	02/20/20 01:23	Soil	6G10680	11.5531	0	12.4120	0.0048
6G106806.D	AD15687-005	02/20/20 01:40	Soil	6G10680	11.5540	0.0078	12.4131	0.004
6G106807.D	AD15687-011	02/20/20 01:58	Soil	6G10680	11.5532	0.0009	12.4129	0.0024
6G106808.D	AD15698-001	02/20/20 02:16	Soil	6G10680	11.5526	0.0043	12.4134	0.0064
6G106809.D	AD15704-001	02/20/20 02:33	Soil	6G10680	11.5523	0.0069	12.4117	0.0072
6G106810.D	AD15704-003	02/20/20 02:50	Soil	6G10680	11.5524	0.0061	12.4124	0.0016
6G106811.D	AD15704-005	02/20/20 03:08	Soil	6G10680	11.5527	0.0035	12.4118	0.0064
6G106812.D	AD15713-005	02/20/20 03:25	Soil	6G10680	11.5538	0.0061	12.4138	0.0097
6G106813.D	AD15713-003	02/20/20 03:43	Soil	6G10680	11.5548	0.0147	12.4146	0.0161
6G106814.D	AD15713-001	02/20/20 04:00	Soil	6G10680	11.5548	0.0147	12.4142	0.0129
6G106815.D	AD15713-001(MS)	02/20/20 04:18	Soil	6G10680	11.5544	0.0113	12.4144	0.0145
6G106816.D	AD15713-001(MSD)	02/20/20 04:36	Soil	6G10680	11.5561	0.026	12.4162	0.029
6G106817.D	AD15736-001	02/20/20 04:53	Soil	6G10680	11.5555	0.0208	12.4135	0.0073
6G106818.D	AD15751-006	02/20/20 05:11	Soil	6G10680	11.5553	0.019	12.4145	0.0153
6G106819.D	AD15751-004	02/20/20 05:28	Soil	6G10680	11.5551	0.0173	12.4136	0.0081
6G106820.D	AD15751-002	02/20/20 05:46	Soil	6G10680	11.5548	0.0147	12.4140	0.0113
6G106821.D	CAL EVAL	02/20/20 09:26	Soil					
6G106822.D	CAL PEST@200PPB	02/20/20 09:44	Soil	6G10680	11.5550	0.0165	12.4147	0.0169
6G106823.D	WMB82164	02/20/20 10:08	Aqueous	6G10682	11.5610	0.0519	12.4185	0.0306
6G106824.D	WMB82164(MS)	02/20/20 10:26	Aqueous	6G10682	11.5570	0.0173	12.4163	0.0129
6G106825.D	AD15662-001(MS)	02/20/20 10:44	Aqueous	6G10682	11.5567	0.0147	12.4173	0.0209
6G106826.D	AD15662-001(MSD)	02/20/20 11:01	Aqueous	6G10682	11.5573	0.0199	12.4167	0.0161
6G106827.D	AD15662-001	02/20/20 11:19	Aqueous	6G10682	11.5564	0.0121	12.4157	0.0081
6G106828.D	AD15662-002	02/20/20 11:36	Aqueous	6G10682	11.5574	0.0208	12.4171	0.0193
6G106829.D	AD15662-003	02/20/20 11:54	Aqueous	6G10682	11.5563	0.0112	12.4162	0.0121
6G106830.D	AD15662-004	02/20/20 12:12	Aqueous	6G10682	11.5576	0.0225	12.4171	0.0193
6G106831.D	AD15662-005	02/20/20 12:29	Aqueous	6G10682	11.5583	0.0286	12.4183	0.029
6G106832.D	AD15705-001	02/20/20 12:47	Aqueous	6G10682	11.5572	0.019	12.4169	0.0177
6G106833.D	AD15714-001	02/20/20 13:04	Soil	6G10682	11.5568	0.0156	12.4187	0.0322
6G106834.D	AD15687-001	02/20/20 13:22	Soil	6G10682	11.5571	0.0182	12.4174	0.0218
6G106835.D	CAL PEST@100PPB	02/20/20 14:28	Soil	6G10682	11.5552	0.0017	12.4138	0.0072

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B
Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G88911.D	CAL EVAL	02/19/20 23:12	Soil					
5G88912.D	EVAL	02/19/20 23:30	Soil					
5G88913.D	CAL PEST@100PPB	02/19/20 23:48	Soil	5G88913.	13.1744	0	13.5572	0
5G88914.D	200PPB	02/20/20 00:07	Soil	5G88913.	13.1743	0.0008	13.5570	0.0015
5G88915.D	AD15669-017	02/20/20 00:25	Soil	5G88913.	13.1724	0.0152	13.5559	0.0096
5G88916.D	AD15669-018	02/20/20 00:43	Soil	5G88913.	13.1704	0.0304	13.5564	0.0059
5G88917.D	AD15676-002	02/20/20 01:01	Soil	5G88913.	13.1720	0.0182	13.5564	0.0059
5G88918.D	AD15683-002	02/20/20 01:19	Soil	5G88913.	13.1726	0.0137	13.5578	0.0044
5G88919.D	AD15687-007	02/20/20 01:38	Soil	5G88913.	13.1714	0.0228	13.5547	0.0184
5G88920.D	AD15687-009	02/20/20 01:56	Soil	5G88913.	13.1723	0.0159	13.5568	0.003
5G88921.D	AD15687-013	02/20/20 02:14	Soil	5G88913.	13.1708	0.0273	13.5554	0.0133
5G88922.D	AD15687-015	02/20/20 02:32	Soil	5G88913.	13.1721	0.0175	13.5575	0.0022
5G88923.D	AD15687-017	02/20/20 02:51	Soil	5G88913.	13.1722	0.0167	13.5563	0.0066
5G88924.D	AD15687-019	02/20/20 03:09	Soil	5G88913.	13.1722	0.0167	13.5568	0.003
5G88925.D	AD15687-013(MS)	02/20/20 03:27	Soil	5G88913.	13.1725	0.0144	13.5556	0.0118
5G88926.D	AD15687-013(MSD)	02/20/20 03:45	Soil	5G88913.	13.1721	0.0175	13.5575	0.0022
5G88927.D	AD15737-001	02/20/20 04:03	Soil	5G88913.	13.1706	0.0289	13.5559	0.0096
5G88928.D	AD15714-002	02/20/20 04:22	Soil	5G88913.	13.1714	0.0228	13.5556	0.0118
5G88929.D	AD15713-007	02/20/20 04:40	Soil	5G88913.	13.1710	0.0258	13.5567	0.0037
5G88930.D	AD15713-009	02/20/20 04:58	Soil	5G88913.	13.1712	0.0243	13.5569	0.0022
5G88931.D	AD15713-011	02/20/20 05:16	Soil	5G88913.	13.1709	0.0266	13.5559	0.0096
5G88932.D	CAL EVAL	02/20/20 09:28	Soil					
5G88933.D	CAL PEST@200PPB	02/20/20 09:46	Soil	5G88913.	13.1725	0.0144	13.5574	0.0015
5G88934.D	WMB82168	02/20/20 15:46	Aqueous	5G88933.	13.1858	0.1009	13.5592	0.0133
5G88935.D	WMB82168(MS)	02/20/20 16:04	Aqueous	5G88933.	13.1779	0.041	13.5603	0.0214
5G88936.D	AD15734-001(T)	02/20/20 16:22	Aqueous	5G88933.	13.1750	0.019	13.5588	0.0103
5G88937.D	CAL PEST@200PPB	02/20/20 16:40	Aqueous	5G88933.	13.1753	0.0213	13.5589	0.0111

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G106836.D	CAL EVAL	02/21/20 03:02	Soil					
6G106837.D	TEST	02/21/20 03:20	Soil					
6G106838.D	100PPB	02/21/20 03:37	Soil					
6G106839.D	CAL PEST@200PPB	02/21/20 03:55	Soil	6G10683	11.5540	0	12.4136	0
6G106840.D	AD15687-001	02/21/20 04:12	Soil	6G10683	11.5529	0.0095	12.4123	0.0105
6G106841.D	AD15658-001(10X)	02/21/20 04:30	Soil	6G10683	11.5536	0.0035	12.4115	0.0169
6G106842.D	AD15713-003	02/21/20 04:48	Soil	6G10683	11.5539	0.0009	12.4138	0.0016
6G106843.D	AD15714-001(100X)	02/21/20 05:05	Soil	6G10683	0.0000	200*	0.0000	200*
6G106844.D	SMB82176	02/21/20 07:55	Soil	6G10683	11.5579	0.0338	12.4140	0.0032
6G106845.D	MB	02/21/20 08:14	Soil	6G10683	11.5540	0	12.4124	0.0097
6G106846.D	MBS82176	02/21/20 08:32	Soil	6G10683	11.5528	0.0104	12.4109	0.0218
6G106847.D	MBS82167	02/21/20 08:49	Soil	6G10683	11.5535	0.0043	12.4132	0.0032
6G106848.D	SMB82167	02/21/20 09:07	Soil	6G10683	11.5545	0.0043	12.4140	0.0032
6G106849.D	AD15816-003	02/21/20 09:24	Soil	6G10683	11.5544	0.0035	12.4139	0.0024
6G106850.D	AD15816-001	02/21/20 09:42	Soil	6G10683	11.5538	0.0017	12.4132	0.0032
6G106851.D	AD15684-001	02/21/20 10:00	Soil	6G10683	11.5520	0.0173	12.4113	0.0185
6G106852.D	15714-001(50X)	02/21/20 10:17	Soil	6G10683	11.5542	0.0017	12.4089	0.0379
6G106853.D	CAL PEST@100PPB	02/21/20 10:47	Soil	6G10683	11.5552	0.0104	12.4147	0.0089
6G106854.D	SMB82176(MS)	02/21/20 11:06	Soil	6G10685	11.5548	0.0035	12.4129	0.0145
6G106855.D	SMB82167(MS)	02/21/20 11:23	Soil	6G10685	11.5538	0.0121	12.4137	0.0081
6G106856.D	AD15718-006(MS)	02/21/20 11:41	Soil	6G10685	11.5536	0.0138	12.4127	0.0161
6G106857.D	AD15718-006(MSD)	02/21/20 11:59	Soil	6G10685	11.5537	0.013	12.4137	0.0081
6G106858.D	AD15718-006	02/21/20 12:16	Soil	6G10685	11.5538	0.0121	12.4138	0.0072
6G106859.D	AD15718-001	02/21/20 12:34	Soil	6G10685	11.5542	0.0086	12.4137	0.0081
6G106860.D	AD15718-002	02/21/20 12:51	Soil	6G10685	11.5515	0.032	12.4143	0.0032
6G106861.D	AD15718-005	02/21/20 13:09	Soil	6G10685	11.5504	0.0415	12.4066	0.0653
6G106862.D	AD15740-002	02/21/20 13:27	Soil	6G10685	11.5531	0.0182	12.4133	0.0113
6G106863.D	AD15740-003	02/21/20 13:44	Soil	6G10685	11.5530	0.019	12.4135	0.0097
6G106864.D	CAL PEST@100PPB	02/21/20 14:18	Soil	6G10685	11.5549	0.0026	12.4131	0.0129

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G106876.D	CAL EVAL	02/24/20 08:12	Soil					
6G106877.D	100PPB	02/24/20 08:38	Soil					
6G106878.D	CAL PEST@100PPB	02/24/20 10:32	Soil	6G10687	11.5620	0	12.4231	0
6G106879.D	SMB83608	02/24/20 10:50	Soil	6G10687	11.5603	0.0147	12.4232	0.0008
6G106880.D	SMB83608(MS)	02/24/20 11:08	Soil	6G10687	11.5603	0.0147	12.4228	0.0024
6G106881.D	MBS83610	02/24/20 11:25	Soil	6G10687	0.0000	200*	0.0000	200*
6G106882.D	SMB83624(MS)	02/24/20 11:44	Soil	6G10687	11.5624	0.0035	12.4242	0.0089
6G106883.D	AD15749-001	02/24/20 12:01	Soil	6G10687	11.5618	0.0017	12.4238	0.0056
6G106884.D	AD15749-002	02/24/20 12:19	Soil	6G10687	11.5616	0.0035	12.4232	0.0008
6G106885.D	AD15715-001	02/24/20 12:37	Soil	6G10687	11.5607	0.0112	12.4236	0.004
6G106886.D	AD15715-002	02/24/20 12:54	Soil	6G10687	11.5601	0.0164	12.4229	0.0016
6G106887.D	AD15739-001	02/24/20 13:12	Soil	6G10687	11.5603	0.0147	12.4228	0.0024
6G106888.D	AD15715-004	02/24/20 13:29	Soil	6G10687	11.5604	0.0138	12.4234	0.0024
6G106889.D	AD15713-005	02/24/20 13:47	Soil	6G10687	11.5609	0.0095	12.4238	0.0056
6G106890.D	AD15752-002	02/24/20 14:05	Soil	6G10687	11.5617	0.0026	12.4243	0.0097
6G106891.D	AD15752-004	02/24/20 14:22	Soil	6G10687	11.5623	0.0026	12.4230	0.0008
6G106892.D	AD15752-006	02/24/20 14:40	Soil	6G10687	11.5620	0	12.4246	0.0121
6G106893.D	AD15753-002	02/24/20 14:57	Soil	6G10687	11.5627	0.0061	12.4243	0.0097
6G106894.D	AD15753-004	02/24/20 15:15	Soil	6G10687	11.5616	0.0035	12.4228	0.0024
6G106895.D	AD15715-003	02/24/20 15:32	Soil	6G10687	11.5620	0	12.4248	0.0137
6G106896.D	CAL PEST@200PPB	02/24/20 16:07	Soil	6G10687	11.5567	0.0459	12.4170	0.0491
6G106897.D	200PPB	02/24/20 16:25	Soil	6G10689	11.5565	0.0017	12.4175	0.004
6G106898.D	AD15803-002	02/24/20 16:43	OIL/OTHER	6G10689	11.5541	0.0225	12.4163	0.0056
6G106899.D	AD15803-001	02/24/20 17:00	OIL/OTHER	6G10689	11.5668	0.0874	12.4265	0.0765
6G106900.D	OMB83627	02/24/20 17:18	OIL/OTHER	6G10689	11.5575	0.0069	12.4180	0.0081
6G106901.D	AD15750-011	02/24/20 17:35	Soil	6G10689	11.5567	0	12.4182	0.0097
6G106902.D	AD15750-003	02/24/20 17:53	Soil	6G10689	11.5556	0.0095	12.4167	0.0024
6G106903.D	AD15750-005	02/24/20 18:11	Soil	6G10689	11.5557	0.0086	12.4170	0
6G106904.D	CAL PEST@200PPB	02/24/20 19:35	Soil	6G10689	11.5560	0.0061	12.4157	0.0105

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6
Initial Calibration

Method: EPA 8081B

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G105796.D	CAL PEST@2PPB	01/08/20 08:25	2	6G105795.D	CAL PEST@10PPB	01/08/20 08:08
3	6G105794.D	CAL PEST@50PPB	01/08/20 07:50	4	6G105797.D	CAL PEST@100PPB	01/08/20 08:43
5	6G105798.D	CAL PEST@200PPB	01/08/20 09:00	6	6G105799.D	CAL PEST@400PPB	01/08/20 09:18
7	6G105800.D	CAL CHLOR@100PP	01/08/20 09:36				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.3651	0.4044	0.3491	0.3450	0.3457	0.3335	----	----	0.357	4.46	1.00	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	0.3716	0.4304	0.4079	0.4363	0.4657	0.4711	----	----	0.431	5.65	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	0.3712	0.4320	0.3977	0.4157	0.4321	0.4314	----	----	0.413	6.17	1.00	1.00	6.0	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	0.2987	0.3062	0.2416	0.2358	0.2317	0.2223	----	----	0.256	7.09	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	0.4042	0.4273	0.3160	0.3085	0.3089	0.3020	----	----	0.345	6.45	1.00	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	0.3260	0.4236	0.3638	0.3833	0.4011	0.4034	----	----	0.384	7.42	1.00	1.00	9.0	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	0.3528	0.4016	0.3507	0.3619	0.3762	0.3780	----	----	0.370	6.81	1.00	1.00	5.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Avg	0.3455	0.3947	0.3258	0.3292	0.3325	0.3267	----	----	0.342	7.66	1.00	1.00	7.8	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	1	0	Avg	0.3865	0.4357	0.3660	0.3706	0.3821	0.3885	----	----	0.388	8.06	1.00	1.00	6.4	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Avg	0.3987	0.4488	0.3767	0.3790	0.3849	0.3848	----	----	0.396	8.13	1.00	1.00	6.9	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Avg	0.3375	0.3766	0.3132	0.3123	0.3128	0.3023	----	----	0.326	8.01	1.00	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	0.2953	0.3550	0.3146	0.3260	0.3387	0.3457	----	----	0.329	8.22	1.00	1.00	6.7	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	0.3261	0.3699	0.3091	0.3147	0.3219	0.3243	----	----	0.328	8.46	1.00	1.00	6.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	0.3046	0.3522	0.2958	0.2971	0.3010	0.2977	----	----	0.308	8.71	1.00	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	0.3030	0.3186	0.2571	0.2619	0.2617	0.2573	----	----	0.277	9.18	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	0.3512	0.3903	0.3215	0.3205	0.3210	0.3155	----	----	0.337	9.29	1.00	1.00	8.7	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	0.1481	0.2250	0.2038	0.2010	0.2072	0.2125	----	----	0.200	9.38	1.00	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	0.2344	0.2855	0.2500	0.2465	0.2459	0.2431	----	----	0.251	9.79	1.00	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	0.3147	0.3406	0.2825	0.2851	0.2979	0.2917	----	----	0.302	10.16	1.00	1.00	7.3	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	0.1254	0.1473	0.1284	0.1205	0.1184	0.1129	----	----	0.126	10.08	0.999	1.00	9.5	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	0.2875	0.3404	0.2804	0.2834	0.2968	0.2905	----	----	0.297	10.66	1.00	1.00	7.5	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	LinF	0.4721	0.5271	0.3854	0.3679	0.3478	0.3308	----	----	0.405	11.57	0.999	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	1	1	Avg	----	----	----	----	----	----	----	----	0.0127	6.25	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	2	Avg	----	----	----	----	----	----	----	----	0.0365	8.06	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	3	Avg	----	----	----	----	----	----	----	----	0.0557	8.13	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	0.0046	0.0050	0.0055	0.0052	0.0051	0.0049	----	----	0.00510	8.84	0.999	1.00	6.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	2	Avg	0.0030	0.0025	0.0025	0.0024	0.0024	0.0023	----	----	0.00258	8.97	1.00	1.00	9.3	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	3	Avg	0.0069	0.0060	0.0059	0.0058	0.0057	0.0057	----	----	0.00605	9.32	1.00	1.00	7.7	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	4	Avg	0.0056	0.0047	0.0050	0.0048	0.0045	0.0044	----	----	0.00489	9.64	1.00	1.00	8.3	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	5	Avg	0.0079	0.0073	0.0079	0.0075	0.0075	0.0071	----	----	0.00758	10.09	0.999	1.00	4.6	50.00	200.0	500.0	1000.	2000.	4000.		
TCMX-Surrogate	2	0	LinF	1.4151	1.4931	1.0882	1.0215	0.9587	0.8806	----	----	1.14	4.65	0.998	1.00	22	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	1.5150	1.7008	1.4905	1.4805	1.4664	1.4145	----	----	1.51	5.59	1.00	1.00	6.5	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.5293	1.6578	1.3760	1.3516	1.3183	1.2598	----	----	1.42	6.14	0.999	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	LinF	1.0101	1.0402	0.7849	0.7408	0.6842	0.6320	----	----	0.815	6.22	0.998	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	LinF	1.7506	1.4952	1.0608	1.0271	0.9785	0.9319	----	----	1.21	6.58	0.999	1.00	28	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	1.4409	1.6075	1.3516	1.3621	1.3284	1.2859	----	----	1.40	6.72	1.00	1.00	8.3	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 8.69 Avg Rsd Col 2: 16.69

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0298

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G105796.D	CAL PEST@2PPB	01/08/20 08:25	2	6G105795.D	CAL PEST@10PPB	01/08/20 08:08
3	6G105794.D	CAL PEST@50PPB	01/08/20 07:50	4	6G105797.D	CAL PEST@100PPB	01/08/20 08:43
5	6G105798.D	CAL PEST@200PPB	01/08/20 09:00	6	6G105799.D	CAL PEST@400PPB	01/08/20 09:18
7	6G105800.D	CAL CHLOR@100PP	01/08/20 09:36				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	1.5113	1.5655	1.2015	1.1929	1.1276	1.0792	----	----	1.28	7.03	0.999	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	LinF	1.4200	1.4489	1.0846	1.0347	0.9762	0.9027	----	----	1.14	7.77	0.998	1.00	20	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	1.4992	1.5793	1.1984	1.1849	1.1253	1.0646	----	----	1.28	7.98	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	2	0	LinF	1.4533	1.5276	1.1464	1.1174	1.0388	0.9672	----	----	1.21	8.18	0.998	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	LinF	1.4230	1.4974	1.1334	1.1058	1.0587	0.9860	----	----	1.20	8.23	0.998	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	1.1896	1.2689	1.0351	1.0392	1.0122	0.9633	----	----	1.08	8.48	0.999	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.2967	1.3291	1.0511	1.0338	0.9872	0.9286	----	----	1.10	8.63	0.999	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	1.1360	1.2126	0.9467	0.8987	0.8502	0.7937	----	----	0.973	9.10	0.998	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	1.0937	1.1443	0.8753	0.8713	0.8349	0.7942	----	----	0.936	9.19	0.999	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	LinF	1.3648	1.4021	1.0693	1.0380	0.9727	0.8953	----	----	1.12	9.32	0.998	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	0.7865	0.9150	0.7801	0.7367	0.7285	0.7243	----	----	0.779	9.57	1.00	1.00	9.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	LinF	1.4170	1.2064	0.8561	0.8151	0.7509	0.6993	----	----	0.958	9.73	0.998	1.00	30	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	LinF	1.2168	1.2062	0.8976	0.8535	0.8019	0.7611	----	----	0.956	9.88	0.999	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	LinF	0.4850	0.5436	0.4210	0.3977	0.3722	0.3546	----	----	0.429	10.64	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	LinF	1.2344	1.2428	0.9607	0.9174	0.8549	0.7981	----	----	1.00	10.87	0.998	1.00	19	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	LinF	1.8619	1.8891	1.2423	1.1514	1.0247	0.9348	----	----	1.35	12.42	0.996	0.999	31	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	2	1	Avg	----	----	----	----	----	----	----	----	0.0535	6.37	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	2	Avg	----	----	----	----	----	----	----	----	0.237	7.98	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	3	Avg	----	----	----	----	----	----	----	----	0.119	8.18	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	0.0118	0.0101	0.0094	0.0086	0.0078	0.0075	----	----	0.00925	8.87	0.999	0.999	17	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	2	Avg	0.0194	0.0172	0.0170	0.0152	0.0138	0.0122	----	----	0.0159	9.13	0.994	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	3	Avg	0.0214	0.0187	0.0183	0.0168	0.0157	0.0141	----	----	0.0175	9.62	0.996	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	4	Avg	0.0278	0.0259	0.0266	0.0250	0.0237	0.0221	----	----	0.0252	10.37	0.998	1.00	8.1	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	5	Avg	0.0187	0.0190	0.0208	0.0202	0.0199	0.0193	----	----	0.0197	10.45	1.00	1.00	4.0	50.00	200.0	500.0	1000.	2000.	4000.		

Avg Rsd Col 1: 8.69 Avg Rsd Col 2: 16.69

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0299

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G88269.D	CAL PEST@2PPB	01/16/20 11:16	2	5G88270.D	CAL PEST@10PPB	01/16/20 11:34
3	5G88268.D	CAL PEST@50PPB	01/16/20 10:49	4	5G88271.D	CAL PEST@100PPB	01/16/20 11:52
5	5G88266.D	CAL PEST@200PPB	01/16/20 09:57	6	5G88267.D	CAL PEST@400PPB	01/16/20 10:20
7	5G88272.D	CAL CHLOR@100PP	01/16/20 12:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	140.81	167.83	130.95	130.41	122.68	117.00	----	----	135	6.14	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	198.79	233.83	194.93	193.05	193.46	190.35	----	----	201	7.44	1.00	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	LinF	217.74	234.22	181.39	178.79	175.53	170.78	----	----	193	7.97	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	87.169	94.698	74.285	72.980	72.493	69.927	----	----	78.6	8.89	1.00	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	195.43	213.91	157.51	153.68	148.11	142.58	----	----	169	8.24	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	159.16	199.81	164.17	163.26	163.30	159.57	----	----	168	9.21	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	164.31	203.99	162.76	159.61	154.23	147.07	----	----	165	8.60	0.999	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	LinF	214.16	176.46	141.12	134.12	130.31	123.70	----	----	153	9.42	0.999	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	1	0	Avg	155.65	187.33	151.31	150.79	148.58	143.01	----	----	156	9.81	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Avg	159.04	183.33	146.74	145.74	142.96	138.16	----	----	153	9.87	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Avg	144.96	170.82	134.64	131.65	128.24	122.59	----	----	139	9.76	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	142.61	176.84	144.17	143.51	141.27	136.10	----	----	147	9.96	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	145.71	176.97	142.49	140.66	137.91	133.00	----	----	146	10.19	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	130.60	157.78	129.71	124.91	127.42	122.64	----	----	132	10.44	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	120.84	144.47	117.30	117.84	116.12	114.71	----	----	122	10.88	1.00	1.00	9.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	132.42	153.89	124.05	123.53	122.19	119.61	----	----	129	10.99	1.00	1.00	9.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	96.476	119.84	104.59	107.52	109.54	111.19	----	----	108	11.07	1.00	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	91.860	112.66	88.783	89.133	87.567	85.727	----	----	92.6	11.47	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	121.44	136.79	111.56	112.22	110.57	107.83	----	----	117	11.82	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	58.613	66.495	53.941	54.509	54.484	54.391	----	----	57.1	11.73	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	105.57	121.48	100.09	102.85	101.14	99.111	----	----	105	12.30	1.00	1.00	8.0	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	128.42	140.87	104.74	106.00	105.39	103.53	----	----	115	13.20	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	1	1	Avg	----	----	----	----	----	----	----	----	5.28	8.04	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	2	Avg	----	----	----	----	----	----	----	----	15.7	9.81	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	3	Avg	----	----	----	----	----	----	----	----	22.1	9.87	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	0.4774	0.4459	0.4565	0.4335	0.3951	0.3860	----	----	0.432	10.03	0.999	1.00	8.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	2	Avg	2.4849	2.3343	2.4680	2.4035	2.2828	2.2830	----	----	2.38	10.56	1.00	1.00	3.8	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	3	Avg	2.3904	2.3097	2.3839	2.3809	2.3064	2.2871	----	----	2.34	11.02	1.00	1.00	2.0	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	4	Avg	2.0595	1.9696	2.1373	2.1052	1.9855	2.0301	----	----	2.05	11.32	1.00	1.00	3.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	5	Avg	2.8142	2.5913	2.7260	2.5947	2.4869	2.4752	----	----	2.61	11.75	1.00	1.00	5.1	50.00	200.0	500.0	1000.	2000.	4000.		
TCMX-Surrogate	2	0	Avg	68.940	79.626	64.093	63.767	62.614	60.140	----	----	66.5	6.08	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	95.199	125.25	103.09	104.29	102.99	100.63	----	----	105	7.09	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	86.311	105.74	88.494	88.998	88.585	86.529	----	----	90.8	7.63	1.00	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	45.404	47.538	38.259	37.859	37.427	36.383	----	----	40.5	7.72	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Avg	97.442	89.314	72.881	72.572	71.803	70.085	----	----	79.0	8.07	1.00	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	110.91	108.92	88.874	88.629	89.385	86.664	----	----	95.6	8.21	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 10.09 Avg Rsd Col 2: 9.11

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G88269.D	CAL PEST@2PPB	01/16/20 11:16	2	5G88270.D	CAL PEST@10PPB	01/16/20 11:34
3	5G88268.D	CAL PEST@50PPB	01/16/20 10:49	4	5G88271.D	CAL PEST@100PPB	01/16/20 11:52
5	5G88266.D	CAL PEST@200PPB	01/16/20 09:57	6	5G88267.D	CAL PEST@400PPB	01/16/20 10:20
7	5G88272.D	CAL CHLOR@100PP	01/16/20 12:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	80.308	97.041	80.220	80.873	79.114	75.752	----	----	82.2	8.51	0.999	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	75.802	84.063	66.835	66.647	66.121	63.728	----	----	70.5	9.21	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	81.500	93.666	75.300	75.998	75.792	73.562	----	----	79.3	9.41	1.00	1.00	9.5	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	2	0	Avg	78.629	86.856	69.357	70.251	69.922	68.316	----	----	73.9	9.61	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	76.200	86.329	67.474	68.220	67.235	64.943	----	----	71.7	9.65	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	69.400	83.797	69.672	70.904	70.879	69.054	----	----	72.3	9.89	1.00	1.00	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	72.276	84.532	69.585	68.444	70.206	68.291	----	----	72.2	10.03	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	62.649	69.585	58.297	56.837	59.919	58.264	----	----	60.9	10.47	1.00	1.00	7.7	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	59.758	68.846	57.658	55.700	59.163	58.384	----	----	59.9	10.56	1.00	1.00	7.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	71.833	76.601	63.032	63.107	63.540	61.989	----	----	66.7	10.68	1.00	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	47.049	55.170	50.093	51.807	54.641	55.314	----	----	52.3	10.92	1.00	1.00	6.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	LinF	65.946	63.818	50.381	49.748	49.902	49.006	----	----	54.8	11.07	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	65.938	69.382	55.545	55.421	56.228	55.384	----	----	59.7	11.21	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	26.376	28.710	23.366	24.217	25.066	25.129	----	----	25.5	11.92	1.00	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	62.384	69.361	55.963	57.464	57.913	57.311	----	----	60.1	12.13	1.00	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	74.994	74.804	53.816	55.611	54.661	54.205	----	----	61.3	13.58	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	2	1	Avg	----	----	----	----	----	----	----	----	2.66	7.86	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	2	Avg	----	----	----	----	----	----	----	----	8.31	9.41	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	3	Avg	----	----	----	----	----	----	----	----	6.37	9.61	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	0.5941	0.5404	0.5372	0.5105	0.4931	0.4868	----	----	0.527	9.77	1.00	1.00	7.5	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	2	Avg	1.2763	1.3286	1.3928	1.3944	1.3430	1.4217	----	----	1.36	10.69	0.999	1.00	3.9	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	3	Avg	1.3587	1.1746	1.2131	1.1880	1.1509	1.1532	----	----	1.21	10.96	1.00	1.00	6.5	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	4	Avg	1.4487	1.3245	1.3593	1.3334	1.2932	1.3105	----	----	1.34	11.67	1.00	1.00	4.1	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	5	Avg	1.1289	1.1349	1.1656	1.1675	1.1504	1.1671	----	----	1.15	11.74	1.00	1.00	1.5	50.00	200.0	500.0	1000.	2000.	4000.		

Avg Rsd Col 1: 10.09 Avg Rsd Col 2: 9.11

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0021406 0301

Form7
Continuing Calibration

Method: EPA 8081B

Data File:				5G88894.D			5G88910.D			5G88913.D			5G88933.D			6G106800.D		
Method:				8081			8081			8081			8081			8081		
Calibration Name:				CAL PEST@100PP			CAL PEST@100PP			CAL PEST@100PP			CAL PEST@200PP			CAL PEST@200PP		
Calibration Date/Time				02/19/20 08:28			02/19/20 14:39			02/19/20 23:48			02/20/20 09:46			02/19/20 23:55		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	20	1	0	99.18	100	0.8	102.8	100	2.8	98.94	100	1.1	190.4	200	4.8	202.7	200	1.3
alpha-BHC	20	1	0	100.3	100	0.3	104.3	100	4.3	96.8	100	3.2	202.4	200	1.2	218.5	200	9.3
gamma-BHC	20	1	0	109.0	100	9.0	112.4	100	12.4	105.6	100	5.6	212.1	200	6.0	211.3	200	5.7
beta-BHC	20	1	0	96.42	100	3.6	91.27	100	8.7	93.53	100	6.5	191.9	200	4.0	189.2	200	5.4
Heptachlor	20	1	0	96.51	100	3.5	102.9	100	2.9	93.64	100	6.4	192.8	200	3.6	169.4	200	15.3
delta-BHC	20	1	0	99.44	100	0.6	104.4	100	4.4	94.85	100	5.2	194.1	200	2.9	211.2	200	5.6
Aldrin	20	1	0	100.8	100	0.8	103.9	100	3.9	98.18	100	1.8	196.0	200	2.0	207.4	200	3.7
Heptachlor Epoxide	20	1	0	111.3	100	11.3	117.3	100	17.3	109.5	100	9.5	219.9	200	9.9	198.2	200	0.9
y-chlordane	20	1	0	98.93	100	1.1	104.3	100	4.3	97.26	100	2.7	196.9	200	1.6	203.5	200	1.8
a-chlordane	20	1	0	97.69	100	2.3	103.2	100	3.2	96.01	100	4.0	194.6	200	2.7	200.7	200	0.3
Endosulfan I	20	1	0	98.71	100	1.3	103.2	100	3.2	97.47	100	2.5	195.2	200	2.4	192.3	200	3.8
p,p'-DDE	20	1	0	100.6	100	0.6	106.1	100	6.1	99.07	100	0.9	200	200	0.0	210.1	200	5.1
Dieldrin	20	1	0	98.53	100	1.5	97.31	100	2.7	97.62	100	2.4	198.3	200	0.8	200.9	200	0.4
Endrin	20	1	0	102.4	100	2.4	110.4	100	10.4	94.72	100	5.3	197.1	200	1.5	195.6	200	2.2
p,p'-DDD	20	1	0	99.03	100	1.0	106.9	100	6.9	99.42	100	0.6	202.1	200	1.0	201.6	200	0.8
Endosulfan II	20	1	0	97.88	100	2.1	104.7	100	4.7	98.22	100	1.8	199.1	200	0.4	198.2	200	0.9
p,p'-DDT	20	1	0	96.69	100	3.3	108.8	100	8.8	95.66	100	4.3	210.1	200	5.1	181.1	200	9.4
Endrin Aldehyde	20	1	0	97.62	100	2.4	106.2	100	6.2	101.7	100	1.7	206.4	200	3.2	215.8	200	7.9
Endosulfan Sulfate	20	1	0	94.66	100	5.3	103.7	100	3.7	94.82	100	5.2	197.6	200	1.2	190.9	200	4.6
Methoxychlor	20	1	0	94.76	100	5.2	108.6	100	8.6	93.89	100	6.1	206.4	200	3.2	166.0	200	17.0
Endrin Ketone	20	1	0	87.87	100	12.1	108.1	100	8.1	99.77	100	0.2	209	200	4.5	200.9	200	0.4
DCB-Surrogate	20	1	0	90.29	100	9.7	99.85	100	0.2	92.87	100	7.1	184.7	200	7.6	216.7	200	8.4
Average Difference	20	1	0			3.6			6.1			3.8			3.2			5.0
TCMX-Surrogate	20	2	0	100.9	100	0.9	102.1	100	2.1	97.4	100	2.6	192.7	200	3.6	214.2	200	7.1
alpha-BHC	20	2	0	104.4	100	4.4	106.2	100	6.2	101.2	100	1.2	204.5	200	2.3	193.4	200	3.3
gamma-BHC	20	2	0	103.8	100	3.8	106.7	100	6.7	100.3	100	0.3	200.8	200	0.4	184.7	200	7.7
beta-BHC	20	2	0	99.4	100	0.6	102.4	100	2.4	96.24	100	3.8	191.0	200	4.5	218.8	200	9.4
Heptachlor	20	2	0	89.32	100	10.7	99.03	100	1.0	81.39	100	18.6	190.1	200	5.0	200.4	200	0.2
delta-BHC	20	2	0	99.42	100	0.6	102.0	100	2.0	92.09	100	7.9	184.7	200	7.6	184.8	200	7.6
Aldrin	20	2	0	105.1	100	5.1	108.1	100	8.1	101.8	100	1.8	200.7	200	0.3	181.6	200	9.2
Heptachlor Epoxide	20	2	0	97.1	100	2.9	105.7	100	5.7	99.57	100	0.4	198.2	200	0.9	212.2	200	6.1
y-chlordane	20	2	0	100.8	100	0.8	98.05	100	1.9	99.64	100	0.4	198.7	200	0.7	178.8	200	10.6
a-chlordane	20	2	0	101.1	100	1.1	106.1	100	6.1	98.44	100	1.6	198.4	200	0.8	208.1	200	4.1
Endosulfan I	20	2	0	101.1	100	1.1	104.5	100	4.5	98.71	100	1.3	199	200	0.5	210.9	200	5.5
p,p'-DDE	20	2	0	104.8	100	4.8	108.2	100	8.2	100.6	100	0.6	203.7	200	1.9	187.4	200	6.3
Dieldrin	20	2	0	105.2	100	5.2	106	100	6.0	101.6	100	1.6	205.8	200	2.9	179.7	200	10.2
Endrin	20	2	0	109.8	100	9.8	116.8	100	16.8	98.64	100	1.4	209.2	200	4.6	172.7	200	13.7
p,p'-DDD	20	2	0	105.2	100	5.2	103	100	3.0	103	100	3.0	208.8	200	4.4	181.7	200	9.1
Endosulfan II	20	2	0	103.7	100	3.7	106.4	100	6.4	103.2	100	3.2	204.4	200	2.2	209.7	200	4.9
p,p'-DDT	20	2	0	100.9	100	0.9	112.2	100	12.2	92.53	100	7.5	215.1	200	7.5	169.4	200	15.3
Endrin Aldehyde	20	2	0	106.8	100	6.8	107.8	100	7.8	107.4	100	7.4	212.8	200	6.4	208.3	200	4.1
Endosulfan Sulfate	20	2	0	99.33	100	0.7	104.4	100	4.3	95.45	100	4.6	192.9	200	3.6	201.8	200	0.9
Methoxychlor	20	2	0	95.91	100	4.1	108.8	100	8.8	87.63	100	12.4	205.8	200	2.9	190.7	200	4.7
Endrin Ketone	20	2	0	101.9	100	1.9	105.4	100	5.4	99.06	100	0.9	202.3	200	1.2	201.8	200	0.9
DCB-Surrogate	20	2	0	91.06	100	8.9	97.95	100	2.1	90.01	100	10.0	181.1	200	9.5	205.0	200	2.5
Average Difference	20	2	0			3.8			5.8			4.2			3.3			6.5

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: EPA 8081B

Data File:				6G106822.D			6G106839.D			6G106853.D			6G106878.D			6G106896.D		
Method:				8081			8081			8081			8081			8081		
Calibration Name:				CAL PEST@200PP			CAL PEST@200PP			CAL PEST@100PP			CAL PEST@100PP			CAL PEST@200PP		
Calibration Date/Time				02/20/20 09:44			02/21/20 03:55			02/21/20 10:47			02/24/20 10:32			02/24/20 16:07		
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	20	1	0	209.7	200	4.9	210.3	200	5.2	107.6	100	7.6	103.0	100	3.0	204.0	200	2.0
alpha-BHC	20	1	0	231.9	200	15.9	230.2	200	15.1	109.7	100	9.7	104.0	100	4.0	222.7	200	11.4
gamma-BHC	20	1	0	225.9	200	13.0	220.7	200	10.4	108.8	100	8.8	102.1	100	2.1	214.3	200	7.2
beta-BHC	20	1	0	198.7	200	0.6	196.2	200	1.9	101.4	100	1.4	95.56	100	4.4	190	200	5.0
Heptachlor	20	1	0	185.4	200	7.3	167.8	200	16.1	93.66	100	6.3	88.62	100	11.4	177.4	200	11.3
delta-BHC	20	1	0	223.8	200	11.9	220	200	10.0	107.4	100	7.4	100.8	100	0.8	214.6	200	7.3
Aldrin	20	1	0	216.1	200	8.0	215.1	200	7.6	105.7	100	5.7	102.8	100	2.8	209.9	200	4.9
Heptachlor Epoxide	20	1	0	208.7	200	4.3	205.8	200	2.9	103.4	100	3.4	101.7	100	1.7	202.2	200	1.1
y-chlordane	20	1	0	214	200	7.0	212.3	200	6.2	104.5	100	4.5	102.6	100	2.6	207.2	200	3.6
a-chlordane	20	1	0	208.6	200	4.3	208.9	200	4.5	104.8	100	4.8	103.2	100	3.2	202.8	200	1.4
Endosulfan I	20	1	0	202.9	200	1.5	200.4	200	0.2	101.0	100	1.0	99.65	100	0.3	195.3	200	2.3
p,p'-DDE	20	1	0	223.1	200	11.6	220.6	200	10.3	106.4	100	6.3	102.2	100	2.2	214.7	200	7.3
Dieldrin	20	1	0	213.5	200	6.7	209.7	200	4.8	104.1	100	4.1	101.3	100	1.3	206.3	200	3.2
Endrin	20	1	0	213.8	200	6.9	192.2	200	3.9	105.5	100	5.4	100.8	100	0.8	202.8	200	1.4
p,p'-DDD	20	1	0	222.1	200	11.0	213.3	200	6.6	110	100	10.0	96.11	100	3.9	207.7	200	3.9
Endosulfan II	20	1	0	208.3	200	4.2	206.6	200	3.3	102.8	100	2.8	102.3	100	2.3	201.6	200	0.8
p,p'-DDT	20	1	0	188.8	200	5.6	174.8	200	12.6	92.1	100	7.9	92.88	100	7.1	181.3	200	9.3
Endrin Aldehyde	20	1	0	222.0	200	11.0	224.4	200	12.2	110.2	100	10.2	108.9	100	8.9	217.7	200	8.8
Endosulfan Sulfate	20	1	0	201.1	200	0.6	190.1	200	5.0	96.95	100	3.1	97.35	100	2.7	197.7	200	1.2
Methoxychlor	20	1	0	179.9	200	10.1	157.1	200	21.5*	94.03	100	6.0	92.37	100	7.6	162.4	200	18.8
Endrin Ketone	20	1	0	210.1	200	5.1	207.6	200	3.8	105.9	100	5.9	97.37	100	2.6	199.5	200	0.3
DCB-Surrogate	20	1	0	215.9	200	8.0	220.6	200	10.3	118.1	100	18.1	116	100	16.0	220.2	200	10.1
Average Difference	20	1	0			7.2			7.9			6.4			4.2			5.6
TCMX-Surrogate	20	2	0	220.5	200	10.3	220.9	200	10.5	114.3	100	14.3	120.6	100	20.6*	215.4	200	7.7
alpha-BHC	20	2	0	204.4	200	2.2	201.3	200	0.7	98.18	100	1.8	105	100	4.9	199.7	200	0.2
gamma-BHC	20	2	0	196.9	200	1.6	192.5	200	3.7	96.21	100	3.8	99.81	100	0.2	192.1	200	3.9
beta-BHC	20	2	0	225.1	200	12.6	223.7	200	11.8	114.5	100	14.5	117.6	100	17.6	220.3	200	10.2
Heptachlor	20	2	0	229.1	200	14.5	204.6	200	2.3	109.3	100	9.3	105.6	100	5.6	217.0	200	8.5
delta-BHC	20	2	0	194.6	200	2.7	192.3	200	3.9	95.05	100	4.9	97.96	100	2.0	192.7	200	3.7
Aldrin	20	2	0	185.7	200	7.1	187.1	200	6.5	91.59	100	8.4	97.55	100	2.4	184.0	200	8.0
Heptachlor Epoxide	20	2	0	220.1	200	10.1	218.5	200	9.3	111.6	100	11.6	120	100	20.0	216	200	8.0
y-chlordane	20	2	0	184.3	200	7.8	185.9	200	7.0	91.44	100	8.6	98.33	100	1.7	179.1	200	10.4
a-chlordane	20	2	0	215	200	7.5	217.3	200	8.7	109.2	100	9.2	116.6	100	16.6	209.1	200	4.6
Endosulfan I	20	2	0	219	200	9.5	217.3	200	8.6	108.1	100	8.1	118.9	100	18.9	212.4	200	6.2
p,p'-DDE	20	2	0	196.2	200	1.9	196	200	2.0	95.72	100	4.3	102.8	100	2.8	189.2	200	5.4
Dieldrin	20	2	0	187.7	200	6.2	185.1	200	7.4	93.57	100	6.4	104.3	100	4.3	184.7	200	7.6
Endrin	20	2	0	190.1	200	5.0	170.8	200	14.6	95.54	100	4.5	100.8	100	0.8	184.3	200	7.8
p,p'-DDD	20	2	0	195.9	200	2.0	190	200	5.0	95.41	100	4.6	96.77	100	3.2	189.1	200	5.5
Endosulfan II	20	2	0	218.7	200	9.4	219.1	200	9.6	107	100	6.9	118.2	100	18.2	216.7	200	8.3
p,p'-DDT	20	2	0	175.5	200	12.3	166.3	200	16.9	83.96	100	16.0	99.51	100	0.5	172.1	200	13.9
Endrin Aldehyde	20	2	0	215.5	200	7.7	219.1	200	9.6	108.3	100	8.3	118.8	100	18.8	214	200	7.0
Endosulfan Sulfate	20	2	0	204.2	200	2.1	206.3	200	3.1	101.0	100	1.0	113.9	100	13.9	201.1	200	0.5
Methoxychlor	20	2	0	207.1	200	3.5	185.8	200	7.1	104.7	100	4.7	115	100	15.0	205.4	200	2.7
Endrin Ketone	20	2	0	218.5	200	9.2	213.7	200	6.9	113.8	100	13.8	115.6	100	15.6	219.2	200	9.6
DCB-Surrogate	20	2	0	206.5	200	3.3	214	200	7.0	111.8	100	11.8	123.5	100	23.5*	218.9	200	9.4
Average Difference	20	2	0			6.7			7.4			8.0			10.3			6.8

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8081B

			Data File:		5G88269.D		6G105796.D		5G88894.D		5G88913.D		6G106800.D	
			Calibration Name:		CAL PEST@2PPB		CAL PEST@2PPB		CAL PEST@100PPB		CAL PEST@100PPB		CAL PEST@200PPB	
			Calibration Date/Time		1/16/2020 11:16:23 AM		1/8/2020 8:25:00 AM		2/19/2020 8:28:48 AM		2/19/2020 11:48:51 PM		2/19/2020 11:55:00 PM	
Compound	Col	Mr		Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0		6.14	(6.08 - 6.20)	4.46	(4.40 - 4.52)	6.14	(6.08 - 6.20)	6.13	(6.07 - 6.19)	4.45	(4.39 - 4.51)
alpha-BHC	1	0		7.44	(7.40 - 7.48)	5.65	(5.61 - 5.69)	7.43	(7.39 - 7.47)	7.42	(7.38 - 7.46)	5.63	(5.59 - 5.67)
gamma-BHC	1	0		7.97	(7.93 - 8.01)	6.17	(6.13 - 6.21)	7.96	(7.92 - 8.00)	7.95	(7.91 - 7.99)	6.15	(6.11 - 6.19)
beta-BHC	1	0		8.89	(8.81 - 8.97)	7.09	(7.01 - 7.17)	8.87	(8.79 - 8.95)	8.87	(8.79 - 8.95)	7.07	(6.99 - 7.15)
Heptachlor	1	0		8.24	(8.20 - 8.28)	6.44	(6.40 - 6.48)	8.23	(8.19 - 8.27)	8.22	(8.18 - 8.26)	6.43	(6.39 - 6.47)
delta-BHC	1	0		9.21	(9.13 - 9.29)	7.42	(7.34 - 7.50)	9.19	(9.11 - 9.27)	9.18	(9.10 - 9.26)	7.40	(7.32 - 7.48)
Aldrin	1	0		8.60	(8.52 - 8.68)	6.81	(6.73 - 6.89)	8.58	(8.50 - 8.66)	8.58	(8.50 - 8.66)	6.80	(6.72 - 6.88)
Heptachlor Epoxide	1	0		9.42	(9.38 - 9.46)	7.65	(7.61 - 7.69)	9.41	(9.37 - 9.45)	9.40	(9.36 - 9.44)	7.64	(7.60 - 7.68)
v-chlordane	1	0		9.81	(9.77 - 9.85)	8.06	(8.02 - 8.10)	9.79	(9.75 - 9.83)	9.79	(9.75 - 9.83)	8.04	(8.00 - 8.08)
a-chlordane	1	0		9.87	(9.83 - 9.91)	8.12	(8.08 - 8.16)	9.86	(9.82 - 9.90)	9.85	(9.81 - 9.89)	8.11	(8.07 - 8.15)
Endosulfan I	1	0		9.76	(9.72 - 9.80)	8.00	(7.96 - 8.04)	9.75	(9.71 - 9.79)	9.74	(9.70 - 9.78)	7.99	(7.95 - 8.03)
p,p'-DDE	1	0		9.96	(9.88 - 10.04)	8.22	(8.14 - 8.30)	9.94	(9.86 - 10.02)	9.93	(9.85 - 10.01)	8.20	(8.12 - 8.28)
Dieldrin	1	0		10.19	(10.11 - 10.27)	8.45	(8.37 - 8.53)	10.18	(10.10 - 10.26)	10.17	(10.09 - 10.25)	8.44	(8.36 - 8.52)
Endrin	1	0		10.44	(10.40 - 10.48)	8.71	(8.67 - 8.75)	10.42	(10.38 - 10.46)	10.42	(10.38 - 10.46)	8.69	(8.65 - 8.73)
o,p'-DDD	1	0		10.88	(10.80 - 10.96)	9.18	(9.10 - 9.26)	10.86	(10.78 - 10.94)	10.85	(10.77 - 10.93)	9.16	(9.08 - 9.24)
Endosulfan II	1	0		10.99	(10.91 - 11.07)	9.29	(9.21 - 9.37)	10.97	(10.89 - 11.05)	10.97	(10.89 - 11.05)	9.27	(9.19 - 9.35)
p,p'-DDT	1	0		11.07	(10.99 - 11.15)	9.38	(9.30 - 9.46)	11.05	(10.97 - 11.13)	11.05	(10.97 - 11.13)	9.37	(9.29 - 9.45)
Endrin Aldehyde	1	0		11.47	(11.39 - 11.55)	9.78	(9.70 - 9.86)	11.45	(11.37 - 11.53)	11.44	(11.36 - 11.52)	9.76	(9.68 - 9.84)
Endosulfan Sulfate	1	0		11.82	(11.78 - 11.86)	10.15	(10.11 - 10.19)	11.80	(11.76 - 11.84)	11.80	(11.76 - 11.84)	10.13	(10.09 - 10.17)
Methoxychlor	1	0		11.73	(11.69 - 11.77)	10.08	(10.04 - 10.12)	11.71	(11.67 - 11.75)	11.71	(11.67 - 11.75)	10.07	(10.03 - 10.11)
Endrin Ketone	1	0		12.30	(12.22 - 12.38)	10.65	(10.57 - 10.73)	12.28	(12.20 - 12.36)	12.27	(12.19 - 12.35)	10.63	(10.55 - 10.71)
DCB-Surrogate	1	0		13.20	(13.14 - 13.26)	11.57	(11.51 - 11.63)	13.18	(13.12 - 13.24)	13.17	(13.11 - 13.23)	11.55	(11.49 - 11.61)
Chlordane (Technical	1	1											
Chlordane (Technical	1	2											
Chlordane (Technical	1	3											
Toxaphene	1	1											
Toxaphene	1	2											
Toxaphene	1	3											
Toxaphene	1	4											
Toxaphene	1	5											
TCMX-Surrogate	2	0		6.08	(6.02 - 6.14)	4.65	(4.59 - 4.71)	6.08	(6.02 - 6.14)	6.08	(6.02 - 6.14)	4.64	(4.58 - 4.70)
alpha-BHC	2	0		7.09	(7.05 - 7.13)	5.60	(5.56 - 5.64)	7.09	(7.05 - 7.13)	7.09	(7.05 - 7.13)	5.59	(5.55 - 5.63)
gamma-BHC	2	0		7.63	(7.59 - 7.67)	6.14	(6.10 - 6.18)	7.63	(7.59 - 7.67)	7.63	(7.59 - 7.67)	6.13	(6.09 - 6.17)
beta-BHC	2	0		7.72	(7.64 - 7.80)	6.22	(6.14 - 6.30)	7.72	(7.64 - 7.80)	7.71	(7.63 - 7.79)	6.21	(6.13 - 6.29)
Heptachlor	2	0		8.07	(8.03 - 8.11)	6.58	(6.54 - 6.62)	8.06	(8.02 - 8.10)	8.06	(8.02 - 8.10)	6.57	(6.53 - 6.61)
delta-BHC	2	0		8.21	(8.13 - 8.29)	6.72	(6.64 - 6.80)	8.20	(8.12 - 8.28)	8.20	(8.12 - 8.28)	6.71	(6.63 - 6.79)
Aldrin	2	0		8.51	(8.43 - 8.59)	7.03	(6.95 - 7.11)	8.50	(8.42 - 8.58)	8.50	(8.42 - 8.58)	7.02	(6.94 - 7.10)
Heptachlor Epoxide	2	0		9.21	(9.17 - 9.25)	7.77	(7.73 - 7.81)	9.20	(9.16 - 9.24)	9.20	(9.16 - 9.24)	7.76	(7.72 - 7.80)
v-chlordane	2	0		9.41	(9.37 - 9.45)	7.98	(7.94 - 8.02)	9.40	(9.36 - 9.44)	9.40	(9.36 - 9.44)	7.97	(7.93 - 8.01)
a-chlordane	2	0		9.61	(9.57 - 9.65)	8.18	(8.14 - 8.22)	9.60	(9.56 - 9.64)	9.60	(9.56 - 9.64)	8.17	(8.13 - 8.21)
Endosulfan I	2	0		9.65	(9.61 - 9.69)	8.23	(8.19 - 8.27)	9.64	(9.60 - 9.68)	9.64	(9.60 - 9.68)	8.22	(8.18 - 8.26)
p,p'-DDE	2	0		9.89	(9.81 - 9.97)	8.48	(8.40 - 8.56)	9.88	(9.80 - 9.96)	9.88	(9.80 - 9.96)	8.48	(8.40 - 8.56)
Dieldrin	2	0		10.03	(9.95 - 10.11)	8.63	(8.55 - 8.71)	10.02	(9.94 - 10.10)	10.02	(9.94 - 10.10)	8.62	(8.54 - 8.70)
Endrin	2	0		10.47	(10.43 - 10.51)	9.10	(9.06 - 9.14)	10.46	(10.42 - 10.50)	10.46	(10.42 - 10.50)	9.09	(9.05 - 9.13)
o,p'-DDD	2	0		10.56	(10.48 - 10.64)	9.19	(9.11 - 9.27)	10.55	(10.47 - 10.63)	10.55	(10.47 - 10.63)	9.18	(9.10 - 9.26)
Endosulfan II	2	0		10.68	(10.60 - 10.76)	9.32	(9.24 - 9.40)	10.67	(10.59 - 10.75)	10.67	(10.59 - 10.75)	9.31	(9.23 - 9.39)
p,p'-DDT	2	0		10.92	(10.84 - 11.00)	9.57	(9.49 - 9.65)	10.91	(10.83 - 10.99)	10.91	(10.83 - 10.99)	9.57	(9.49 - 9.65)
Endrin Aldehyde	2	0		11.07	(10.99 - 11.15)	9.73	(9.65 - 9.81)	11.06	(10.98 - 11.14)	11.05	(10.97 - 11.13)	9.72	(9.64 - 9.80)
Endosulfan Sulfate	2	0		11.21	(11.17 - 11.25)	9.88	(9.84 - 9.92)	11.20	(11.16 - 11.24)	11.20	(11.16 - 11.24)	9.88	(9.84 - 9.92)
Methoxychlor	2	0		11.92	(11.88 - 11.96)	10.64	(10.60 - 10.68)	11.91	(11.87 - 11.95)	11.91	(11.87 - 11.95)	10.64	(10.60 - 10.68)
Endrin Ketone	2	0		12.13	(12.05 - 12.21)	10.87	(10.79 - 10.95)	12.12	(12.04 - 12.20)	12.12	(12.04 - 12.20)	10.86	(10.78 - 10.94)
DCB-Surrogate	2	0		13.58	(13.52 - 13.64)	12.42	(12.36 - 12.48)	13.56	(13.50 - 13.62)	13.56	(13.50 - 13.62)	12.41	(12.35 - 12.47)
Chlordane (Technical	2	1											
Chlordane (Technical	2	2											
Chlordane (Technical	2	3											
Toxaphene	2	1											
Toxaphene	2	2											
Toxaphene	2	3											
Toxaphene	2	4											
Toxaphene	2	5											

Form7

RtWindow Summary

Method: EPA 8081B

Data File:			6G106839.D		6G106878.D							
Calibration Name:			CAL PEST@200PPB		CAL PEST@100PPB							
Calibration Date/Time			2/21/2020 3:55:00 AM		2/24/2020 10:32:00 AM							
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	4.45	(4.39 - 4.51)	4.45	(4.39 - 4.51)						
alpha-BHC	1	0	5.63	(5.59 - 5.67)	5.63	(5.59 - 5.67)						
gamma-BHC	1	0	6.15	(6.11 - 6.19)	6.15	(6.11 - 6.19)						
beta-BHC	1	0	7.07	(6.99 - 7.15)	7.08	(6.99 - 7.15)						
Heptachlor	1	0	6.43	(6.39 - 6.47)	6.44	(6.40 - 6.48)						
delta-BHC	1	0	7.40	(7.32 - 7.48)	7.40	(7.32 - 7.48)						
Aldrin	1	0	6.80	(6.72 - 6.88)	6.80	(6.72 - 6.88)						
Heptachlor Epoxide	1	0	7.64	(7.60 - 7.68)	7.64	(7.60 - 7.68)						
v-chlordane	1	0	8.04	(8.00 - 8.08)	8.05	(8.01 - 8.09)						
a-chlordane	1	0	8.11	(8.07 - 8.15)	8.11	(8.07 - 8.15)						
Endosulfan I	1	0	7.99	(7.95 - 8.03)	8.00	(7.96 - 8.04)						
o,o'-DDE	1	0	8.20	(8.12 - 8.28)	8.21	(8.13 - 8.29)						
Dieldrin	1	0	8.44	(8.36 - 8.52)	8.45	(8.37 - 8.53)						
Endrin	1	0	8.69	(8.65 - 8.73)	8.70	(8.66 - 8.74)						
o,o'-DDD	1	0	9.16	(9.08 - 9.24)	9.17	(9.09 - 9.25)						
Endosulfan II	1	0	9.27	(9.19 - 9.35)	9.27	(9.19 - 9.35)						
o,o'-DDT	1	0	9.37	(9.29 - 9.45)	9.37	(9.29 - 9.45)						
Endrin Aldehyde	1	0	9.76	(9.68 - 9.84)	9.77	(9.69 - 9.85)						
Endosulfan Sulfate	1	0	10.13	(10.09 - 10.17)	10.14	(10.10 - 10.18)						
Methoxychlor	1	0	10.07	(10.03 - 10.11)	10.07	(10.03 - 10.11)						
Endrin Ketone	1	0	10.63	(10.55 - 10.71)	10.64	(10.56 - 10.72)						
DCB-Surrogate	1	0	11.55	(11.49 - 11.61)	11.56	(11.50 - 11.62)						
Chlordane (Technical	1	1										
Chlordane (Technical	1	2										
Chlordane (Technical	1	3										
Toxaphene	1	1										
Toxaphene	1	2										
Toxaphene	1	3										
Toxaphene	1	4										
Toxaphene	1	5										
TCMX-Surrogate	2	0	4.64	(4.58 - 4.70)	4.64	(4.58 - 4.70)						
alpha-BHC	2	0	5.59	(5.55 - 5.63)	5.59	(5.55 - 5.63)						
gamma-BHC	2	0	6.13	(6.09 - 6.17)	6.13	(6.09 - 6.17)						
beta-BHC	2	0	6.21	(6.13 - 6.29)	6.22	(6.14 - 6.30)						
Heptachlor	2	0	6.57	(6.53 - 6.61)	6.58	(6.54 - 6.62)						
delta-BHC	2	0	6.71	(6.63 - 6.79)	6.72	(6.64 - 6.80)						
Aldrin	2	0	7.02	(6.94 - 7.10)	7.03	(6.95 - 7.11)						
Heptachlor Epoxide	2	0	7.76	(7.72 - 7.80)	7.76	(7.72 - 7.80)						
v-chlordane	2	0	7.97	(7.93 - 8.01)	7.97	(7.93 - 8.01)						
a-chlordane	2	0	8.17	(8.13 - 8.21)	8.18	(8.14 - 8.22)						
Endosulfan I	2	0	8.22	(8.18 - 8.26)	8.23	(8.19 - 8.27)						
o,o'-DDE	2	0	8.48	(8.40 - 8.56)	8.48	(8.40 - 8.56)						
Dieldrin	2	0	8.62	(8.54 - 8.70)	8.63	(8.55 - 8.71)						
Endrin	2	0	9.09	(9.05 - 9.13)	9.10	(9.06 - 9.14)						
o,o'-DDD	2	0	9.18	(9.10 - 9.26)	9.19	(9.11 - 9.27)						
Endosulfan II	2	0	9.32	(9.24 - 9.40)	9.32	(9.24 - 9.40)						
o,o'-DDT	2	0	9.57	(9.49 - 9.65)	9.57	(9.49 - 9.65)						
Endrin Aldehyde	2	0	9.73	(9.65 - 9.81)	9.73	(9.65 - 9.81)						
Endosulfan Sulfate	2	0	9.88	(9.84 - 9.92)	9.88	(9.84 - 9.92)						
Methoxychlor	2	0	10.64	(10.60 - 10.68)	10.64	(10.60 - 10.68)						
Endrin Ketone	2	0	10.86	(10.78 - 10.94)	10.87	(10.79 - 10.95)						
DCB-Surrogate	2	0	12.41	(12.35 - 12.47)	12.42	(12.36 - 12.48)						
Chlordane (Technical	2	1										
Chlordane (Technical	2	2										
Chlordane (Technical	2	3										
Toxaphene	2	1										
Toxaphene	2	2										
Toxaphene	2	3										
Toxaphene	2	4										
Toxaphene	2	5										

Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-001	% Solid:	92	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-1 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	1800	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-39-3	Barium	11	68	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-70-2	Calcium	1100	6000	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-47-3	Chromium	5.4	9.0	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-48-4	Cobalt	2.7	ND	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-50-8	Copper	5.4	59	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7439-89-6	Iron	220	5500	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7439-92-1	Lead	5.4	130	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7439-95-4	Magnesium	540	1800	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7439-96-5	Manganese	11	39	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7439-97-6	Mercury	0.091	0.89	1	0.15	25	02/19/20	82631	H25393S	28	CV	HGCV3A
7440-02-0	Nickel	5.4	6.8	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-09-7	Potassium	540	ND	1	0.5	50	02/19/20	82631	S25395A4	60	P	PEICPRAD4A
7440-23-5	Sodium	270	ND	1	0.5	50	02/19/20	82631	S25395A4	60	P	PEICPRAD4A
7440-62-2	Vanadium	11	11	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A
7440-66-6	Zinc	11	180	1	0.5	50	02/18/20	82631	S25395A3	60	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-001	% Solid:	92	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-1 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.87	ND	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA
7440-38-2	Arsenic	0.22	2.5	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	ND	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA
7440-43-9	Cadmium	0.43	0.52	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.22	1.1	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA
7440-28-0	Thallium	0.43	ND	1	0.5	100	02/18/20	826321	820BNEW	35	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-003	% Solid:	93	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-2 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	2300	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-39-3	Barium	11	53	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-70-2	Calcium	1100	24000	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-47-3	Chromium	5.4	9.3	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-48-4	Cobalt	2.7	ND	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-50-8	Copper	5.4	43	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7439-89-6	Iron	220	6400	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7439-92-1	Lead	5.4	67	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7439-95-4	Magnesium	540	8000	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7439-96-5	Manganese	11	66	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7439-97-6	Mercury	0.090	0.45	1	0.15	25	02/19/20	82631	H25393S	29	CV	HGCV3A
7440-02-0	Nickel	5.4	7.7	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-09-7	Potassium	540	ND	1	0.5	50	02/19/20	82631	S25395A4	61	P	PEICPRAD4A
7440-23-5	Sodium	270	ND	1	0.5	50	02/19/20	82631	S25395A4	61	P	PEICPRAD4A
7440-62-2	Vanadium	11	13	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A
7440-66-6	Zinc	11	120	1	0.5	50	02/18/20	82631	S25395A3	61	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-003	% Solid:	93	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-2 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.86	ND	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA
7440-38-2	Arsenic	0.22	2.4	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA
7440-41-7	Beryllium	0.22	ND	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA
7440-43-9	Cadmium	0.43	ND	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA
7440-22-4	Silver	0.22	0.93	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA
7440-28-0	Thallium	0.43	ND	1	0.5	100	02/18/20	826321820	BNEW	36	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-005	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-3 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	230	1000	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-39-3	Barium	11	320	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-70-2	Calcium	1100	2400	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-47-3	Chromium	5.7	9.7	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-48-4	Cobalt	2.9	ND	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-50-8	Copper	5.7	180	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7439-89-6	Iron	230	3900	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7439-92-1	Lead	5.7	140	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7439-95-4	Magnesium	570	ND	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7439-96-5	Manganese	11	19	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7439-97-6	Mercury	0.096	0.20	1	0.15	25	02/19/20	82631	H25393S	30	CV	HGCV3A
7440-02-0	Nickel	5.7	ND	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-09-7	Potassium	570	ND	1	0.5	50	02/19/20	82631	S25395A4	62	P	PEICPRAD4A
7440-23-5	Sodium	290	ND	1	0.5	50	02/19/20	82631	S25395A4	62	P	PEICPRAD4A
7440-62-2	Vanadium	11	ND	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A
7440-66-6	Zinc	11	240	1	0.5	50	02/18/20	82631	S25395A3	62	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-005	% Solid:	87	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-3 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.92	ND	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA
7440-38-2	Arsenic	0.23	1.4	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	ND	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA
7440-43-9	Cadmium	0.46	ND	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA
7440-22-4	Silver	0.23	2.8	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA
7440-28-0	Thallium	0.46	ND	1	0.5	100	02/18/20	826321	820BNEW	37	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-007	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-4 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	230	780	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-39-3	Barium	12	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-70-2	Calcium	1200	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-47-3	Chromium	5.8	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-48-4	Cobalt	2.9	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-50-8	Copper	5.8	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7439-89-6	Iron	230	1500	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7439-92-1	Lead	5.8	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7439-95-4	Magnesium	580	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7439-96-5	Manganese	12	14	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7439-97-6	Mercury	0.097	ND	1	0.15	25	02/19/20	82631	H25393S	31	CV	HGCV3A
7440-02-0	Nickel	5.8	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-09-7	Potassium	580	ND	1	0.5	50	02/19/20	82631	S25395A4	63	P	PEICPRAD4A
7440-23-5	Sodium	290	ND	1	0.5	50	02/19/20	82631	S25395A4	63	P	PEICPRAD4A
7440-62-2	Vanadium	12	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A
7440-66-6	Zinc	12	ND	1	0.5	50	02/18/20	82631	S25395A3	63	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-007	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-4 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.93	ND	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA
7440-38-2	Arsenic	0.23	1.2	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA
7440-41-7	Beryllium	0.23	ND	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA
7440-43-9	Cadmium	0.47	ND	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA
7440-28-0	Thallium	0.47	ND	1	0.5	100	02/18/20	826321	820BNEW	41	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-009	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-5 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	240	650	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-39-3	Barium	12	ND	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-70-2	Calcium	1200	1900	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-47-3	Chromium	5.9	7.3	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-48-4	Cobalt	2.9	ND	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-50-8	Copper	5.9	6.2	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7439-89-6	Iron	240	1700	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7439-92-1	Lead	5.9	9.0	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7439-95-4	Magnesium	590	960	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7439-96-5	Manganese	12	14	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7439-97-6	Mercury	0.098	ND	1	0.15	25	02/19/20	82631	H25393S	32	CV	HGCV3A
7440-02-0	Nickel	5.9	ND	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-09-7	Potassium	590	ND	1	0.5	50	02/19/20	82631	S25395A4	43	P	PEICPRAD4A
7440-23-5	Sodium	290	ND	1	0.5	50	02/19/20	82631	S25395A4	43	P	PEICPRAD4A
7440-62-2	Vanadium	12	ND	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A
7440-66-6	Zinc	12	ND	1	0.5	50	02/18/20	82631	S25395A3	66	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-009	% Solid:	85	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-5 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.94	ND	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA
7440-38-2	Arsenic	0.24	0.92	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	ND	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA
7440-43-9	Cadmium	0.47	ND	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA
7440-28-0	Thallium	0.47	ND	1	0.5	100	02/18/20	826321	820BNEW	42	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-011	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-6 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	240	480	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-39-3	Barium	12	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-70-2	Calcium	1200	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-47-3	Chromium	6.1	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-48-4	Cobalt	3.0	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-50-8	Copper	6.1	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7439-89-6	Iron	240	1300	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7439-92-1	Lead	6.1	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7439-95-4	Magnesium	610	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7439-96-5	Manganese	12	14	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7439-97-6	Mercury	0.10	ND	1	0.15	25	02/19/20	82631	H25393S	35	CV	HGCV3A
7440-02-0	Nickel	6.1	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-09-7	Potassium	610	ND	1	0.5	50	02/19/20	82631	S25395A4	44	P	PEICPRAD4A
7440-23-5	Sodium	300	ND	1	0.5	50	02/19/20	82631	S25395A4	44	P	PEICPRAD4A
7440-62-2	Vanadium	12	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A
7440-66-6	Zinc	12	ND	1	0.5	50	02/18/20	82631	S25395A3	67	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15713-011	% Solid:	82	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-101-6 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/14/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.98	ND	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA
7440-38-2	Arsenic	0.24	0.56	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA
7440-41-7	Beryllium	0.24	ND	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA
7440-43-9	Cadmium	0.49	ND	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA
7782-49-2	Selenium	2.4	ND	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA
7440-22-4	Silver	0.24	ND	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA
7440-28-0	Thallium	0.49	ND	1	0.5	100	02/18/20	826321820	BNEW	43	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82631 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 82631 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	02/19/20	82631	S25395A4	32	P	PEICPRAD4A
7440-23-5	Sodium	120	ND	1	0.5	50	02/19/20	82631	S25395A4	32	P	PEICPRAD4A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	02/18/20	82631	S25395A3	43	P	PEICP3A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82631 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 82631 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	02/19/20	82631	H25393S	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82632
Client Id: MB 82632
Matrix: SOIL
Level: LOW

% Solid: 0
Units: MG/KG

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-09-7	Potassium	50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	02/18/20	82632	1820BNEW	17	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 02/18/20
Data File: S25395A3
Prep Batch: 82631
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-12	Rec	CCV V-321090-23	Rec	CCV V-321090-32	Rec	CCV V-321090-41	Rec	CCV V-321090-52	Rec	CCV V-321090-64	Rec	CCV V-321090-75	Rec
Aluminum	5/5	4.86922	97	4.98833	100	5.00368	100	5.00885	100	5.03121	101	5.03701	101	5.04345	101	5.06059	101
Barium	.5/.5	0.48634	97	0.49349	99	0.49543	99	0.49604	99	0.49861	100	0.49967	100	0.49942	100	0.50035	100
Calcium	50/50	49.43940	99	50.35770	101	49.92480	100	49.68670	99	50.50840	101	50.33660	101	50.41790	101	50.47030	101
Chromium	.5/.5	0.49150	98	0.49875	100	0.50126	100	0.49975	100	0.50356	101	0.50419	101	0.50355	101	0.50447	101
Cobalt	.5/.5	0.51265	103	0.51517	103	0.51729	103	0.51239	102	0.52114	104	0.51755	104	0.52030	104	0.51995	104
Copper	.5/.5	0.48952	98	0.48915	98	0.48963	98	0.48938	98	0.49200	98	0.49308	99	0.49222	98	0.49375	99
Iron	5/5	4.94408	99	4.95620	99	4.98010	100	4.98396	100	5.01559	100	5.01874	100	4.99929	100	5.00999	100
Lead	.5/.5	0.48840	98	0.48747	97	0.48787	98	0.48214	96	0.49313	99	0.48949	98	0.49154	98	0.49148	98
Magnesium	50/50	49.21830	98	49.38600	99	48.76350	98	48.43810	97	49.57680	99	49.29340	99	49.30710	99	49.38130	99
Manganese	.5/.5	0.49440	99	0.49908	100	0.50155	100	0.50199	100	0.50496	101	0.50512	101	0.50417	101	0.50536	101
Nickel	.5/.5	0.50957	102	0.51033	102	0.51122	102	0.50637	101	0.51506	103	0.51176	102	0.51468	103	0.51504	103
Vanadium	.5/.5	0.50285	101	0.50733	101	0.51039	102	0.50952	102	0.51330	103	0.51424	103	0.51523	103	0.51453	103
Zinc	.5/.5	0.49154	98	0.48557	97	0.48629	97	0.48565	97	0.49163	98	0.49325	99	0.48907	98	0.48792	98

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 02/18/20
Data File: S25395A3
Prep Batch: 82633 | 82631
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-319737	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-321254	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0291592	117	80	120		10	9.51664	95	90	110
Aluminum	2.0	2.10866	105	80	120		500	494.188	99	90	110
Arsenic	0.04	0.0431338	108	80	120		10	10.2342	102	90	110
Barium	0.1	0.106930	107	80	120		10	9.77727	98	90	110
Beryllium	0.012	0.0173615	145 a	80	120		5	4.86119	97	90	110
Calcium	10	10.5183	105	80	120		500	473.215	95	90	110
Cadmium	0.012	0.0125508	105	80	120		5	5.30211	106	90	110
Cobalt	0.025	0.0251635	101	80	120		5	4.80939	96	90	110
Chromium	0.05	0.0552043	110	80	120		10	9.87711	99	90	110
Copper	0.05	0.0534438	107	80	120		10	10.8251	108	90	110
Iron	2.0	2.07892	104	80	120		400	384.233	96	90	110
Potassium	NA	-112.416		80	120		200	620.486	310 a	90	110
Silver	0.015	0.0156366	104	80	120		1	1.07942	108	90	110
Manganese	0.1	0.104823	105	80	120		10	9.79602	98	90	110
Silicon	0.1	0.151157	151 a	80	120		25	21.9326	68 a	90	110
Sodium	NA	2.97414		80	120		1000	1111.12	111 a	90	110
Nickel	0.05	0.0504304	101	80	120		10	9.67223	97	90	110
Lead	0.05	0.0559005	112	80	120		10	9.52106	95	90	110
Antimony	0.04	0.0431571	108	80	120		5	5.33241	107	90	110
Selenium	0.05	0.0571188	114	80	120		5	5.00095	100	90	110
Tin	0.2	0.211344	106	80	120		10	9.79271	98	90	110
Titanium	0.1	0.103414	103	80	120		10	10.1464	101	90	110
Thallium	0.05	0.0575041	115	80	120		5	4.76206	95	90	110
Vanadium	0.1	0.106383	106	80	120		10	9.78597	98	90	110
Zinc	0.1	0.103029	103	80	120		10	9.71032	97	90	110
Boron	0.2	0.211404	106	80	120		5	3.86585	77 a	90	110
Magnesium	5.0	5.58958	112	80	120		500	478.738	96	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 02/18/20
Data File: S25395A4
Prep Batch: 82631
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-12	Rec	CCV V-321090-23	Rec	CCV V-321090-30	Rec	CCV V-321090-41	Rec	CCV V-321090-52	Rec	CCV V-321090-64	Rec	Rec
Potassium	50/50	51.33720	103	51.93270	104	52.49350	105	52.57970	105	52.99170	106	52.98900	106	53.12680	106	
Sodium	50/50	50.58500	101	50.98580	102	50.76410	102	50.76170	102	51.13300	102	51.12530	102	51.24650	102	

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 02/18/20
Data File: S25395A4
Prep Batch: 82633 | 82631
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-319737	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-321254	Recovery	Low Limit	High Limit	
Barium	0.1	0.0931705	93	80	120		10	10.2770	103	90	110	
Calcium	10.00	9.70384	97	80	120		500	551.768	110	90	110	
Iron	2.00	1.86967	93	80	120		400	387.728	97	90	110	
Magnesium	5.00	5.00593	100	80	120		500	544.744	109	90	110	
Manganese	0.10	0.100116	100	80	120		10	10.5720	106	90	110	
Potassium	5.00	5.51352	110	80	120		200	258.457	129 a	90	110	
Sodium	2.50	2.82494	113	80	120		1000	1229.66	123 a	90	110	
Aluminum	2.00	1.92340	96	80	120		500	500.345	100	90	110	
Boron	0.2	0.197253	99	80	120		5	3.90589	78 a	90	110	
Zinc	0.1	0.100552	101	80	120		10	10.5076	105	90	110	
Copper	0.05	0.0415367	83	80	120		10	11.0333	110	90	110	
Molybdenum	0.025	0.0213151	85	80	120		10	10.7384	107	90	110	
Nickel	0.05	0.0533933	107	80	120		10	10.4518	105	90	110	
Selenium	0.05	0.0369543	74 a	80	120		5	4.87448	97	90	110	
Silicon	0.1	0.156495	156 a	80	120		25	26.4099	106	90	110	
Tin	0.2	0.203721	102	80	120		10	10.4406	104	90	110	
Vanadium	0.1	0.0979346	98	80	120		10	10.0987	101	90	110	
Titanium	0.1	0.103422	103	80	120		10	10.8722	109	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 02/18/20
Data File: S021820BNEW
Prep Batch: 82632
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321573-8	Rec	CCV V-321577-15	Rec	CCV V-321577-27	Rec	CCV V-321577-39	Rec	CCV V-321577-51	Rec	CCV V-321577-55	Rec	Rec	Rec
Antimony	50/50	47.36500	95	48.29900	97	47.02300	94	47.71800	95	47.66500	95	52.62900	105		
Arsenic	50/50	50.31100	101	50.33100	101	50.17500	100	50.58800	101	50.23900	100	50.83600	102		
Beryllium	50/50	49.50200	99	50.61900	101	49.23600	98	48.47300	97	48.39000	97	54.46900	109		
Cadmium	50/50	49.39800	99	49.85700	100	49.25300	99	49.73600	99	49.84100	100	55.00900	110		
Selenium	50/250	49.56200	99	252.05700	101	247.35400	99	254.74900	102	249.92600	100	252.89900	101		
Silver	10/50	9.47500	95	48.64300	97	48.30300	97	48.56400	97	48.68700	97	54.02200	108		
Thallium	50/50	49.25000	98	51.69700	103	50.63500	101	50.59400	101	51.14300	102	57.49800	115 c		

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 02/18/20
Data File: S021820BNEW
Prep Batch: 82632
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-321578	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-321576	Recovery	Low Limit	High Limit
Magnesium	500	503.524	101	80	120		50000	50817.181	102	90	110
Aluminum	500	486.283	97	80	120		15000	15237.772	102	90	110
Chromium	2	1.930	96	80	120		500	508.806	102	90	110
Copper	10	9.968	100	80	120		500	500.188	100	90	110
Iron	500	515.564	103	80	120		50000	50244.564	100	90	110
Arsenic	1	1.019	102	80	120		500	504.337	101	90	110
Barium	5	5.022	100	80	120		500	506.888	101	90	110
Beryllium	1	1.006	101	80	120		500	482.988	97	90	110
Calcium	500	486.997	97	80	120		50000	52865.667	106	90	110
Cadmium	2	1.965	98	80	120		500	500.775	100	90	110
Silver	1	0.950	95	80	120		500	1038.859	208 a	90	110
Potassium	500	500.149	100	80	120		50000	51272.219	103	90	110
Zinc	20	19.215	96	80	120		500	476.772	95	90	110
Manganese	6	5.901	98	80	120		500	515.035	103	90	110
Molybdenum	1	0.999	100	80	120		500	507.399	101	90	110
Sodium	500	482.449	96	80	120		50000	51363.520	103	90	110
Nickel	3	2.946	98	80	120		500	502.967	101	90	110
Lead	2	1.875	94	80	120		500	460.029	92	90	110
Antimony	4	4.216	105	80	120		500	486.966	97	90	110
Selenium	10	10.063	101	80	120		2500	2476.779	99	90	110
Thallium	2	1.836	92	80	120		500	463.582	93	90	110
Vanadium	1	0.971	97	80	120		500	522.070	104	90	110
Cobalt	2	2.011	101	80	120		500	503.973	101	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 02/19/20
Data File: H25393S
Prep Batch: 82631
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV (2)-9	Rec	CCV-21	Rec	CCV-33	Rec	CCV-43	Rec	Rec	Rec	Rec	Rec
Mercury	20/10	18.69000	93	10.13000	101	10.12000	101	10.11000	101				

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 02/18/20
Data File: S25395A3
Prep Batch: 82631
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-317800-6	CCB V-317800-13	CCB V-317800-24	CCB V-317800-33	CCB V-317800-42	CCB V-317800-53	CCB V-317800-65	CCB V-317800-76
Aluminum	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Calcium	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	.025 U	.025 U	.025 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U

Analyte	MB 82631 (100)-43
Aluminum	100 U
Barium	5 U
Calcium	500 U
Chromium	2.5 U
Cobalt	1.3 U
Copper	2.5 U
Iron	100 U
Lead	2.5 U
Magnesium	250 U
Manganese	5 U
Nickel	2.5 U
Vanadium	5 U
Zinc	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 02/18/20
Data File: S25395A4
Prep Batch: 82631
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-317800-6	CCB V-317800-13	CCB V-317800-24	CCB V-317800-31	CCB V-317800-42	CCB V-317800-53	CCB V-317800-65	MB 82631 (100)-32
Potassium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	250 U
Sodium	1.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	125 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 02/18/20
Data File: S021820BNEW
Prep Batch: 82632
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-321574-10	CCB V-321574-16	CCB V-321574-28	CCB V-321574-40	CCB V-321574-52	CCB V-321574-56	MB 82632-17
Antimony	2 U	4 U	4 U	4 U	4 U	4 U	400 U
Arsenic	.5 U	1 U	1 U	1 U	1 U	1 U	100 U
Beryllium	.5 U	1 U	1 U	1 U	1 U	1 U	100 U
Cadmium	1 U	2 U	2 U	2 U	2 U	2 U	200 U
Selenium	5 U	10 U	10 U	10 U	10 U	10 U	1000 U
Silver	.5 U	1 U	1 U	1 U	1 U	1 U	100 U
Thallium	1 U	2 U	2 U	2 U	2 U	2 U	200 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 02/19/20
Data File: H25393S
Prep Batch: 82631
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-44	MB 82631 (167)-11
Mercury	.5 U	.5 U	.5 U	.5 U	83 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 02/18/20
Data File: S25395A3
Prep Batch: 82631
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-321157-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	492.069	98							
Barium	0	U								
Calcium	500	471.107	94							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	186.306	93							
Lead	0	U								
Magnesium	500	473.125	95							
Manganese	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 02/18/20
Data File: S25395A4
Prep Batch: 82631
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-317801-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	481.348	96							
Calcium	500	528.954	106							
Iron	200	182.403	91							
Magnesium	500	514.552	103							
Potassium	0	U								
Sodium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 02/18/20
Data File: S021820BNEW
Prep Batch: 82632
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0021406

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-321575-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	50252.3	101							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	166583.8	111							
Iron	125000	131896	106							
Magnesium	50000	51993.11	104							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82631

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82631

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82631	1	S25395A3	45	101.8220	110	93		55	152
Barium	82631	1	S25395A3	45	7.7206	8.92	87		65	110
Calcium	82631	1	S25395A3	45	181.8580	207.00	88		69	110
Chromium	82631	1	S25395A3	45	2.0198	2.27	89		61	114
Cobalt	82631	1	S25395A3	45	2.4804	2.87	86		64	110
Copper	82631	1	S25395A3	45	1.8431	2.09	88		66	110
Iron	82631	1	S25395A3	45	194.9280	192.00	102		34	138
Lead	82631	1	S25395A3	45	1.3343	1.63	82		62	110
Magnesium	82631	1	S25395A3	45	65.6825	74.60	88		26	114
Manganese	82631	1	S25395A3	45	5.3885	6.03	89		68	110
Mercury	82631	4	H25393S	15	6.9450	41.64	67		39	110
Nickel	82631	1	S25395A3	45	0.5142	.553	93		61	114
Potassium	82631	1	S25395A4	34	19.8071	22.60	88		61	140
Sodium	82631	1	S25395A4	34	7.8375	8.67	90		57	125
Vanadium	82631	1	S25395A3	45	2.6110	3.00	87		66	110
Zinc	82631	1	S25395A3	45	5.9600	7.13	84		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 82631

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82631	1	S25395A3	44	96.1600	110	87		55	152
Barium	82631	1	S25395A3	44	7.4254	8.92	83		65	110
Calcium	82631	1	S25395A3	44	175.4710	207.00	85		69	110
Chromium	82631	1	S25395A3	44	1.9228	2.27	85		61	114
Cobalt	82631	1	S25395A3	44	2.3748	2.87	83		64	110
Copper	82631	1	S25395A3	44	1.7587	2.09	84		66	110
Iron	82631	1	S25395A3	44	181.8650	192.00	95		34	138
Lead	82631	1	S25395A3	44	1.2817	1.63	79		62	110
Magnesium	82631	1	S25395A3	44	62.8660	74.60	84		26	114
Manganese	82631	1	S25395A3	44	5.1511	6.03	85		68	110
Mercury	82631	4	H25393S	14	7.0770	41.64	68		39	110
Nickel	82631	1	S25395A3	44	0.4872	.553	88		61	114
Potassium	82631	1	S25395A4	33	18.7210	22.60	83		61	140
Sodium	82631	1	S25395A4	33	7.3816	8.67	85		57	125
Vanadium	82631	1	S25395A3	44	2.4909	3.00	83		66	110
Zinc	82631	1	S25395A3	44	5.7134	7.13	80		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82631	1	S25395A3	49	S25395A3	46	51.3497	40.8376	5.0	210	b	75	125
Barium	82631	1	S25395A3	49	S25395A3	46	0.6411	0.1417	0.5	100		75	125
Calcium	82631	1	S25395A3	49	S25395A3	46	68.3053	18.9633	50	99		75	125
Chromium	82631	1	S25395A3	49	S25395A3	46	0.5914	0.0874	0.5	101		75	125
Cobalt	82631	1	S25395A3	49	S25395A3	46	0.5667	0.0395	0.5	105		75	125
Copper	82631	1	S25395A3	49	S25395A3	46	0.5725	0.0613	0.5	102		75	125
Iron	82631	1	S25395A3	49	S25395A3	46	109.8810	95.5448	5.0	287	b	75	125
Lead	82631	1	S25395A3	49	S25395A3	46	0.7162	0.2197	0.5	99		75	125
Magnesium	82631	1	S25395A3	49	S25395A3	46	74.8865	24.2380	50	101		75	125
Manganese	82631	1	S25395A3	49	S25395A3	46	1.4060	0.8169	0.5	118		75	125
Mercury	82631	1	H25393S	19	H25393S	16	9.9980	.5U	10	100		75	125
Nickel	82631	1	S25395A3	49	S25395A3	46	0.6133	0.0807	0.5	107		75	125
Potassium	82631	1	S25395A4	38	S25395A4	35	54.4201	5U	50	109		75	125
Sodium	82631	1	S25395A4	38	S25395A4	35	50.4335	2.5U	50	101		75	125
Vanadium	82631	1	S25395A3	49	S25395A3	46	0.6790	0.1542	0.5	105		75	125
Zinc	82631	1	S25395A3	49	S25395A3	46	8.4870	7.1697	0.5	263	b	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82631

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82631	1	S25395A3	48	S25395A3	46	46.5623	40.8376	5.0	114		75	125
Barium	82631	1	S25395A3	48	S25395A3	46	0.5892	0.1417	0.5	90		75	125
Calcium	82631	1	S25395A3	48	S25395A3	46	65.5000	18.9633	50	93		75	125
Chromium	82631	1	S25395A3	48	S25395A3	46	0.5566	0.0874	0.5	94		75	125
Cobalt	82631	1	S25395A3	48	S25395A3	46	0.5369	0.0395	0.5	99		75	125
Copper	82631	1	S25395A3	48	S25395A3	46	0.5396	0.0613	0.5	96		75	125
Iron	82631	1	S25395A3	48	S25395A3	46	98.5066	95.5448	5.0	59	b	75	125
Lead	82631	1	S25395A3	48	S25395A3	46	0.6304	0.2197	0.5	82		75	125
Magnesium	82631	1	S25395A3	48	S25395A3	46	70.9473	24.2380	50	93		75	125
Manganese	82631	1	S25395A3	48	S25395A3	46	1.2540	0.8169	0.5	87		75	125
Mercury	82631	1	H25393S	18	H25393S	16	10.1100	.5U	10	101		75	125
Nickel	82631	1	S25395A3	48	S25395A3	46	0.5840	0.0807	0.5	101		75	125
Potassium	82631	1	S25395A4	37	S25395A4	35	51.7207	5U	50	103		75	125
Sodium	82631	1	S25395A4	37	S25395A4	35	48.1884	2.5U	50	96		75	125
Vanadium	82631	1	S25395A3	48	S25395A3	46	0.6254	0.1542	0.5	94		75	125
Zinc	82631	1	S25395A3	48	S25395A3	46	6.7182	7.1697	0.5	-90	b	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82631

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD15737-001

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S25395A3	50	S25395A3	46	41.9146	40.8376	5.0	22	b	75	125
Barium	1	S25395A3	50	S25395A3	46	0.5819	0.1417	0.50	88		75	125
Calcium	1	S25395A3	50	S25395A3	46	62.6163	18.9633	50	87		75	125
Chromium	1	S25395A3	50	S25395A3	46	0.5311	0.0874	0.50	89		75	125
Cobalt	1	S25395A3	50	S25395A3	46	0.5021	0.0395	0.50	93		75	125
Copper	1	S25395A3	50	S25395A3	46	0.5137	0.0613	0.50	90		75	125
Iron	1	S25395A3	50	S25395A3	46	92.8969	95.5448	5.0	-53	b	75	125
Lead	1	S25395A3	50	S25395A3	46	0.6365	0.2197	0.50	83		75	125
Magnesium	1	S25395A3	50	S25395A3	46	65.1648	24.2380	50	82		75	125
Manganese	1	S25395A3	50	S25395A3	46	1.2544	0.8169	0.50	87		75	125
Nickel	1	S25395A3	50	S25395A3	46	0.5424	0.0807	0.50	92		75	125
Potassium	1	S25395A4	39	S25395A4	35	50.5245	5U	50	101		75	125
Sodium	1	S25395A4	39	S25395A4	35	45.7130	2.5U	50	91		75	125
Vanadium	1	S25395A3	50	S25395A3	46	0.6049	0.1542	0.50	90		75	125
Zinc	1	S25395A3	50	S25395A3	46	7.5351	7.1697	0.50	73	b	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82632

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82632

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82632	1	S021820B	19	18.3810	117	16		10	110
Arsenic	82632	1	S021820B	19	40.7730	49.4	83		61	113
Beryllium	82632	1	S021820B	19	154.4870	187	83		66	110
Cadmium	82632	1	S021820B	19	166.0140	197	84		64	110
Selenium	82632	1	S021820B	19	301.2840	364	83		60	112
Silver	82632	1	S021820B	19	82.3380	94.0	88		61	111
Thallium	82632	1	S021820B	19	187.1610	229	82		61	110

TxtQcType: LCS Matrix: SOIL SampleID: LCS 82632

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82632	1	S021820B	18	17.8950	117	15		10	110
Arsenic	82632	1	S021820B	18	40.4280	49.4	82		61	113
Beryllium	82632	1	S021820B	18	156.5720	187	84		66	110
Cadmium	82632	1	S021820B	18	164.4690	197	83		64	110
Selenium	82632	1	S021820B	18	304.7230	364	84		60	112
Silver	82632	1	S021820B	18	81.5400	94.0	87		61	111
Thallium	82632	1	S021820B	18	188.7880	229	82		61	110

TxtQcType: MSD Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82632	1	S021820B	24	S021820B	20	141.0890	4U	250	56	a	75	125
Arsenic	82632	1	S021820B	24	S021820B	20	234.8950	2.4250	250	93		75	125
Beryllium	82632	1	S021820B	24	S021820B	20	232.3400	1U	250	93		75	125
Cadmium	82632	1	S021820B	24	S021820B	20	235.2280	16.3440	250	88		75	125
Selenium	82632	1	S021820B	24	S021820B	20	229.4590	10U	250	92		75	125
Silver	82632	1	S021820B	24	S021820B	20	42.6380	1U	50	85		75	125
Thallium	82632	1	S021820B	24	S021820B	20	225.0160	2U	250	90		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82632	1	S021820B	23	S021820B	20	142.2920	4U	250	57	a	75	125
Arsenic	82632	1	S021820B	23	S021820B	20	240.1480	2.4250	250	95		75	125
Beryllium	82632	1	S021820B	23	S021820B	20	232.1440	1U	250	93		75	125
Cadmium	82632	1	S021820B	23	S021820B	20	244.6690	16.3440	250	91		75	125
Selenium	82632	1	S021820B	23	S021820B	20	231.0580	10U	250	92		75	125
Silver	82632	1	S021820B	23	S021820B	20	44.0310	1U	50	88		75	125
Thallium	82632	1	S021820B	23	S021820B	20	231.5180	2U	250	93		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82632

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD15737-001

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S021820B	25	S021820B	20	47.6990	4U	50	95		75	125
Arsenic	1	S021820B	25	S021820B	20	53.5430	2.4250	50	102		75	125
Beryllium	1	S021820B	25	S021820B	20	49.0670	1U	50	98		75	125
Cadmium	1	S021820B	25	S021820B	20	64.8340	16.3440	50	97		75	125
Selenium	1	S021820B	25	S021820B	20	252.1280	10U	250	101		75	125
Silver	1	S021820B	25	S021820B	20	43.7870	1U	50	88		75	125
Thallium	1	S021820B	25	S021820B	20	48.8770	2U	50	98		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82631

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82631

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82631	S25395A3	45	S25395A3	44	101.8220	96.1600	5.7		20
Barium	82631	S25395A3	45	S25395A3	44	7.7206	7.4254	3.9		20
Calcium	82631	S25395A3	45	S25395A3	44	181.8580	175.4710	3.6		20
Chromium	82631	S25395A3	45	S25395A3	44	2.0198	1.9228	4.9		20
Cobalt	82631	S25395A3	45	S25395A3	44	2.4804	2.3748	4.3		20
Copper	82631	S25395A3	45	S25395A3	44	1.8431	1.7587	4.7		20
Iron	82631	S25395A3	45	S25395A3	44	194.9280	181.8650	6.9		20
Lead	82631	S25395A3	45	S25395A3	44	1.3343	1.2817	4		20
Magnesium	82631	S25395A3	45	S25395A3	44	65.6825	62.8660	4.4		20
Manganese	82631	S25395A3	45	S25395A3	44	5.3885	5.1511	4.5		20
Mercury	82631	H25393S	15	H25393S	14	6.9450	7.0770	1.9		20
Nickel	82631	S25395A3	45	S25395A3	44	0.5142	0.4872	5.4		20
Potassium	82631	S25395A4	34	S25395A4	33	19.8071	18.7210	5.6		20
Sodium	82631	S25395A4	34	S25395A4	33	7.8375	7.3816	6		20
Vanadium	82631	S25395A3	45	S25395A3	44	2.6110	2.4909	4.7		20
Zinc	82631	S25395A3	45	S25395A3	44	5.9600	5.7134	4.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82631	S25395A3	47	S25395A3	46	42.2569	40.8376	3.4		20
Barium	82631	S25395A3	47	S25395A3	46	0.1306	0.1417	8.1		20
Calcium	82631	S25395A3	47	S25395A3	46	18.4883	18.9633	2.5		20
Chromium	82631	S25395A3	47	S25395A3	46	0.0926	0.0874	5.9		20
Cobalt	82631	S25395A3	47	S25395A3	46	0.0419	0.0395	5.8		20
Copper	82631	S25395A3	47	S25395A3	46	0.0672	0.0613	9.2		20
Iron	82631	S25395A3	47	S25395A3	46	94.5382	95.5448	1.1		20
Lead	82631	S25395A3	47	S25395A3	46	0.1558	0.2197	34	b	20
Magnesium	82631	S25395A3	47	S25395A3	46	25.0422	24.2380	3.3		20
Manganese	82631	S25395A3	47	S25395A3	46	0.8942	0.8169	9		20
Mercury	82631	H25393S	17	H25393S	16	.5U	.5U	---		20
Nickel	82631	S25395A3	47	S25395A3	46	0.0827	0.0807	2.5		20
Potassium	82631	S25395A4	36	S25395A4	35	5U	5U	---		20
Sodium	82631	S25395A4	36	S25395A4	35	2.5U	2.5U	---		20
Vanadium	82631	S25395A3	47	S25395A3	46	0.1549	0.1542	0.41		20
Zinc	82631	S25395A3	47	S25395A3	46	6.9635	7.1697	2.9		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82631

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82631	S25395A3	49	S25395A3	48	51.3497	46.5623	9.8		20
Barium	82631	S25395A3	49	S25395A3	48	0.6411	0.5892	8.4		20
Calcium	82631	S25395A3	49	S25395A3	48	68.3053	65.5000	4.2		20
Chromium	82631	S25395A3	49	S25395A3	48	0.5914	0.5566	6.1		20
Cobalt	82631	S25395A3	49	S25395A3	48	0.5667	0.5369	5.4		20
Copper	82631	S25395A3	49	S25395A3	48	0.5725	0.5396	5.9		20
Iron	82631	S25395A3	49	S25395A3	48	109.8810	98.5066	11		20
Lead	82631	S25395A3	49	S25395A3	48	0.7162	0.6304	13		20
Magnesium	82631	S25395A3	49	S25395A3	48	74.8865	70.9473	5.4		20
Manganese	82631	S25395A3	49	S25395A3	48	1.4060	1.2540	11		20
Mercury	82631	H25393S	19	H25393S	18	9.9980	10.1100	1.1		20
Nickel	82631	S25395A3	49	S25395A3	48	0.6133	0.5840	4.9		20
Potassium	82631	S25395A4	38	S25395A4	37	54.4201	51.7207	5.1		20
Sodium	82631	S25395A4	38	S25395A4	37	50.4335	48.1884	4.6		20
Vanadium	82631	S25395A3	49	S25395A3	48	0.6790	0.6254	8.2		20
Zinc	82631	S25395A3	49	S25395A3	48	8.4870	6.7182	23	a	20

TxtQcType: SD Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	82631	S25395A3	51	S25395A3	46	5	8.1840	40.8376	0.2		10
Barium	82631	S25395A3	51	S25395A3	46	5	0.0272	0.1417	4.2		10
Calcium	82631	S25395A3	51	S25395A3	46	5	3.8879	18.9633	2.5		10
Chromium	82631	S25395A3	51	S25395A3	46	5	0.0193	0.0874	11	a	10
Cobalt	82631	S25395A3	51	S25395A3	46	5	0.0069	0.0395	13	c	10
Copper	82631	S25395A3	51	S25395A3	46	5	0.0156	0.0613	27	c	10
Iron	82631	S25395A3	51	S25395A3	46	5	19.1984	95.5448	0.47		10
Lead	82631	S25395A3	51	S25395A3	46	5	0.0459	0.2197	4.5		10
Magnesium	82631	S25395A3	51	S25395A3	46	5	5.1517	24.2380	6.3		10
Manganese	82631	S25395A3	51	S25395A3	46	5	0.1638	0.8169	0.27		10
Nickel	82631	S25395A3	51	S25395A3	46	5	0.0136	0.0807	16	a	10
Potassium	82631	S25395A4	40	S25395A4	35	5	1.3203	4.1536	59	c	10
Sodium	82631	S25395A4	40	S25395A4	35	5	0.4402	0.8347	164	c	10
Vanadium	82631	S25395A3	51	S25395A3	46	5	0.0285	0.1542	7.6		10
Zinc	82631	S25395A3	51	S25395A3	46	5	1.4161	7.1697	1.2		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82632

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82632

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82632	S021820B	19	S021820B	18	18.3810	17.8950	2.7		20
Arsenic	82632	S021820B	19	S021820B	18	40.7730	40.4280	.85		20
Beryllium	82632	S021820B	19	S021820B	18	154.4870	156.5720	1.3		20
Cadmium	82632	S021820B	19	S021820B	18	166.0140	164.4690	.94		20
Selenium	82632	S021820B	19	S021820B	18	301.2840	304.7230	1.1		20
Silver	82632	S021820B	19	S021820B	18	82.3380	81.5400	.97		20
Thallium	82632	S021820B	19	S021820B	18	187.1610	188.7880	.87		20

TxtQcType: MR Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82632	S021820B	21	S021820B	20	4U	4U	---		20
Arsenic	82632	S021820B	21	S021820B	20	2.5550	2.4250	5.2		20
Beryllium	82632	S021820B	21	S021820B	20	1U	1U	---		20
Cadmium	82632	S021820B	21	S021820B	20	7.7220	16.3440	72	b	20
Selenium	82632	S021820B	21	S021820B	20	10U	10U	---		20
Silver	82632	S021820B	21	S021820B	20	1U	1U	---		20
Thallium	82632	S021820B	21	S021820B	20	2U	2U	---		20

TxtQcType: MSD Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82632	S021820B	24	S021820B	23	141.0890	142.2920	.85		20
Arsenic	82632	S021820B	24	S021820B	23	234.8950	240.1480	2.2		20
Beryllium	82632	S021820B	24	S021820B	23	232.3400	232.1440	.084		20
Cadmium	82632	S021820B	24	S021820B	23	235.2280	244.6690	3.9		20
Selenium	82632	S021820B	24	S021820B	23	229.4590	231.0580	.69		20
Silver	82632	S021820B	24	S021820B	23	42.6380	44.0310	3.2		20
Thallium	82632	S021820B	24	S021820B	23	225.0160	231.5180	2.8		20

TxtQcType: SD Matrix: SOIL SampleID: AD15737-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	82632	S021820B	22	S021820B	20	5	0.0120	0.0780	---		20
Arsenic	82632	S021820B	22	S021820B	20	5	0.4750	2.4250	2.1		20
Beryllium	82632	S021820B	22	S021820B	20	5	0.1320	0.6310	4.6		20
Cadmium	82632	S021820B	22	S021820B	20	5	3.4160	16.3440	4.5		20
Selenium	82632	S021820B	22	S021820B	20	5	0.4710	2.7020	13	c	20
Silver	82632	S021820B	22	S021820B	20	5	0.1070	0.3010	78	c	20
Thallium	82632	S021820B	22	S021820B	20	5	0.0100	0.0930	---		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 25393 Analyst: BR

QC Number: 82631 Prep Date: 2/18/20

Matrix: Soil 6010 Reviewed By: [illegible]

LAB ID#	ICP Initial	ICP Final	ICP-MS (Secondary dil) Aliquot	ICP-MS (Secondary dil) Final	TCLP Eff	TCLP TCLP	COMMENTS
	BR 2/18/20						
Method blank	.50mL	50mL				–	
LCS	.59					–	
LCSD						–	
1. 15737 -001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 15737 -001							
MS 15737 -001							Balance used: 038
MSD 15737 -001							Pipettes used: 149,160
2. 15718 -001							
3. -002							Hot Block used: 164 BR 2/18/20
4. -005							
5. -006							
6. -007							
7. -008							
8. 15713 -001							
9. -003							
10. -005							
11. -007							
12. -009							
13. -011							
14. 15715 -001							
15. -002							
16. -003							
17. -004							
18. 15714 -001							
19. -002							
20. 15721 -002							

Hot Plate Temperature: 94 C (90-95° C) Start Time: 8:30 am End Time: 1:30 pm

	Volume mL	Lot #
LCS, LCSD	.59	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25mL	V- 12538, 12537
LLMS, LLMSD		V- 20443

Acid	Vol mL	Lot#
HNO_3	25	V- 12969
HCl	25	V- 12849
H_2O_2	1.5	V- 12516

Acid	Vol mL	Lot#
1:1 HNO_3	5mL	V-320611
1:1 HCl		V-

Relinquished By BR Date 2/18/20

Received By [illegible] Date 02/18/2020

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Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 25394 Analyst: BR

QC Number: 82632 Prep Date: 2/18/20

Matrix: Soil 6020 Reviewed By: R

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL	25mL	50mL		–	
LCS	.19					–	
LCSD						–	
1. 15737 -001	.59						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 15737 -001							
MS 15737 -001							Balance used: D38
MSD 15737 -001							Pipettes used: 149, 160
2. 15718 -001							
3. -002							Hot Block used: 4
4. -005							
5. -006							
6. -007							
7. -008							
8. 15713 -001							
9. -003							
10. -005							
11. -007							
12. -009							
13. -011							
14. 15715 -001							
15. -002							
16. -003							
17. -004							
18. 15714 -001							
19. -002							
20. 15721 -002							

Hot Plate Temperature: 99° C (90-95° C) Start Time: 830 am End Time: 130 pm

	Volume mL	Lot #
LCS, LCSD	.19	V-13000
LLLCS, LLLCSD		V-
MS, MSD	0.25mL	V- 12538, 12537
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V- 12969
HCl		V-
H_2O_2	1.5	V- 12516

Acid	Vol mL	Lot#
1:1 HNO_3	5mL	V-3201011
1:1 HCl		V-

Relinquished By BR Date 2/18/20

Received By R Date 2/18/20

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER_____

Batch No.:* 25393

QC Number: 82631

Matrix: SDI1

Analyst: BR

Prep Date: 2/18/20

Review By: BA

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25mL	25mL		CAL CURVE BLK 0ppb V- 321898
LCS	159			
LCSD				STD 0.2 ppb V- 321899
1 15737 -001				STD 0.5 ppb V- 321900
MR 15737 -001				STD 1.0 ppb V- 321901
MS 15737 -001				STD 2.0 ppb V- 321902
MSD 15737 -001				STD 5.0 ppb V- 321903
2 15718 -001				STD 10.0 ppb V- 321904
3 -002				STD 25.0 ppb V- 321905
4 -005				ICV 10.0 ppb V- 321896
5 -006				CCV 20.0 ppb V- 321897
6 -007				
7 -008				
8 15713 -001				Balance used: 038
9 -003				Pipettes used: 143, 152, 159
10 -005				
11 -007				Hot Block used: 6
12 -009				
13 -011				
14 ~~15715~~ 15715 -001				
15 -002				
16 -003				
17 -004				
18 15714 -001				
19 -002				
20 16721 -002				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
V- 317828	3.75 mL	HNO3		V-
V-		HCl		V-
V- 317822	1.5mL	H2SO4		V-
		Aqua Regia	1.25 mL	V- 321894

**Block Temp.: °C	93
Time In Block:	2:30 pm
Time Out of Block:	3:00 pm

Spike Name & Lot #

V- 13005 0.15g/0.25 ml

V- 321826 0.250 ml

Blank/Control Batch B- 28544

Start time: 8:30 am End Time: 3:30 pm

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: BR

ml's of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

PREP 2016

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S25395A3.txt

Analysis Date: 02/18/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-317800	1	CAL	15:23	1							V-317800(ICB/CCB)
CALST2 V-319737	1	CAL	15:27	2							V-319737(LLICV/LLCCV soil)
CALST3 V-321087	1	CAL	15:30	3							V-321087(ICS3 - Middle Std)
CALST4 V-321088	1	CAL	15:35	4							V-321088(ICS4 High std)
ICV V-321090	1	ICV	15:39	5							V-321090(CCV)
ICB V-317800	1	ICB	15:43	6							V-317800(ICB/CCB)
LRS V-321254	1	LRS	15:47	7		SOIL	SOIL	SW846	82633		V-321254(LRS)
ICS3 V-321087	1	ICS	15:51	8							V-321087(ICS3 - Middle Std)
RINSE	1	SMP	15:56	9		SOIL	SOIL	SW846	82633		0
LLICV V-319737	1	LLICV	15:59	10		SOIL	SOIL	SW846	82633	Be FAILED	V-319737(LLICV/LLCCV soil)
ICSA V-321157	1	ICSA	16:03	11							V-321157(ICSA)
CCV V-321090	1	CCV	16:09	12							V-321090(CCV)
CCB V-317800	1	CCB	16:13	13							V-317800(ICB/CCB)
MB 82633 (100)	1	MB	16:16	14		SOIL	SOIL	SW846	82633	Be NOT REPORTED	0
LCS 82633	1	LCS	16:20	15		SOIL	SOIL	SW846	82633		0
LCS MR 82633	1	LCS	16:25	16		SOIL	SOIL	SW846	82633		0
AD15698-001	1	SMP	16:31	17	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	MR	16:35	18	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	MS	16:40	19	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	MSD	16:45	20	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	PS	16:50	21	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	5	SD	16:54	22	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
CCV V-321090	1	CCV	16:58	23							V-321090(CCV)
CCB V-317800	1	CCB	17:02	24							V-317800(ICB/CCB)
AD15704-001	1	SMP	17:06	25	MET-TAL6010S	SOIL	SOIL	SW846	82633	Zn NOT REPORTED >LR	0
AD15704-003	1	SMP	17:11	26	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15704-005	1	SMP	17:16	27	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15684-001	1	SMP	17:21	28	MET-TAL6010S	SOIL	SOIL	SW846	82633	Ca NOT REPORTED Sat"	0
AD15687-001	1	SMP	17:25	29	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15676-002	1	SMP	17:29	30	MET-RCRA-S	SOIL	SOIL	SW846	82633		0
AD15712-021	1	SMP	17:33	31	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
CCV V-321090	1	CCV	17:38	32							V-321090(CCV)
CCB V-317800	1	CCB	17:42	33							V-317800(ICB/CCB)
AD15700-002	1	SMP	17:46	34	MET-2-SOIL	SOIL	SOIL	SW846	82633		0
AD15700-005	1	SMP	17:51	35	MET-2-SOIL	SOIL	SOIL	SW846	82633		0
AD15565-001	1	SMP	17:56	36	PB-SOIL	SOIL	SOIL	SW846	82633		0
AD15565-008	1	SMP	18:00	37	PB-SOIL	SOIL	SOIL	SW846	82633		0
AD15565-009	1	SMP	18:05	38	PB-SOIL	SOIL	SOIL	SW846	82633		0
AD15565-010	1	SMP	18:10	39	PB-SOIL	SOIL	SOIL	SW846	82633		0
AD15565-012	1	SMP	18:14	40	PB-SOIL	SOIL	SOIL	SW846	82633		0
CCV V-321090	1	CCV	18:18	41							V-321090(CCV)
CCB V-317800	1	CCB	18:22	42							V-317800(ICB/CCB)
MB 82631 (100)	1	MB	18:26	43		SOIL	SOIL	SW846	82631		0
LCS 82631	1	LCS	18:30	44		SOIL	SOIL	SW846	82631		0
LCS MR 82631	1	LCS	18:34	45		SOIL	SOIL	SW846	82631		0
AD15737-001	1	SMP	18:39	46	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MR	18:43	47	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MS	18:48	48	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MSD	18:53	49	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	PS	18:57	50	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	5	SD	19:02	51	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
CCV V-321090	1	CCV	19:06	52							V-321090(CCV)
CCB V-317800	1	CCB	19:10	53							V-317800(ICB/CCB)
AD15718-001	1	SMP	19:14	54	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-002	1	SMP	19:19	55	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-005	1	SMP	19:22	56	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-006	1	SMP	19:27	57	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-007	1	SMP	19:31	58	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-008	1	SMP	19:35	59	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15713-001	1	SMP	19:39	60	MET-TAL6010S	SOIL	SOIL	SW846	82631		0

Comments/Reviewedby:

carmela
192.168.1.23 2/19/2020 1:09:34 PM

ok
all elements reported
Na,K NOT REPORTED
QC#82633 Be NOT REPORTED
2/20/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S25395A3.txt

Analysis Date: 02/18/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD15713-003	1	SMP	19:43	61	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15713-005	1	SMP	19:47	62	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15713-007	1	SMP	19:51	63	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
CCV V-321090	1	CCV	19:55	64							V-321090(CCV)
CCB V-317800	1	CCB	19:59	65							V-317800(ICB/CCB)
AD15713-009	1	SMP	20:03	66	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15713-011	1	SMP	20:07	67	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15715-001	1	SMP	20:10	68	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15715-002	1	SMP	20:15	69	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15715-003	1	SMP	20:20	70	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15715-004	1	SMP	20:24	71	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15714-001	1	SMP	20:29	72	MET-TAL6010S	SOIL	SOIL	SW846	82631	Mn NOT REPORTED >LR	()
AD15714-002	1	SMP	20:34	73	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
AD15721-002	1	SMP	20:38	74	MET-TAL6010S	SOIL	SOIL	SW846	82631		()
CCV V-321090	1	CCV	20:42	75							V-321090(CCV)
CCB V-317800	1	CCB	20:46	76							V-317800(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.23 2/19/2020 1:09:34 PM

ok
all elements reported
Na,K NOT REPORTED
QC#82633 Be NOT REPORTED

2/20/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S25395A4.txt

Analysis Date: 02/18/20 **Instrument:** PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-317800	1	CAL	21:59	1							V-317800(ICB/CCB)
CALST2 V-319737	1	CAL	22:04	2							V-319737(LLICV/LLCCV soil)
CALST3 V-321087	1	CAL	22:08	3							V-321087(ICS3 - Middle Std)
CALST4 V-320609	1	CAL	22:12	4							V-320609(ICS4 High std)
ICV V-321090	1	ICV	22:17	5							V-321090(CCV)
ICB V-317800	1	ICB	22:22	6							V-317800(ICB/CCB)
LRS V-321254	1	LRS	22:26	7		SOIL	SOIL	SW846	82633		V-321254(LRS)
ICS3 V-321087	1	ICS	22:32	8							V-321087(ICS3 - Middle Std)
RINSE	1	SMP	22:36	9		SOIL	SOIL	SW846	82633		0
LLICV V-319737	1	LLICV	22:41	10		SOIL	SOIL	SW846	82633		V-319737(LLICV/LLCCV soil)
ICSA V-317801	1	ICSA	22:46	11							V-317801(ICSA)
CCV V-321090	1	CCV	22:51	12							V-321090(CCV)
CCB V-317800	1	CCB	22:55	13							V-317800(ICB/CCB)
MB 82633 (100)	1	MB	23:00	14		SOIL	SOIL	SW846	82633		0
LCS 82633	1	LCS	23:05	15		SOIL	SOIL	SW846	82633		0
LCS MR 82633	1	LCS	23:09	16		SOIL	SOIL	SW846	82633		0
AD15698-001	1	SMP	23:13	17	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	MR	23:17	18	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	MS	23:21	19	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	MSD	23:25	20	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	1	PS	23:29	21	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15698-001	5	SD	23:33	22	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
CCV V-321090	1	CCV	23:38	23							V-321090(CCV)
CCB V-317800	1	CCB	23:42	24							V-317800(ICB/CCB)
AD15704-001	1	SMP	23:47	25	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15704-003	1	SMP	23:51	26	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15704-005	1	SMP	23:55	27	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15684-001	1	SMP	23:59	28	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
AD15687-001	1	SMP	00:05	29	MET-TAL6010S	SOIL	SOIL	SW846	82633		0
CCV V-321090	1	CCV	00:09	30							V-321090(CCV)
CCB V-317800	1	CCB	00:13	31							V-317800(ICB/CCB)
MB 82631 (100)	1	MB	00:18	32		SOIL	SOIL	SW846	82631		0
LCS 82631	1	LCS	00:23	33		SOIL	SOIL	SW846	82631		0
LCS MR 82631	1	LCS	00:27	34		SOIL	SOIL	SW846	82631		0
AD15737-001	1	SMP	00:31	35	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MR	00:35	36	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MS	00:39	37	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MSD	00:43	38	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	1	PS	00:47	39	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15737-001	5	SD	00:52	40	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
CCV V-321090	1	CCV	00:56	41							V-321090(CCV)
CCB V-317800	1	CCB	01:00	42							V-317800(ICB/CCB)
AD15713-009	1	SMP	01:05	43	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15713-011	1	SMP	01:10	44	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15715-001	1	SMP	01:15	45	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15715-002	1	SMP	01:19	46	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15715-003	1	SMP	01:23	47	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15715-004	1	SMP	01:28	48	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15714-001	1	SMP	01:32	49	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15714-002	1	SMP	01:36	50	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15721-002	1	SMP	01:41	51	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
CCV V-321090	1	CCV	01:46	52							V-321090(CCV)
CCB V-317800	1	CCB	01:50	53							V-317800(ICB/CCB)
AD15718-001	1	SMP	01:55	54	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-002	1	SMP	02:00	55	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-005	1	SMP	02:05	56	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-006	1	SMP	02:09	57	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-007	1	SMP	02:14	58	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15718-008	1	SMP	02:18	59	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15713-001	1	SMP	02:22	60	MET-TAL6010S	SOIL	SOIL	SW846	82631		0

Comments/Reviewedby:

carmela
192.168.1.89 2/19/2020 11:53:31 AM

OK
Na,K REPORTED

2/20/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S25395A4.txt

Analysis Date: 02/19/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD15713-003	1	SMP	02:26	61	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15713-005	1	SMP	02:30	62	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
AD15713-007	1	SMP	02:35	63	MET-TAL6010S	SOIL	SOIL	SW846	82631		0
CCV V-321090	1	CCV	02:40	64							V-321090(CCV)
CCB V-317800	1	CCB	02:44	65							V-317800(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 2/19/2020 11:53:31 AM

OK
Na,K REPORTED

2/20/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H25393S.txt

Analysis Date: 02/19/20

Instrument: HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	13:40	1							0
.2 PPB	1	CAL	13:41	2							0
.5 PPB	1	CAL	13:42	3							0
1 PPB	1	CAL	13:44	4							0
2 PPB	1	CAL	13:45	5							0
5 PPB	1	CAL	13:46	6							0
10 PPB	1	CAL	13:48	7							0
25 PPB	1	CAL	13:49	8							0
ICV (2)	1	ICV	13:51	9							0
ICB	1	ICB	13:53	10							0
MB 82631 (167)	1	MB	13:54	11	HG-SOIL	SOIL	SOIL	SW846	82631		0
LCS 82631	1	NA	13:55	12	HG-SOIL	SOIL	SOIL	SW846	82631	CONC.HIGH	0
LCS MR 82631	1	NA	13:57	13	HG-SOIL	SOIL	SOIL	SW846	82631	CONC.HIGH	0
LCS 4D	4	LCS	13:59	14	HG-SOIL	SOIL	SOIL	SW846	82631		0
LCS MR 4D	4	LCS	14:00	15	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15737-001	1	SMP	14:02	16	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MR	14:03	17	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MS	14:04	18	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15737-001	1	MSD	14:06	19	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15718-001	1	SMP	14:08	20	HG-SOIL	SOIL	SOIL	SW846	82631		0
CCV	1	CCV	14:09	21							0
CCB	1	CCB	14:11	22							0
AD15718-002	1	SMP	14:12	23	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15718-005	1	SMP	14:13	24	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15718-006	1	SMP	14:15	25	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15718-007	1	SMP	14:16	26	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15718-008	1	SMP	14:17	27	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15713-001	1	SMP	14:19	28	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15713-003	1	SMP	14:20	29	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15713-005	1	SMP	14:21	30	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15713-007	1	SMP	14:23	31	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15713-009	1	SMP	14:24	32	HG-SOIL	SOIL	SOIL	SW846	82631		0
CCV	1	CCV	14:25	33							0
CCB	1	CCB	14:27	34							0
AD15713-011	1	SMP	14:28	35	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15715-001	1	SMP	14:30	36	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15715-002	1	SMP	14:31	37	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15715-003	1	SMP	14:32	38	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15715-004	1	SMP	14:34	39	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15714-001	1	SMP	14:35	40	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15714-002	1	SMP	14:36	41	HG-SOIL	SOIL	SOIL	SW846	82631		0
AD15721-002	1	SMP	14:38	42	HG-SOIL	SOIL	SOIL	SW846	82631		0
CCV	1	CCV	14:39	43							0
CCB	1	CCB	14:41	44							0

Comments/Reviewedby:

BAdeola
192.168.1.120 2/19/2020 3:18:55 PM

RUN IS OK

2/19/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-321969

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S021820BNEW.txt

Analysis Date: 02/18/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	15:55	1	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
CalBlk V-321567	1	ISBLK	15:59	2		SOIL	SOIL				V-321567(Cal Blk WARNING)
CalStd1 V-321568	1	CAL	16:03	3							V-321568(Cal Std-1 WARNING)
CalStd2 V-321569	1	CAL	16:08	4							V-321569(Cal Std-2 WARNING)
CalStd3 V-321570	1	CAL	16:12	5							V-321570(Cal Std-3 WARNING)
CalStd4 V-321571	1	CAL	16:16	6							V-321571(Cal Std-4 WARNING)
CalStd5 V-321572	1	CAL	16:21	7							V-321572(Cal Std-5 WARNING)
ICV V-321573	1	ICV	16:25	8							V-321573(ICV WARNING)
LLICV V-321578	1	LLICV	16:29	9	MET-TAL6020S	SOIL	SOIL	SW846	82632		V-321578(LL-ICV/CCV SOIL WARNING)
ICB V-321574	1	ICB	16:34	10							V-321574(ICB/CCB WARNING)
ICSA V-321575	1	ICSA	16:38	11							V-321575(ICSA WARNING)
RINSE	1	NA	16:42	12	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
LRS V-321576	1	LRS	16:47	13	MET-TAL6020S	SOIL	SOIL	SW846	82632	Ag fail.	V-321576(LRS WARNING)
RINSE	1	NA	16:51	14	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
CCV V-321577	1	CCV	16:55	15							V-321577(CCV WARNING)
CCB V-321574	1	CCB	16:59	16							V-321574(ICB/CCB WARNING)
MB 82632	1	MB	17:03	17	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
LCS 82632	1	LCS	17:08	18	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
LCS MR 82632	1	LCS	17:12	19	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15737-001	1	SMP	17:16	20	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15737-001	1	MR	17:20	21	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15737-001	5	SD	17:25	22	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15737-001	1	MS	17:29	23	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15737-001	1	MSD	17:33	24	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15737-001	1	PS	17:37	25	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
RINSE	1	NA	17:41	26	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
CCV V-321577	1	CCV	17:46	27							V-321577(CCV WARNING)
CCB V-321574	1	CCB	17:50	28							V-321574(ICB/CCB WARNING)
AD15718-001	1	SMP	17:54	29	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15718-002	1	SMP	17:59	30	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15718-005	1	SMP	18:03	31	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15718-006	1	SMP	18:07	32	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15718-007	1	SMP	18:12	33	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15718-008	1	SMP	18:16	34	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15713-001	1	SMP	18:20	35	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15713-003	1	SMP	18:24	36	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15713-005	1	SMP	18:29	37	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
RINSE	1	NA	18:33	38	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
CCV V-321577	1	CCV	18:37	39							V-321577(CCV WARNING)
CCB V-321574	1	CCB	18:42	40							V-321574(ICB/CCB WARNING)
AD15713-007	1	SMP	18:46	41	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15713-009	1	SMP	18:50	42	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15713-011	1	SMP	18:55	43	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15715-001	1	SMP	18:59	44	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15715-002	1	SMP	19:03	45	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15715-003	1	SMP	19:08	46	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15715-004	1	SMP	19:12	47	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
AD15714-001	1	SMP	19:16	48	MET-TAL6020S	SOIL	SOIL	SW846	82632	Rerun As (LR).	0
AD15714-002	1	SMP	19:20	49	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
RINSE	1	NA	19:25	50	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
CCV V-321577	1	CCV	19:29	51							V-321577(CCV WARNING)
CCB V-321574	1	CCB	19:33	52							V-321574(ICB/CCB WARNING)
AD15721-002	1	SMP	19:38	53	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
RINSE	1	NA	19:42	54	MET-TAL6020S	SOIL	SOIL	SW846	82632		0
CCV V-321577	1	CCV	19:46	55						Tl fail.	V-321577(CCV WARNING)
CCB V-321574	1	CCB	19:50	56							V-321574(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 2/19/2020 9:51:18 AM

Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl. LRS fail for Ag. Ag LR = 100ppb. Rerun Tl for 15721-002 (CCV fail). Rerun As for 15714-001 (Ove LR). PC.

2/19/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2/18/20

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S021820BNSample ID: CalBlk V-321567 Sample Date 02/18/20 Sample Time: 15:59

IS ID:	Area	Area Limit		
Ho-1	2435794.06	1705055.842	-	3166532.278
In-1	1654027.70	1157819.39	-	2150236.01
Sc-1	1106311.97	774418.379	-	1438205.561
Tb-1	2454804.13	1718362.891	-	3191245.369

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area		Area	Area	Area	Area
ISBLK	CalBlk V-321567	2	2435794.	1654027.	1106311.	2454804.					
SMP	RINSE	1	2437642.	1680475.	1086954.	2470080.					
CAL	CalStd1 V-32156	3	2452912.	1683036.	1091205.	2469316.					
CAL	CalStd2 V-32156	4	2431513.	1672070.	1098069.	2463276.					
CAL	CalStd3 V-32157	5	2445521.	1688225.	1099484.	2486506.					
CAL	CalStd4 V-32157	6	2446470.	1674359.	1104531.	2479005.					
CAL	CalStd5 V-32157	7	2428073.	1635477.	1109693.	2459181.					
ICV	ICV V-321573	8	2433579.	1672888.	1126960.	2457601.					
LLICV	LLICV V-321578	9	2469810.	1688755.	1137917.	2484175.					
ICB	ICB V-321574	10	2464770.	1689321.	1158973.	2489741.					
ICSA	ICSA V-321575	11	2462844.	1601353.	1167066.	2469985.					
SMP	RINSE	12	2437443.	1699858.	1184852.	2480775.					
LRS	LRS V-321576	13	2440794.	1627810.	1182688.	2460584.					
SMP	RINSE	14	2516278.	1752472.	1230844.	2541354.					
CCV	CCV V-321577	15	2468097.	1687804.	1152195.	2491973.					
CCB	CCB V-321574	16	2437518.	1696998.	1153460.	2477942.					
MB	MB 82632	17	2426581.	1677846.	1093514.	2447015.					
LCS	LCS 82632	18	2473076.	1675859.	1230999.	2495792.					
MR	LCS MR 82632	19	2500820.	1674139.	1229796.	2521492.					
SMP	AD15737-001	20	2529351.	1684458.	1331021.	2544448.					
MR	AD15737-001	21	2549546.	1698040.	1356574.	2573787.					
SD	AD15737-001	22	2516583.	1717087.	1212035.	2540763.					
MS	AD15737-001	23	2479469.	1649364.	1360281.	2513356.					
MSD	AD15737-001	24	2505324.	1690654.	1385366.	2539932.					
PS	AD15737-001	25	2590262.	1737396.	1408407.	2624678.					
SMP	RINSE	26	2521431.	1770959.	1235358.	2568188.					
CCV	CCV V-321577	27	2520912.	1733985.	1203379.	2532973.					
CCB	CCB V-321574	28	2530822.	1742815.	1212431.	2541215.					
SMP	AD15718-001	29	2564744.	1690551.	1651944.	* 2602228.					
SMP	AD15718-002	30	2592157.	1690169.	1431546.	2646785.					
SMP	AD15718-005	31	2550234.	1690953.	1389153.	2582778.					
SMP	AD15718-006	32	2581890.	1728139.	1418372.	2616361.					
SMP	AD15718-007	33	2574818.	1711543.	1396129.	2628014.					
SMP	AD15718-008	34	2584782.	1689319.	1368252.	2596100.					
SMP	AD15713-001	35	2556020.	1700936.	1283932.	2545356.					
SMP	AD15713-003	36	2501992.	1665488.	1307590.	2540828.					
SMP	AD15713-005	37	2532075.	1736402.	1252220.	2563648.					
SMP	RINSE	38	2510179.	1735914.	1176078.	2521588.					
CCV	CCV V-321577	39	2492648.	1678822.	1144497.	2507616.					
CCB	CCB V-321574	40	2478471.	1707923.	1152716.	2508829.					
SMP	AD15713-007	41	2500590.	1688398.	1216462.	2536834.					
SMP	AD15713-009	42	2539566.	1730604.	1230999.	2581737.					
SMP	AD15713-011	43	2520532.	1741673.	1222505.	2561473.					
SMP	AD15715-001	44	2612674.	1694422.	1575486.	* 2627225.					
SMP	AD15715-002	45	2658087.	1714119.	1667794.	* 2697697.					
SMP	AD15715-003	46	2603723.	1717830.	1485587.	* 2655970.					
SMP	AD15715-004	47	2631015.	1720259.	1477645.	* 2661940.					
SMP	AD15714-001	48	2673809.	1702410.	1647733.	* 2714685.					

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

SMP	AD15714-002	49	2683491.	1689977.	1634886.	* 2765546.
SMP	RINSE	50	2581046.	1777218.	1240590.	2609605.
CCV	CCV V-321577	51	2540681.	1737970.	1221311.	2563026.
CCB	CCB V-321574	52	2553945.	1771348.	1234574.	2585457.
SMP	AD15721-002	53	2567221.	1753020.	1365294.	2628876.
SMP	RINSE	54	2556072.	1770347.	1224415.	2593297.
CCV	CCV V-321577	55	2284720.	1578279.	1106562.	2332118.
CCB	CCB V-321574	56	2552631.	1765359.	1219584.	2584603.

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S021820BNSample ID: CalBlk V-321567 Sample Date 02/18/20 Sample Time: 15:59

IS ID:	Area	Area Limit		
Ho-2	1011104.13	707772.891	-	1314435.369
In-2	314277.79	219994.453	-	408561.127
Sc-2	52214.07	36549.849	-	67878.291
Tb-2	1006072.45	704250.715	-	1307894.185

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-321567	2	1011104.	314277.7	52214.07	1006072.				
SMP	RINSE	1	1037835.	323868.3	53861.89	1038914.				
CAL	CalStd1 V-32156	3	1036201.	324301.9	54077.19	1036716.				
CAL	CalStd2 V-32156	4	1048214.	326140.6	54391.42	1044404.				
CAL	CalStd3 V-32157	5	1058299.	329448.7	54134.92	1051250.				
CAL	CalStd4 V-32157	6	1057087.	327046.0	54614.21	1056794.				
CAL	CalStd5 V-32157	7	1049261.	323273.9	54985.30	1051105.				
ICV	ICV V-321573	8	1058698.	328356.6	55846.91	1056485.				
LLICV	LLICV V-321578	9	1064569.	332942.9	55966.79	1067464.				
ICB	ICB V-321574	10	1058313.	329869.6	55191.36	1053991.				
ICSA	ICSA V-321575	11	983677.2	298738.7	55463.42	963072.9				
SMP	RINSE	12	1084218.	341857.9	58192.55	1083334.				
LRS	LRS V-321576	13	1017361.	310361.8	55436.41	1013682.				
SMP	RINSE	14	1051282.	331614.2	56440.65	1053207.				
CCV	CCV V-321577	15	1042852.	325477.0	55522.42	1050538.				
CCB	CCB V-321574	16	1033546.	322577.4	54225.32	1031543.				
MB	MB 82632	17	1026659.	318626.4	53874.25	1027319.				
LCS	LCS 82632	18	1054481.	323838.9	57032.35	1049858.				
MR	LCS MR 82632	19	1060025.	323939.1	56626.80	1054545.				
SMP	AD15737-001	20	1093254.	323466.5	62486.41	1081590.				
MR	AD15737-001	21	1091569.	323859.1	63599.54	1093905.				
SD	AD15737-001	22	1077058.	331791.8	56340.23	1074057.				
MS	AD15737-001	23	1053402.	323318.8	63525.10	1056749.				
MSD	AD15737-001	24	1081730.	333885.1	65146.04	1082698.				
PS	AD15737-001	25	1113631.	336278.6	66238.68	1116538.				
SMP	RINSE	26	1083817.	342796.8	57341.11	1082230.				
CCV	CCV V-321577	27	1082100.	338377.4	57025.74	1079651.				
CCB	CCB V-321574	28	1066930.	337196.6	56058.03	1068169.				
SMP	AD15718-001	29	1001030.	301623.0	73506.90	* 1002832.				
SMP	AD15718-002	30	1131809.	333632.0	67796.58	1128256.				
SMP	AD15718-005	31	1103943.	329697.1	66395.89	1106072.				
SMP	AD15718-006	32	1116198.	336011.6	67170.77	1116577.				
SMP	AD15718-007	33	1099853.	329531.9	64895.14	1103539.				
SMP	AD15718-008	34	1102334.	329862.0	64128.16	1100053.				
SMP	AD15713-001	35	1081281.	330723.9	59216.76	1080834.				
SMP	AD15713-003	36	1063597.	321454.9	60204.29	1063729.				
SMP	AD15713-005	37	1087858.	333887.9	58240.36	1085723.				
SMP	RINSE	38	1056710.	328583.1	54667.53	1054962.				
CCV	CCV V-321577	39	1055873.	326677.7	55415.37	1056699.				
CCB	CCB V-321574	40	1049300.	326827.4	54632.11	1051123.				
SMP	AD15713-007	41	1079521.	328538.1	56984.58	1074571.				
SMP	AD15713-009	42	1083757.	332534.0	56591.24	1080697.				
SMP	AD15713-011	43	1072582.	334249.0	56469.44	1078908.				
SMP	AD15715-001	44	1107427.	325059.6	74284.12	* 1105455.				
SMP	AD15715-002	45	1126921.	330255.4	80330.68	* 1132318.				
SMP	AD15715-003	46	1110035.	329239.0	68260.36	* 1101162.				
SMP	AD15715-004	47	1115949.	334604.4	69986.61	* 1117901.				
SMP	AD15714-001	48	1140148.	327236.6	77150.84	* 1142669.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

SMP	AD15714-002	49	1142434.	328688.4	76857.24	*	1156648.
SMP	RINSE	50	1085150.	341362.4	56748.13		1087764.
CCV	CCV V-321577	51	1085074.	339364.3	56196.45		1085874.
CCB	CCB V-321574	52	1075435.	340960.5	55993.83		1076259.
SMP	AD15721-002	53	1084845.	331957.8	63507.17		1098312.
SMP	RINSE	54	1079239.	340943.2	56602.24		1084085.
CCV	CCV V-321577	55	1085075.	337282.3	56324.79		1084202.
CCB	CCB V-321574	56	1079339.	341860.2	56739.34		1076615.

* Indicates Internal Standard Area outside of limits

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD15713-001
Matrix Soil
Client SampleID: TB-101-1 COMP

Project Number: 0021406
Received Date: 2/14/2020
Collect Date: 2/13/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	**1**	**0.29**	**mg/Kg**	**0.26**	02/18/20	02/19/20

Lab#: AD15713-003
Matrix Soil
Client SampleID: TB-101-2 COMP

Project Number: 0021406
Received Date: 2/14/2020
Collect Date: 2/13/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.26	02/18/20	02/19/20

Lab#: AD15713-005
Matrix Soil
Client SampleID: TB-101-3 COMP

Project Number: 0021406
Received Date: 2/14/2020
Collect Date: 2/13/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	**1**	**0.86**	**mg/Kg**	**0.28**	02/18/20	02/19/20

Lab#: AD15713-007
Matrix Soil
Client SampleID: TB-101-4 COMP

Project Number: 0021406
Received Date: 2/14/2020
Collect Date: 2/13/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	02/18/20	02/19/20

Lab#: AD15713-009
Matrix Soil
Client SampleID: TB-101-5 COMP

Project Number: 0021406
Received Date: 2/14/2020
Collect Date: 2/13/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.28	02/19/20	02/19/20

Lab#: AD15713-011
Matrix Soil
Client SampleID: TB-101-6 COMP

Project Number: 0021406
Received Date: 2/14/2020
Collect Date: 2/13/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.29	02/19/20	02/19/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0021406**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD15713-001	TB-101-1 COMP	Soil	1	92	Percent			02/15/20	02/14/20	02/13/20
AD15713-002	TB-101-1 GRAB	Soil/Encore	1	93	Percent			02/15/20	02/14/20	02/13/20
AD15713-003	TB-101-2 COMP	Soil	1	93	Percent			02/15/20	02/14/20	02/13/20
AD15713-004	TB-101-2 GRAB	Soil/Encore	1	93	Percent			02/15/20	02/14/20	02/13/20
AD15713-005	TB-101-3 COMP	Soil	1	87	Percent			02/15/20	02/14/20	02/13/20
AD15713-006	TB-101-3 GRAB	Soil/Encore	1	89	Percent			02/15/20	02/14/20	02/13/20
AD15713-007	TB-101-4 COMP	Soil	1	86	Percent			02/15/20	02/14/20	02/13/20
AD15713-008	TB-101-4 GRAB	Soil/Encore	1	82	Percent			02/15/20	02/14/20	02/13/20
AD15713-009	TB-101-5 COMP	Soil	1	85	Percent			02/15/20	02/14/20	02/13/20
AD15713-010	TB-101-5 GRAB	Soil/Encore	1	82	Percent			02/15/20	02/14/20	02/13/20
AD15713-011	TB-101-6 COMP	Soil	1	82	Percent			02/15/20	02/14/20	02/13/20
AD15713-012	TB-101-6 GRAB	Soil/Encore	1	82	Percent			02/15/20	02/14/20	02/13/20

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10298

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD15713-001	92	92.07650	Percent	1.33	12.31	11.44	02/15/20	jessica	0.37	5
Sample	AD15712-018	66	66.22222	Percent	1.33	8.08	5.80	02/15/20	jessica		
Sample	AD15712-019	68	68.40194	Percent	1.33	9.59	6.98	02/15/20	jessica		
Sample	AD15712-020	71	70.75774	Percent	1.34	10.71	7.97	02/15/20	jessica		
Sample	AD15712-021	68	67.55663	Percent	1.33	13.69	9.68	02/15/20	jessica		
Sample	AD15713-001	92	92.42160	Percent	1.34	12.82	11.95	02/15/20	jessica		
Sample	AD15713-002	93	92.77721	Percent	1.33	11.16	10.45	02/15/20	jessica		
Sample	AD15713-003	93	92.75074	Percent	1.33	11.40	10.67	02/15/20	jessica		
Sample	AD15713-004	93	93.06198	Percent	1.32	12.13	11.38	02/15/20	jessica		
Sample	AD15713-005	87	87.07015	Percent	1.33	15.87	13.99	02/15/20	jessica		
Sample	AD15713-006	89	89.49153	Percent	1.32	16.07	14.52	02/15/20	jessica		
Sample	AD15713-007	86	85.76744	Percent	1.32	12.07	10.54	02/15/20	jessica		
Sample	AD15713-008	82	81.93653	Percent	1.33	13.62	11.40	02/15/20	jessica		
Sample	AD15713-009	85	85.49674	Percent	1.33	15.12	13.12	02/15/20	jessica		
Sample	AD15713-010	82	82.34234	Percent	1.33	12.43	10.47	02/15/20	jessica		
Sample	AD15713-011	82	81.52610	Percent	1.33	11.29	9.45	02/15/20	jessica		
Sample	AD15713-012	82	82.36536	Percent	1.33	10.80	9.13	02/15/20	jessica		
Sample	AD15714-001	72	71.60494	Percent	1.31	11.84	8.85	02/15/20	jessica		
Sample	AD15714-002	93	93.38304	Percent	1.32	12.05	11.33	02/15/20	jessica		
Sample	AD15715-001	82	82.18063	Percent	1.32	13.61	11.41	02/15/20	jessica		
Sample	AD15715-002	78	77.78970	Percent	1.32	10.64	8.57	02/15/20	jessica		

* - Indicates Failed Rpd Criteria

MS/MSD/DUP Recovery

Prep Batch: S-2342 Sample ID: AD15687-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200219115	15	02/19/20 12:23	20200219115	14	02/19/20 12:21

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.2783	0	70	Ms	20200219115	16	02/19/20 12:26	20200219115	14	02/19/20 12:21

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.2957	0	74	6.1	Ms	20200219115	17	02/19/20 12:28	20200219115	14	02/19/20 12:21

LCS Recoveries

BatchRunID/RunID:====>				202002191150-12											
QcBatchID:====>				LCSS-2342											
Date/Time:====>				02/19/20 12:16											
Analytical Method:====>				EPA 9012B											
Matrix:====>				Soil		Soil		Soil		Soil		Soil			
	EPA 9012B														
Analyte	Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	
Cyanide	0.4	80-120			94										

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200219115	9	ICV	89	0.4	85-115
Cyanide	20200219115	21	CCV	86	0.4	85-115
Cyanide	20200219115	33	CCV	90	0.4	85-115
Cyanide	20200219115	41	CCV	94	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 2/18/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200219115	2/19/20 12:14	MBS-2342	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200219115	2/19/20 12:11	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200219115	2/19/20 12:39	CCB	22	Cyanide	ND	0.020
20200219115	2/19/20 13:07	CCB	34	Cyanide	ND	0.020
20200219115	2/19/20 13:23	CCB	42	Cyanide	ND	0.020

MS/MSD/DUP Recovery

Prep Batch: S-2343 Sample ID: AD15714-002
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200219175	15	02/19/20 18:24	20200219175	14	02/19/20 18:21

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.3567	0	89		20200219175	16	02/19/20 18:26	20200219175	14	02/19/20 18:21

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3417	0	85	4.3		20200219175	17	02/19/20 18:28	20200219175	14	02/19/20 18:21

LCS Recoveries

BatchRunID/RunID:====> 202002191751-12
QcBatchID:====> LCSS-2343
Date/Time:====> 02/19/20 18:17
Analytical Method:====> EPA 9012B
Matrix:====> Soil

Analyte	EPA 9012B Amt	Limits	Amt	Limits	Soil % Rec	Flags	Soil % Rec	Flags	Soil % Rec	Flags	Soil % Rec	Flags	Soil % Rec	Flags
Cyanide	0.4	80-120			91									

Calibration Summary:

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200219175	9	ICV	101	0.4	85-115
Cyanide	20200219175	21	CCV	99	0.4	85-115
Cyanide	20200219175	33	CCV	99	0.4	85-115
Cyanide	20200219175	41	CCV	99	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 2/19/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200219175	2/19/20 18:14	MBS-2343	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200219175	2/19/20 18:12	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200219175	2/19/20 18:40	CCB	22	Cyanide	ND	0.020
20200219175	2/19/20 19:08	CCB	34	Cyanide	ND	0.020
20200219175	2/19/20 19:23	CCB	42	Cyanide	ND	0.020

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke Report Of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0021432

Sample ID: TB-101-7 COMP
Lab#: AD15739-001
Matrix: Soil

Collection Date: 2/14/2020
Receipt Date: 2/14/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
%Solids	**1**	**percent**		**71**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.34	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.12	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0070	ND
Aldrin	1	mg/kg	0.0070	ND
Alpha-BHC	1	mg/kg	0.0014	ND
beta-BHC	1	mg/kg	0.0014	ND
Chlordane (Total)	1	mg/kg	0.0070	ND
delta-BHC	1	mg/kg	0.0070	ND
Dieldrin	1	mg/kg	0.0014	ND
Endosulfan I	1	mg/kg	0.0070	ND
Endosulfan II	1	mg/kg	0.0070	ND
Endosulfan Sulfate	1	mg/kg	0.0070	ND
Endrin	1	mg/kg	0.0070	ND
Endrin Aldehyde	1	mg/kg	0.0070	ND
Endrin Ketone	1	mg/kg	0.0070	ND
gamma-BHC	1	mg/kg	0.0014	ND
Heptachlor	1	mg/kg	0.0070	ND
Heptachlor Epoxide	1	mg/kg	0.0070	ND
Methoxychlor	1	mg/kg	0.0070	ND
p,p'-DDD	1	mg/kg	0.0035	ND
p,p'-DDE	1	mg/kg	0.0035	ND
p,p'-DDT	1	mg/kg	0.0035	ND
Toxaphene	1	mg/kg	0.035	ND
y-Chlordane	1	mg/kg	0.0070	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	107.22	100	37	141	107	
TCMX-Surrogate	101.76	100	37	141	102	
DCB-Surrogate	111.73	100	33	146	112	
DCB-Surrogate	112.84	100	33	146	113	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.035	ND
Aroclor-1016	1	mg/kg	0.035	ND
Aroclor-1221	1	mg/kg	0.035	ND
Aroclor-1232	1	mg/kg	0.035	ND
Aroclor-1242	1	mg/kg	0.035	ND
Aroclor-1248	1	mg/kg	0.035	ND
Aroclor-1254	1	mg/kg	0.035	ND
Aroclor-1260	1	mg/kg	0.035	ND
Aroclor-1262	1	mg/kg	0.035	ND
Aroclor-1268	1	mg/kg	0.035	ND

Sample ID: TB-101-7 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-001 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	105.86	100	37	141	106	
TCMX-Surrogate	100.58	100	37	141	101	
DCB-Surrogate	98.99	100	34	146	99	
DCB-Surrogate	92.55	100	34	146	93	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.047	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.047	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.047	ND
2,4,5-Trichlorophenol	1	mg/kg	0.047	ND
2,4,6-Trichlorophenol	1	mg/kg	0.047	ND
2,4-Dichlorophenol	1	mg/kg	0.012	ND
2,4-Dimethylphenol	1	mg/kg	0.012	ND
2,4-Dinitrophenol	1	mg/kg	0.23	ND
2,4-Dinitrotoluene	1	mg/kg	0.047	ND
2,6-Dinitrotoluene	1	mg/kg	0.047	ND
2-Chloronaphthalene	1	mg/kg	0.047	ND
2-Chlorophenol	1	mg/kg	0.047	ND
2-Methylnaphthalene	1	mg/kg	0.047	ND
2-Methylphenol	1	mg/kg	0.012	ND
2-Nitroaniline	1	mg/kg	0.047	ND
2-Nitrophenol	1	mg/kg	0.047	ND
3&4-Methylphenol	1	mg/kg	0.012	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.047	ND
3-Nitroaniline	1	mg/kg	0.047	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.23	ND
4-Bromophenyl-phenylether	1	mg/kg	0.047	ND
4-Chloro-3-methylphenol	1	mg/kg	0.047	ND
4-Chloroaniline	1	mg/kg	0.012	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.047	ND
4-Nitroaniline	1	mg/kg	0.047	ND
4-Nitrophenol	1	mg/kg	0.047	ND
Acenaphthene	1	mg/kg	0.047	ND
Acenaphthylene	1	mg/kg	0.047	ND
Acetophenone	1	mg/kg	0.047	ND
Anthracene	1	mg/kg	0.047	ND
Atrazine	1	mg/kg	0.047	ND
Benzaldehyde	1	mg/kg	0.047	ND
Benzo[a]anthracene	1	mg/kg	0.047	ND
Benzo[a]pyrene	1	mg/kg	0.047	ND
Benzo[b]fluoranthene	1	mg/kg	0.047	ND
Benzo[g,h,i]perylene	1	mg/kg	0.047	ND
Benzo[k]fluoranthene	1	mg/kg	0.047	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.047	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.012	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.047	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.047	ND
Butylbenzylphthalate	1	mg/kg	0.047	ND
Caprolactam	1	mg/kg	0.047	ND
Carbazole	1	mg/kg	0.047	ND
Chrysene	1	mg/kg	0.047	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.047	ND
Dibenzofuran	1	mg/kg	0.012	ND
Diethylphthalate	1	mg/kg	0.047	ND
Dimethylphthalate	1	mg/kg	0.047	ND
Di-n-butylphthalate	1	mg/kg	0.012	ND
Di-n-octylphthalate	1	mg/kg	0.047	ND
Fluoranthene	1	mg/kg	0.047	ND
Fluorene	1	mg/kg	0.047	ND
Hexachlorobenzene	1	mg/kg	0.047	ND
Hexachlorobutadiene	1	mg/kg	0.047	ND
Hexachlorocyclopentadiene	1	mg/kg	0.047	ND
Hexachloroethane	1	mg/kg	0.047	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.047	ND
Isophorone	1	mg/kg	0.047	ND
Naphthalene	1	mg/kg	0.012	ND
Nitrobenzene	1	mg/kg	0.047	ND

Sample ID: TB-101-7 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-001 **Receipt Date: 2/14/2020**
Matrix: Soil

N-Nitroso-di-n-propylamine	1	mg/kg	0.012	ND
N-Nitrosodiphenylamine	1	mg/kg	0.047	ND
Pentachlorophenol	1	mg/kg	0.23	ND
Phenanthrene	1	mg/kg	0.047	ND
Phenol	1	mg/kg	0.047	ND
Pyrene	1	mg/kg	0.047	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	44.96	50	58	148	90	
Phenol-d5	73.43	100	49	129	73	
Nitrobenzene-d5	33.48	50	52	129	67	
2-Fluorophenol	74.02	100	43	128	74	
2-Fluorobiphenyl	36.31	50	58	125	73	
2,4,6-Tribromophenol	87.95	100	54	145	88	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecane	**1**	**mg/kg**	**12.65**	**0.34J**
Hexatriacontane	**1**	**mg/kg**	**13.03**	**0.40J**
Docosane	**1**	**mg/kg**	**13.41**	**0.62J**
Nonadecane	**1**	**mg/kg**	**13.77**	**0.47J**
Hexatriacontane	**1**	**mg/kg**	**14.12**	**0.60J**
Eicosane	**1**	**mg/kg**	**14.49**	**0.39J**
Tritetracontane	**1**	**mg/kg**	**14.88**	**0.37J**
Eicosane	**1**	**mg/kg**	**15.33**	**0.23J**
Heptadecane	**1**	**mg/kg**	**15.82**	**0.23J**
1,2-Propanediol	**1**	**mg/kg**	**3**	**0.19J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.3**	**4.3JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.24**	**0.17JB**
(-)-Loliolide	**1**	**mg/kg**	**9.56**	**0.095J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**8.4J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**280**	**10000**
Barium	**1**	**mg/kg**	**14**	**21**
Calcium	1	mg/kg	1400	ND
Chromium	**1**	**mg/kg**	**7.0**	**26**
Cobalt	**1**	**mg/kg**	**3.5**	**7.7**
Copper	**1**	**mg/kg**	**7.0**	**8.5**
Iron	**1**	**mg/kg**	**280**	**27000**
Lead	**1**	**mg/kg**	**7.0**	**9.1**
Magnesium	**1**	**mg/kg**	**700**	**5100**
Manganese	**1**	**mg/kg**	**14**	**260**
Nickel	**1**	**mg/kg**	**7.0**	**21**
Potassium	**1**	**mg/kg**	**700**	**2400**
Sodium	**1**	**mg/kg**	**350**	**770**
Vanadium	**1**	**mg/kg**	**14**	**32**
Zinc	**1**	**mg/kg**	**14**	**60**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.28**	**9.9**
Beryllium	**1**	**mg/kg**	**0.28**	**0.61**
Cadmium	1	mg/kg	0.56	ND
Selenium	1	mg/kg	2.8	ND
Silver	1	mg/kg	0.28	ND
Thallium	1	mg/kg	0.56	ND

Sample ID: TB-101-7 GRAB | **Collection Date: 2/14/2020**
Lab#: AD15739-002 | **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**83**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.929	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.929	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.929	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.929	mg/kg	0.0022	ND
1,1-Dichloroethane	0.929	mg/kg	0.0022	ND
1,1-Dichloroethene	0.929	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.929	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.929	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.929	mg/kg	0.0022	ND
1,2-Dibromoethane	0.929	mg/kg	0.00087	ND
1,2-Dichlorobenzene	0.929	mg/kg	0.0022	ND
1,2-Dichloroethane	0.929	mg/kg	0.0022	ND
1,2-Dichloropropane	0.929	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.929	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.929	mg/kg	0.0022	ND
1,4-Dioxane	0.929	mg/kg	0.11	ND
2-Butanone	0.929	mg/kg	0.0022	ND
2-Hexanone	0.929	mg/kg	0.0022	ND
4-Methyl-2-pentanone	**0.929**	**mg/kg**	**0.0022**	**0.0045**
Acetone	0.929	mg/kg	0.011	ND
Benzene	0.929	mg/kg	0.0011	ND
Bromochloromethane	0.929	mg/kg	0.0022	ND
Bromodichloromethane	0.929	mg/kg	0.0022	ND
Bromoform	0.929	mg/kg	0.0022	ND
Bromomethane	0.929	mg/kg	0.0022	ND
Carbon disulfide	**0.929**	**mg/kg**	**0.0022**	**0.0093**
Carbon tetrachloride	0.929	mg/kg	0.0022	ND
Chlorobenzene	0.929	mg/kg	0.0022	ND
Chloroethane	0.929	mg/kg	0.0022	ND
Chloroform	0.929	mg/kg	0.0022	ND
Chloromethane	0.929	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.929	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.929	mg/kg	0.0022	ND
Cyclohexane	0.929	mg/kg	0.0022	ND
Dibromochloromethane	0.929	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.929	mg/kg	0.0022	ND
Ethylbenzene	0.929	mg/kg	0.0011	ND
Isopropylbenzene	0.929	mg/kg	0.0011	ND
m&p-Xylenes	0.929	mg/kg	0.0011	ND
Methyl Acetate	**0.929**	**mg/kg**	**0.0022**	**0.021**
Methylcyclohexane	0.929	mg/kg	0.0022	ND
Methylene chloride	0.929	mg/kg	0.0022	ND
Methyl-t-butyl ether	0.929	mg/kg	0.0011	ND
o-Xylene	0.929	mg/kg	0.0011	ND
Styrene	0.929	mg/kg	0.0022	ND
Tetrachloroethene	0.929	mg/kg	0.0022	ND
Toluene	0.929	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.929	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.929	mg/kg	0.0022	ND
Trichloroethene	0.929	mg/kg	0.0022	ND
Trichlorofluoromethane	0.929	mg/kg	0.0022	ND
Vinyl chloride	0.929	mg/kg	0.0022	ND
Xylenes (Total)	0.929	mg/kg	0.0011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.42	30	68	122	101	
Dibromofluoromethane	29.15	30	63	140	97	
Bromofluorobenzene	31.58	30	64	129	105	
1,2-Dichloroethane-d4	30.99	30	63	143	103	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID:	**TB-101-7 GRAB**	**Collection Date:**	**2/14/2020**
Lab#:	**AD15739-002**	**Receipt Date:**	**2/14/2020**
Matrix:	**Soil/Terracore**		

Acetic acid, ethyl ester	**0.929**	**mg/kg**	**4.7**	**0.013J**
TotalVolatileTic	**0.929**	**mg/kg**	**NA**	**0.013J**

Sample ID: TB-101-8 COMP | **Collection Date: 2/14/2020**
Lab#: AD15739-003 | **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**81**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0062	ND
Aldrin	1	mg/kg	0.0062	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0062	ND
delta-BHC	1	mg/kg	0.0062	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0062	ND
Endosulfan II	1	mg/kg	0.0062	ND
Endosulfan Sulfate	1	mg/kg	0.0062	ND
Endrin	1	mg/kg	0.0062	ND
Endrin Aldehyde	1	mg/kg	0.0062	ND
Endrin Ketone	1	mg/kg	0.0062	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0062	ND
Heptachlor Epoxide	1	mg/kg	0.0062	ND
Methoxychlor	1	mg/kg	0.0062	ND
p,p'-DDD	1	mg/kg	0.0031	ND
p,p'-DDE	1	mg/kg	0.0031	ND
p,p'-DDT	1	mg/kg	0.0031	ND
Toxaphene	1	mg/kg	0.031	ND
y-Chlordane	1	mg/kg	0.0062	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	83.79	100	37	141	84	
TCMX-Surrogate	85.42	100	37	141	85	
DCB-Surrogate	80.60	100	33	146	81	
DCB-Surrogate	83.08	100	33	146	83	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	88.02	100	37	141	88	
TCMX-Surrogate	83.96	100	37	141	84	
DCB-Surrogate	80.16	100	34	146	80	
DCB-Surrogate	77.02	100	34	146	77	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND

Sample ID: TB-101-8 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-003 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.041	ND
2-Chlorophenol	1	mg/kg	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.041	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.041	ND
2-Nitrophenol	1	mg/kg	0.041	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.041	ND
3-Nitroaniline	1	mg/kg	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.041	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.041	ND
4-Nitroaniline	1	mg/kg	0.041	ND
4-Nitrophenol	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Acetophenone	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Atrazine	1	mg/kg	0.041	ND
Benzaldehyde	1	mg/kg	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.041	ND
Butylbenzylphthalate	1	mg/kg	0.041	ND
Caprolactam	1	mg/kg	0.041	ND
Carbazole	1	mg/kg	0.041	ND
Chrysene	1	mg/kg	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.041	ND
Dimethylphthalate	1	mg/kg	0.041	ND
Di-n-butylphthalate	**1**	**mg/kg**	**0.010**	**0.017**
Di-n-octylphthalate	1	mg/kg	0.041	ND
Fluoranthene	1	mg/kg	0.041	ND
Fluorene	1	mg/kg	0.041	ND
Hexachlorobenzene	1	mg/kg	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.041	ND
Hexachloroethane	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND
Isophorone	1	mg/kg	0.041	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.041	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.041	ND
Phenol	1	mg/kg	0.041	ND
Pyrene	1	mg/kg	0.041	ND

Sample ID: TB-101-8 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-003 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	53.72	50	58	148	107	
Phenol-d5	77.70	100	49	129	78	
Nitrobenzene-d5	37.08	50	52	129	74	
2-Fluorophenol	72.32	100	43	128	72	
2-Fluorobiphenyl	40.79	50	58	125	82	
2,4,6-Tribromophenol	86.74	100	54	145	87	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
1,2-Propanediol	**1**	**mg/kg**	**3.02**	**0.28J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**4.2JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.19JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.42**	**0.11J**
Cyclohexasiloxane, dodecamethyl-	**1**	**mg/kg**	**7.2**	**0.20J**
unknown	**1**	**mg/kg**	**7.94**	**0.10J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**5.1J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**650**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.2	ND
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	ND
Iron	**1**	**mg/kg**	**250**	**1700**
Lead	1	mg/kg	6.2	ND
Magnesium	1	mg/kg	620	ND
Manganese	1	mg/kg	12	ND
Nickel	1	mg/kg	6.2	ND
Potassium	1	mg/kg	620	ND
Sodium	1	mg/kg	310	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.99	ND
Arsenic	**1**	**mg/kg**	**0.25**	**2.7**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.49	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: TB-101-8 GRAB | **Collection Date: 2/14/2020**
Lab#: AD15739-004 | **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		80

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.618	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.618	mg/kg	0.0015	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.618	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.618	mg/kg	0.0015	ND
1,1-Dichloroethane	0.618	mg/kg	0.0015	ND
1,1-Dichloroethene	0.618	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.618	mg/kg	0.0015	ND
1,2,4-Trichlorobenzene	0.618	mg/kg	0.0015	ND
1,2-Dibromo-3-chloropropane	0.618	mg/kg	0.0015	ND
1,2-Dibromoethane	0.618	mg/kg	0.00060	ND
1,2-Dichlorobenzene	0.618	mg/kg	0.0015	ND
1,2-Dichloroethane	0.618	mg/kg	0.0015	ND
1,2-Dichloropropane	0.618	mg/kg	0.0015	ND
1,3-Dichlorobenzene	0.618	mg/kg	0.0015	ND
1,4-Dichlorobenzene	0.618	mg/kg	0.0015	ND
1,4-Dioxane	0.618	mg/kg	0.077	ND
2-Butanone	0.618	mg/kg	0.0015	ND
2-Hexanone	0.618	mg/kg	0.0015	ND
4-Methyl-2-pentanone	0.618	mg/kg	0.0015	ND
Acetone	0.618	mg/kg	0.0077	ND
Benzene	0.618	mg/kg	0.00077	ND
Bromochloromethane	0.618	mg/kg	0.0015	ND
Bromodichloromethane	0.618	mg/kg	0.0015	ND
Bromoform	0.618	mg/kg	0.0015	ND
Bromomethane	0.618	mg/kg	0.0015	ND
Carbon disulfide	0.618	mg/kg	0.0015	ND
Carbon tetrachloride	0.618	mg/kg	0.0015	ND
Chlorobenzene	0.618	mg/kg	0.0015	ND
Chloroethane	0.618	mg/kg	0.0015	ND
Chloroform	0.618	mg/kg	0.0015	ND
Chloromethane	0.618	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.618	mg/kg	0.0015	ND
cis-1,3-Dichloropropene	0.618	mg/kg	0.0015	ND
Cyclohexane	0.618	mg/kg	0.0015	ND
Dibromochloromethane	0.618	mg/kg	0.0015	ND
Dichlorodifluoromethane	0.618	mg/kg	0.0015	ND
Ethylbenzene	0.618	mg/kg	0.00077	ND
Isopropylbenzene	0.618	mg/kg	0.00077	ND
m&p-Xylenes	0.618	mg/kg	0.00077	ND
Methyl Acetate	0.618	mg/kg	0.0015	ND
Methylcyclohexane	0.618	mg/kg	0.0015	ND
Methylene chloride	0.618	mg/kg	0.0015	ND
Methyl-t-butyl ether	0.618	mg/kg	0.00077	ND
o-Xylene	0.618	mg/kg	0.00077	ND
Styrene	0.618	mg/kg	0.0015	ND
Tetrachloroethene	0.618	mg/kg	0.0015	ND
Toluene	0.618	mg/kg	0.00077	ND
trans-1,2-Dichloroethene	0.618	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.618	mg/kg	0.0015	ND
Trichloroethene	0.618	mg/kg	0.0015	ND
Trichlorofluoromethane	0.618	mg/kg	0.0015	ND
Vinyl chloride	0.618	mg/kg	0.0015	ND
Xylenes (Total)	0.618	mg/kg	0.00077	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.21	30	68	122	101	
Dibromofluoromethane	38.88	30	63	140	130	
Bromofluorobenzene	31.13	30	64	129	104	
1,2-Dichloroethane-d4	34.87	30	63	143	116	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-101-8 GRAB **Collection Date: 2/14/2020**
Lab#: AD15739-004 **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.618	mg/kg	NA	ND
TotalVolatileTic	0.618	mg/kg	NA	ND

Sample ID: TB-101-9 COMP | **Collection Date: 2/14/2020**
Lab#: AD15739-005 | **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**82**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0061	ND
Aldrin	1	mg/kg	0.0061	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0061	ND
delta-BHC	1	mg/kg	0.0061	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0061	ND
Endosulfan II	1	mg/kg	0.0061	ND
Endosulfan Sulfate	1	mg/kg	0.0061	ND
Endrin	1	mg/kg	0.0061	ND
Endrin Aldehyde	1	mg/kg	0.0061	ND
Endrin Ketone	1	mg/kg	0.0061	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0061	ND
Heptachlor Epoxide	1	mg/kg	0.0061	ND
Methoxychlor	1	mg/kg	0.0061	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0061	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	85.11	100	37	141	85	
TCMX-Surrogate	86.08	100	37	141	86	
DCB-Surrogate	80.63	100	33	146	81	
DCB-Surrogate	82.93	100	33	146	83	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	86.24	100	37	141	86	
TCMX-Surrogate	81.66	100	37	141	82	
DCB-Surrogate	77.16	100	34	146	77	
DCB-Surrogate	74.34	100	34	146	74	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND

Sample ID: TB-101-9 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-005 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.041	ND
2-Chlorophenol	1	mg/kg	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.041	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.041	ND
2-Nitrophenol	1	mg/kg	0.041	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.041	ND
3-Nitroaniline	1	mg/kg	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.041	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.041	ND
4-Nitroaniline	1	mg/kg	0.041	ND
4-Nitrophenol	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Acetophenone	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Atrazine	1	mg/kg	0.041	ND
Benzaldehyde	1	mg/kg	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.041	ND
Butylbenzylphthalate	1	mg/kg	0.041	ND
Caprolactam	1	mg/kg	0.041	ND
Carbazole	1	mg/kg	0.041	ND
Chrysene	1	mg/kg	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.041	ND
Dimethylphthalate	1	mg/kg	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.041	ND
Fluoranthene	1	mg/kg	0.041	ND
Fluorene	1	mg/kg	0.041	ND
Hexachlorobenzene	1	mg/kg	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.041	ND
Hexachloroethane	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND
Isophorone	1	mg/kg	0.041	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.041	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.041	ND
Phenol	1	mg/kg	0.041	ND
Pyrene	1	mg/kg	0.041	ND

Sample ID: TB-101-9 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-005 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	45.83	50	58	148	92	
Phenol-d5	70.21	100	49	129	70	
Nitrobenzene-d5	33.35	50	52	129	67	
2-Fluorophenol	54.63	100	43	128	55	
2-Fluorobiphenyl	37.72	50	58	125	75	
2,4,6-Tribromophenol	69.69	100	54	145	70	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.28**	**3.7JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.18JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.42**	**0.084J**
Cyclohexasiloxane, dodecamethyl-	**1**	**mg/kg**	**7.2**	**0.094J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.1J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**960**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.1	ND
Cobalt	1	mg/kg	3.0	ND
Copper	1	mg/kg	6.1	ND
Iron	**1**	**mg/kg**	**240**	**1300**
Lead	1	mg/kg	6.1	ND
Magnesium	1	mg/kg	610	ND
Manganese	1	mg/kg	12	ND
Nickel	1	mg/kg	6.1	ND
Potassium	1	mg/kg	610	ND
Sodium	1	mg/kg	300	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.98	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.55**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.49	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: TB-101-9 GRAB | **Collection Date: 2/14/2020**
Lab#: AD15739-006 | **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		82

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.761	mg/kg	0.0019	ND
1,1,2,2-Tetrachloroethane	0.761	mg/kg	0.0019	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.761	mg/kg	0.0019	ND
1,1,2-Trichloroethane	0.761	mg/kg	0.0019	ND
1,1-Dichloroethane	0.761	mg/kg	0.0019	ND
1,1-Dichloroethene	0.761	mg/kg	0.0019	ND
1,2,3-Trichlorobenzene	0.761	mg/kg	0.0019	ND
1,2,4-Trichlorobenzene	0.761	mg/kg	0.0019	ND
1,2-Dibromo-3-chloropropane	0.761	mg/kg	0.0019	ND
1,2-Dibromoethane	0.761	mg/kg	0.00072	ND
1,2-Dichlorobenzene	0.761	mg/kg	0.0019	ND
1,2-Dichloroethane	0.761	mg/kg	0.0019	ND
1,2-Dichloropropane	0.761	mg/kg	0.0019	ND
1,3-Dichlorobenzene	0.761	mg/kg	0.0019	ND
1,4-Dichlorobenzene	0.761	mg/kg	0.0019	ND
1,4-Dioxane	0.761	mg/kg	0.093	ND
2-Butanone	0.761	mg/kg	0.0019	ND
2-Hexanone	0.761	mg/kg	0.0019	ND
4-Methyl-2-pentanone	0.761	mg/kg	0.0019	ND
Acetone	0.761	mg/kg	0.0093	ND
Benzene	0.761	mg/kg	0.00093	ND
Bromochloromethane	0.761	mg/kg	0.0019	ND
Bromodichloromethane	0.761	mg/kg	0.0019	ND
Bromoform	0.761	mg/kg	0.0019	ND
Bromomethane	0.761	mg/kg	0.0019	ND
Carbon disulfide	0.761	mg/kg	0.0019	ND
Carbon tetrachloride	0.761	mg/kg	0.0019	ND
Chlorobenzene	0.761	mg/kg	0.0019	ND
Chloroethane	0.761	mg/kg	0.0019	ND
Chloroform	0.761	mg/kg	0.0019	ND
Chloromethane	0.761	mg/kg	0.0019	ND
cis-1,2-Dichloroethene	0.761	mg/kg	0.0019	ND
cis-1,3-Dichloropropene	0.761	mg/kg	0.0019	ND
Cyclohexane	0.761	mg/kg	0.0019	ND
Dibromochloromethane	0.761	mg/kg	0.0019	ND
Dichlorodifluoromethane	0.761	mg/kg	0.0019	ND
Ethylbenzene	0.761	mg/kg	0.00093	ND
Isopropylbenzene	0.761	mg/kg	0.00093	ND
m&p-Xylenes	0.761	mg/kg	0.00093	ND
Methyl Acetate	0.761	mg/kg	0.0019	ND
Methylcyclohexane	0.761	mg/kg	0.0019	ND
Methylene chloride	0.761	mg/kg	0.0019	ND
Methyl-t-butyl ether	0.761	mg/kg	0.00093	ND
o-Xylene	0.761	mg/kg	0.00093	ND
Styrene	0.761	mg/kg	0.0019	ND
Tetrachloroethene	0.761	mg/kg	0.0019	ND
Toluene	0.761	mg/kg	0.00093	ND
trans-1,2-Dichloroethene	0.761	mg/kg	0.0019	ND
trans-1,3-Dichloropropene	0.761	mg/kg	0.0019	ND
Trichloroethene	0.761	mg/kg	0.0019	ND
Trichlorofluoromethane	0.761	mg/kg	0.0019	ND
Vinyl chloride	0.761	mg/kg	0.0019	ND
Xylenes (Total)	0.761	mg/kg	0.00093	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.97	30	68	122	100	
Dibromofluoromethane	40.78	30	63	140	136	
Bromofluorobenzene	30.81	30	64	129	103	
1,2-Dichloroethane-d4	33.29	30	63	143	111	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-101-9 GRAB **Collection Date: 2/14/2020**
Lab#: AD15739-006 **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.761	mg/kg	NA	ND
TotalVolatileTic	0.761	mg/kg	NA	ND

Sample ID: TB-101-10 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-007 **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**87**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.096	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0057	ND
Aldrin	1	mg/kg	0.0057	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane (Total)	1	mg/kg	0.0057	ND
delta-BHC	1	mg/kg	0.0057	ND
Dieldrin	1	mg/kg	0.0011	ND
Endosulfan I	1	mg/kg	0.0057	ND
Endosulfan II	1	mg/kg	0.0057	ND
Endosulfan Sulfate	1	mg/kg	0.0057	ND
Endrin	1	mg/kg	0.0057	ND
Endrin Aldehyde	1	mg/kg	0.0057	ND
Endrin Ketone	1	mg/kg	0.0057	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0057	ND
Heptachlor Epoxide	1	mg/kg	0.0057	ND
Methoxychlor	1	mg/kg	0.0057	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0057	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	81.97	100	37	141	82	
TCMX-Surrogate	83.63	100	37	141	84	
DCB-Surrogate	78.12	100	33	146	78	
DCB-Surrogate	80.06	100	33	146	80	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	83.87	100	37	141	84	
TCMX-Surrogate	79.69	100	37	141	80	
DCB-Surrogate	77.94	100	34	146	78	
DCB-Surrogate	75.99	100	34	146	76	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.038	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.038	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.038	ND
2,4,5-Trichlorophenol	1	mg/kg	0.038	ND

Sample ID: TB-101-10 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-007 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.038	ND
2,4-Dichlorophenol	1	mg/kg	0.0096	ND
2,4-Dimethylphenol	1	mg/kg	0.0096	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.038	ND
2,6-Dinitrotoluene	1	mg/kg	0.038	ND
2-Chloronaphthalene	1	mg/kg	0.038	ND
2-Chlorophenol	1	mg/kg	0.038	ND
2-Methylnaphthalene	1	mg/kg	0.038	ND
2-Methylphenol	1	mg/kg	0.0096	ND
2-Nitroaniline	1	mg/kg	0.038	ND
2-Nitrophenol	1	mg/kg	0.038	ND
3&4-Methylphenol	1	mg/kg	0.0096	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.038	ND
3-Nitroaniline	1	mg/kg	0.038	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.038	ND
4-Chloro-3-methylphenol	1	mg/kg	0.038	ND
4-Chloroaniline	1	mg/kg	0.0096	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.038	ND
4-Nitroaniline	1	mg/kg	0.038	ND
4-Nitrophenol	1	mg/kg	0.038	ND
Acenaphthene	1	mg/kg	0.038	ND
Acenaphthylene	1	mg/kg	0.038	ND
Acetophenone	1	mg/kg	0.038	ND
Anthracene	1	mg/kg	0.038	ND
Atrazine	1	mg/kg	0.038	ND
Benzaldehyde	1	mg/kg	0.038	ND
Benzo[a]anthracene	1	mg/kg	0.038	ND
Benzo[a]pyrene	1	mg/kg	0.038	ND
Benzo[b]fluoranthene	1	mg/kg	0.038	ND
Benzo[g,h,i]perylene	1	mg/kg	0.038	ND
Benzo[k]fluoranthene	1	mg/kg	0.038	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.038	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0096	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.038	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.038	ND
Butylbenzylphthalate	1	mg/kg	0.038	ND
Caprolactam	1	mg/kg	0.038	ND
Carbazole	1	mg/kg	0.038	ND
Chrysene	1	mg/kg	0.038	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.038	ND
Dibenzofuran	1	mg/kg	0.0096	ND
Diethylphthalate	1	mg/kg	0.038	ND
Dimethylphthalate	1	mg/kg	0.038	ND
Di-n-butylphthalate	1	mg/kg	0.0096	ND
Di-n-octylphthalate	1	mg/kg	0.038	ND
Fluoranthene	1	mg/kg	0.038	ND
Fluorene	1	mg/kg	0.038	ND
Hexachlorobenzene	1	mg/kg	0.038	ND
Hexachlorobutadiene	1	mg/kg	0.038	ND
Hexachlorocyclopentadiene	1	mg/kg	0.038	ND
Hexachloroethane	1	mg/kg	0.038	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.038	ND
Isophorone	1	mg/kg	0.038	ND
Naphthalene	1	mg/kg	0.0096	ND
Nitrobenzene	1	mg/kg	0.038	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0096	ND
N-Nitrosodiphenylamine	1	mg/kg	0.038	ND
Pentachlorophenol	1	mg/kg	0.19	ND
Phenanthrene	1	mg/kg	0.038	ND
Phenol	1	mg/kg	0.038	ND
Pyrene	1	mg/kg	0.038	ND

Sample ID: TB-101-10 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-007 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.62	50	58	148	99	
Phenol-d5	68.41	100	49	129	68	
Nitrobenzene-d5	31.82	50	52	129	64	
2-Fluorophenol	54.51	100	43	128	55	
2-Fluorobiphenyl	37.82	50	58	125	76	
2,4,6-Tribromophenol	70.55	100	54	145	71	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**4.0JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.15JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.42**	**0.17J**
Cyclohexasiloxane, dodecamethyl-	**1**	**mg/kg**	**7.2**	**0.23J**
unknown	**1**	**mg/kg**	**7.94**	**0.11J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.7J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**230**	**440**
Barium	1	mg/kg	11	ND
Calcium	1	mg/kg	1100	ND
Chromium	**1**	**mg/kg**	**5.7**	**5.8**
Cobalt	1	mg/kg	2.9	ND
Copper	1	mg/kg	5.7	ND
Iron	**1**	**mg/kg**	**230**	**1600**
Lead	1	mg/kg	5.7	ND
Magnesium	1	mg/kg	570	ND
Manganese	1	mg/kg	11	ND
Nickel	1	mg/kg	5.7	ND
Potassium	1	mg/kg	570	ND
Sodium	1	mg/kg	290	ND
Vanadium	1	mg/kg	11	ND
Zinc	1	mg/kg	11	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.92	ND
Arsenic	**1**	**mg/kg**	**0.23**	**0.42**
Beryllium	1	mg/kg	0.23	ND
Cadmium	1	mg/kg	0.46	ND
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND
Thallium	1	mg/kg	0.46	ND

Sample ID: TB-101-10 GRAB | **Collection Date: 2/14/2020**
Lab#: AD15739-008 | **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.503	mg/kg	0.0011	ND
1,1,2,2-Tetrachloroethane	0.503	mg/kg	0.0011	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.503	mg/kg	0.0011	ND
1,1,2-Trichloroethane	0.503	mg/kg	0.0011	ND
1,1-Dichloroethane	0.503	mg/kg	0.0011	ND
1,1-Dichloroethene	0.503	mg/kg	0.0011	ND
1,2,3-Trichlorobenzene	0.503	mg/kg	0.0011	ND
1,2,4-Trichlorobenzene	0.503	mg/kg	0.0011	ND
1,2-Dibromo-3-chloropropane	0.503	mg/kg	0.0011	ND
1,2-Dibromoethane	0.503	mg/kg	0.00044	ND
1,2-Dichlorobenzene	0.503	mg/kg	0.0011	ND
1,2-Dichloroethane	0.503	mg/kg	0.0011	ND
1,2-Dichloropropane	0.503	mg/kg	0.0011	ND
1,3-Dichlorobenzene	0.503	mg/kg	0.0011	ND
1,4-Dichlorobenzene	0.503	mg/kg	0.0011	ND
1,4-Dioxane	0.503	mg/kg	0.057	ND
2-Butanone	0.503	mg/kg	0.0011	ND
2-Hexanone	0.503	mg/kg	0.0011	ND
4-Methyl-2-pentanone	0.503	mg/kg	0.0011	ND
Acetone	0.503	mg/kg	0.0057	ND
Benzene	0.503	mg/kg	0.00057	ND
Bromochloromethane	0.503	mg/kg	0.0011	ND
Bromodichloromethane	0.503	mg/kg	0.0011	ND
Bromoform	0.503	mg/kg	0.0011	ND
Bromomethane	0.503	mg/kg	0.0011	ND
Carbon disulfide	0.503	mg/kg	0.0011	ND
Carbon tetrachloride	0.503	mg/kg	0.0011	ND
Chlorobenzene	0.503	mg/kg	0.0011	ND
Chloroethane	0.503	mg/kg	0.0011	ND
Chloroform	0.503	mg/kg	0.0011	ND
Chloromethane	0.503	mg/kg	0.0011	ND
cis-1,2-Dichloroethene	0.503	mg/kg	0.0011	ND
cis-1,3-Dichloropropene	0.503	mg/kg	0.0011	ND
Cyclohexane	0.503	mg/kg	0.0011	ND
Dibromochloromethane	0.503	mg/kg	0.0011	ND
Dichlorodifluoromethane	0.503	mg/kg	0.0011	ND
Ethylbenzene	0.503	mg/kg	0.00057	ND
Isopropylbenzene	0.503	mg/kg	0.00057	ND
m&p-Xylenes	0.503	mg/kg	0.00057	ND
Methyl Acetate	0.503	mg/kg	0.0011	ND
Methylcyclohexane	0.503	mg/kg	0.0011	ND
Methylene chloride	0.503	mg/kg	0.0011	ND
Methyl-t-butyl ether	0.503	mg/kg	0.00057	ND
o-Xylene	0.503	mg/kg	0.00057	ND
Styrene	0.503	mg/kg	0.0011	ND
Tetrachloroethene	0.503	mg/kg	0.0011	ND
Toluene	0.503	mg/kg	0.00057	ND
trans-1,2-Dichloroethene	0.503	mg/kg	0.0011	ND
trans-1,3-Dichloropropene	0.503	mg/kg	0.0011	ND
Trichloroethene	0.503	mg/kg	0.0011	ND
Trichlorofluoromethane	0.503	mg/kg	0.0011	ND
Vinyl chloride	0.503	mg/kg	0.0011	ND
Xylenes (Total)	0.503	mg/kg	0.00057	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.27	30	68	122	101	
Dibromofluoromethane	28.96	30	63	140	97	
Bromofluorobenzene	31.70	30	64	129	106	
1,2-Dichloroethane-d4	30.04	30	63	143	100	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-101-10 GRAB **Collection Date: 2/14/2020**
Lab#: AD15739-008 **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.503	mg/kg	NA	ND
TotalVolatileTic	0.503	mg/kg	NA	ND

Sample ID: TB-101-11 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-009 **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**85**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.098	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0059	ND
Aldrin	1	mg/kg	0.0059	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0059	ND
delta-BHC	1	mg/kg	0.0059	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0059	ND
Endosulfan II	1	mg/kg	0.0059	ND
Endosulfan Sulfate	1	mg/kg	0.0059	ND
Endrin	1	mg/kg	0.0059	ND
Endrin Aldehyde	1	mg/kg	0.0059	ND
Endrin Ketone	1	mg/kg	0.0059	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0059	ND
Heptachlor Epoxide	1	mg/kg	0.0059	ND
Methoxychlor	1	mg/kg	0.0059	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0059	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	99.31	100	37	141	99	
TCMX-Surrogate	102.08	100	37	141	102	
DCB-Surrogate	95.88	100	33	146	96	
DCB-Surrogate	98.87	100	33	146	99	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	103.18	100	37	141	103	
TCMX-Surrogate	96.77	100	37	141	97	
DCB-Surrogate	93.86	100	34	146	94	
DCB-Surrogate	90.98	100	34	146	91	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.039	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.039	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.039	ND
2,4,5-Trichlorophenol	1	mg/kg	0.039	ND

Sample ID: TB-101-11 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-009 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.039	ND
2,4-Dichlorophenol	1	mg/kg	0.0098	ND
2,4-Dimethylphenol	1	mg/kg	0.0098	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.039	ND
2,6-Dinitrotoluene	1	mg/kg	0.039	ND
2-Chloronaphthalene	1	mg/kg	0.039	ND
2-Chlorophenol	1	mg/kg	0.039	ND
2-Methylnaphthalene	1	mg/kg	0.039	ND
2-Methylphenol	1	mg/kg	0.0098	ND
2-Nitroaniline	1	mg/kg	0.039	ND
2-Nitrophenol	1	mg/kg	0.039	ND
3&4-Methylphenol	1	mg/kg	0.0098	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.039	ND
3-Nitroaniline	1	mg/kg	0.039	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.039	ND
4-Chloro-3-methylphenol	1	mg/kg	0.039	ND
4-Chloroaniline	1	mg/kg	0.0098	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.039	ND
4-Nitroaniline	1	mg/kg	0.039	ND
4-Nitrophenol	1	mg/kg	0.039	ND
Acenaphthene	1	mg/kg	0.039	ND
Acenaphthylene	1	mg/kg	0.039	ND
Acetophenone	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	ND
Atrazine	1	mg/kg	0.039	ND
Benzaldehyde	1	mg/kg	0.039	ND
Benzo[a]anthracene	1	mg/kg	0.039	ND
Benzo[a]pyrene	1	mg/kg	0.039	ND
Benzo[b]fluoranthene	1	mg/kg	0.039	ND
Benzo[g,h,i]perylene	1	mg/kg	0.039	ND
Benzo[k]fluoranthene	1	mg/kg	0.039	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.039	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0098	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.039	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.039	ND
Butylbenzylphthalate	1	mg/kg	0.039	ND
Caprolactam	1	mg/kg	0.039	ND
Carbazole	1	mg/kg	0.039	ND
Chrysene	1	mg/kg	0.039	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.039	ND
Dibenzofuran	1	mg/kg	0.0098	ND
Diethylphthalate	1	mg/kg	0.039	ND
Dimethylphthalate	1	mg/kg	0.039	ND
Di-n-butylphthalate	1	mg/kg	0.0098	ND
Di-n-octylphthalate	1	mg/kg	0.039	ND
Fluoranthene	1	mg/kg	0.039	ND
Fluorene	1	mg/kg	0.039	ND
Hexachlorobenzene	1	mg/kg	0.039	ND
Hexachlorobutadiene	1	mg/kg	0.039	ND
Hexachlorocyclopentadiene	1	mg/kg	0.039	ND
Hexachloroethane	1	mg/kg	0.039	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.039	ND
Isophorone	1	mg/kg	0.039	ND
Naphthalene	1	mg/kg	0.0098	ND
Nitrobenzene	1	mg/kg	0.039	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0098	ND
N-Nitrosodiphenylamine	1	mg/kg	0.039	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.039	ND
Phenol	1	mg/kg	0.039	ND
Pyrene	1	mg/kg	0.039	ND

Sample ID: TB-101-11 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-009 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	47.28	50	58	148	95	
Phenol-d5	62.76	100	49	129	63	
Nitrobenzene-d5	32.43	50	52	129	65	
2-Fluorophenol	56.29	100	43	128	56	
2-Fluorobiphenyl	36.98	50	58	125	74	
2,4,6-Tribromophenol	74.20	100	54	145	74	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.28**	**3.1JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.099JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.2J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**4200**
Barium	**1**	**mg/kg**	**12**	**18**
Calcium	1	mg/kg	1200	ND
Chromium	**1**	**mg/kg**	**5.9**	**16**
Cobalt	1	mg/kg	2.9	ND
Copper	1	mg/kg	5.9	ND
Iron	**1**	**mg/kg**	**240**	**10000**
Lead	1	mg/kg	5.9	ND
Magnesium	**1**	**mg/kg**	**590**	**1600**
Manganese	**1**	**mg/kg**	**12**	**35**
Nickel	1	mg/kg	5.9	ND
Potassium	**1**	**mg/kg**	**590**	**1700**
Sodium	**1**	**mg/kg**	**290**	**2300**
Vanadium	**1**	**mg/kg**	**12**	**17**
Zinc	**1**	**mg/kg**	**12**	**39**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.94	ND
Arsenic	**1**	**mg/kg**	**0.24**	**1.8**
Beryllium	**1**	**mg/kg**	**0.24**	**0.47**
Cadmium	1	mg/kg	0.47	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.47	ND

Sample ID: TB-101-11 GRAB | **Collection Date: 2/14/2020**
Lab#: AD15739-010 | **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**85**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.704	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.704	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.704	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.704	mg/kg	0.0017	ND
1,1-Dichloroethane	0.704	mg/kg	0.0017	ND
1,1-Dichloroethene	0.704	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.704	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.704	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.704	mg/kg	0.0017	ND
1,2-Dibromoethane	0.704	mg/kg	0.00065	ND
1,2-Dichlorobenzene	0.704	mg/kg	0.0017	ND
1,2-Dichloroethane	0.704	mg/kg	0.0017	ND
1,2-Dichloropropane	0.704	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.704	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.704	mg/kg	0.0017	ND
1,4-Dioxane	0.704	mg/kg	0.083	ND
2-Butanone	0.704	mg/kg	0.0017	ND
2-Hexanone	0.704	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.704	mg/kg	0.0017	ND
Acetone	0.704	mg/kg	0.0083	ND
Benzene	0.704	mg/kg	0.00083	ND
Bromochloromethane	0.704	mg/kg	0.0017	ND
Bromodichloromethane	0.704	mg/kg	0.0017	ND
Bromoform	0.704	mg/kg	0.0017	ND
Bromomethane	0.704	mg/kg	0.0017	ND
Carbon disulfide	**0.704**	**mg/kg**	**0.0017**	**0.0030**
Carbon tetrachloride	0.704	mg/kg	0.0017	ND
Chlorobenzene	0.704	mg/kg	0.0017	ND
Chloroethane	0.704	mg/kg	0.0017	ND
Chloroform	0.704	mg/kg	0.0017	ND
Chloromethane	0.704	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.704	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.704	mg/kg	0.0017	ND
Cyclohexane	0.704	mg/kg	0.0017	ND
Dibromochloromethane	0.704	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.704	mg/kg	0.0017	ND
Ethylbenzene	0.704	mg/kg	0.00083	ND
Isopropylbenzene	0.704	mg/kg	0.00083	ND
m&p-Xylenes	0.704	mg/kg	0.00083	ND
Methyl Acetate	0.704	mg/kg	0.0017	ND
Methylcyclohexane	0.704	mg/kg	0.0017	ND
Methylene chloride	0.704	mg/kg	0.0017	ND
Methyl-t-butyl ether	0.704	mg/kg	0.00083	ND
o-Xylene	0.704	mg/kg	0.00083	ND
Styrene	0.704	mg/kg	0.0017	ND
Tetrachloroethene	0.704	mg/kg	0.0017	ND
Toluene	0.704	mg/kg	0.00083	ND
trans-1,2-Dichloroethene	0.704	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.704	mg/kg	0.0017	ND
Trichloroethene	0.704	mg/kg	0.0017	ND
Trichlorofluoromethane	0.704	mg/kg	0.0017	ND
Vinyl chloride	0.704	mg/kg	0.0017	ND
Xylenes (Total)	0.704	mg/kg	0.00083	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.05	30	68	122	100	
Dibromofluoromethane	39.73	30	63	140	132	
Bromofluorobenzene	31.33	30	64	129	104	
1,2-Dichloroethane-d4	33.16	30	63	143	111	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-101-11 GRAB **Collection Date: 2/14/2020**
Lab#: AD15739-010 **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.704	mg/kg	NA	ND
TotalVolatileTic	0.704	mg/kg	NA	ND

Sample ID: TB-101-12 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-011 **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**86**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0058	ND
Aldrin	1	mg/kg	0.0058	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0058	ND
delta-BHC	1	mg/kg	0.0058	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0058	ND
Endosulfan II	1	mg/kg	0.0058	ND
Endosulfan Sulfate	1	mg/kg	0.0058	ND
Endrin	1	mg/kg	0.0058	ND
Endrin Aldehyde	1	mg/kg	0.0058	ND
Endrin Ketone	1	mg/kg	0.0058	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0058	ND
Heptachlor Epoxide	1	mg/kg	0.0058	ND
Methoxychlor	1	mg/kg	0.0058	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0058	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	99.39	100	37	141	99	
TCMX-Surrogate	102.45	100	37	141	102	
DCB-Surrogate	96.19	100	33	146	96	
DCB-Surrogate	98.77	100	33	146	99	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	104.19	100	37	141	104	
TCMX-Surrogate	101.51	100	37	141	102	
DCB-Surrogate	95.17	100	34	146	95	
DCB-Surrogate	93.16	100	34	146	93	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.039	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.039	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.039	ND
2,4,5-Trichlorophenol	1	mg/kg	0.039	ND

Sample ID: TB-101-12 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-011 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.039	ND
2,4-Dichlorophenol	1	mg/kg	0.0097	ND
2,4-Dimethylphenol	1	mg/kg	0.0097	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.039	ND
2,6-Dinitrotoluene	1	mg/kg	0.039	ND
2-Chloronaphthalene	1	mg/kg	0.039	ND
2-Chlorophenol	1	mg/kg	0.039	ND
2-Methylnaphthalene	1	mg/kg	0.039	ND
2-Methylphenol	1	mg/kg	0.0097	ND
2-Nitroaniline	1	mg/kg	0.039	ND
2-Nitrophenol	1	mg/kg	0.039	ND
3&4-Methylphenol	1	mg/kg	0.0097	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.039	ND
3-Nitroaniline	1	mg/kg	0.039	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.039	ND
4-Chloro-3-methylphenol	1	mg/kg	0.039	ND
4-Chloroaniline	1	mg/kg	0.0097	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.039	ND
4-Nitroaniline	1	mg/kg	0.039	ND
4-Nitrophenol	1	mg/kg	0.039	ND
Acenaphthene	1	mg/kg	0.039	ND
Acenaphthylene	1	mg/kg	0.039	ND
Acetophenone	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	ND
Atrazine	1	mg/kg	0.039	ND
Benzaldehyde	1	mg/kg	0.039	ND
Benzo[a]anthracene	1	mg/kg	0.039	ND
Benzo[a]pyrene	1	mg/kg	0.039	ND
Benzo[b]fluoranthene	1	mg/kg	0.039	ND
Benzo[g,h,i]perylene	1	mg/kg	0.039	ND
Benzo[k]fluoranthene	1	mg/kg	0.039	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.039	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0097	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.039	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.039	ND
Butylbenzylphthalate	1	mg/kg	0.039	ND
Caprolactam	1	mg/kg	0.039	ND
Carbazole	1	mg/kg	0.039	ND
Chrysene	1	mg/kg	0.039	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.039	ND
Dibenzofuran	1	mg/kg	0.0097	ND
Diethylphthalate	1	mg/kg	0.039	ND
Dimethylphthalate	1	mg/kg	0.039	ND
Di-n-butylphthalate	1	mg/kg	0.0097	ND
Di-n-octylphthalate	1	mg/kg	0.039	ND
Fluoranthene	1	mg/kg	0.039	ND
Fluorene	1	mg/kg	0.039	ND
Hexachlorobenzene	1	mg/kg	0.039	ND
Hexachlorobutadiene	1	mg/kg	0.039	ND
Hexachlorocyclopentadiene	1	mg/kg	0.039	ND
Hexachloroethane	1	mg/kg	0.039	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.039	ND
Isophorone	1	mg/kg	0.039	ND
Naphthalene	1	mg/kg	0.0097	ND
Nitrobenzene	1	mg/kg	0.039	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0097	ND
N-Nitrosodiphenylamine	1	mg/kg	0.039	ND
Pentachlorophenol	1	mg/kg	0.19	ND
Phenanthrene	1	mg/kg	0.039	ND
Phenol	1	mg/kg	0.039	ND
Pyrene	1	mg/kg	0.039	ND

Sample ID: TB-101-12 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-011 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	45.78	50	58	148	92	
Phenol-d5	67.04	100	49	129	67	
Nitrobenzene-d5	34.54	50	52	129	69	
2-Fluorophenol	62.69	100	43	128	63	
2-Fluorobiphenyl	38.40	50	58	125	77	
2,4,6-Tribromophenol	75.79	100	54	145	76	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**4.1JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.16JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.42**	**0.22J**
Cyclohexasiloxane, dodecamethyl-	**1**	**mg/kg**	**7.2**	**0.33J**
unknown	**1**	**mg/kg**	**7.94**	**0.17J**
unknown	**1**	**mg/kg**	**8.67**	**0.092J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**5.1J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**230**	**680**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	5.8	ND
Cobalt	1	mg/kg	2.9	ND
Copper	1	mg/kg	5.8	ND
Iron	**1**	**mg/kg**	**230**	**7400**
Lead	1	mg/kg	5.8	ND
Magnesium	1	mg/kg	580	ND
Manganese	**1**	**mg/kg**	**12**	**24**
Nickel	1	mg/kg	5.8	ND
Potassium	1	mg/kg	580	ND
Sodium	**1**	**mg/kg**	**290**	**530**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.93	ND
Arsenic	**1**	**mg/kg**	**0.23**	**0.50**
Beryllium	1	mg/kg	0.23	ND
Cadmium	1	mg/kg	0.47	ND
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND
Thallium	1	mg/kg	0.47	ND

Sample ID: TB-101-12 GRAB | **Collection Date: 2/14/2020**
Lab#: AD15739-012 | **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**91**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.657	mg/kg	0.0014	ND
1,1,2,2-Tetrachloroethane	0.657	mg/kg	0.0014	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.657	mg/kg	0.0014	ND
1,1,2-Trichloroethane	0.657	mg/kg	0.0014	ND
1,1-Dichloroethane	0.657	mg/kg	0.0014	ND
1,1-Dichloroethene	0.657	mg/kg	0.0014	ND
1,2,3-Trichlorobenzene	0.657	mg/kg	0.0014	ND
1,2,4-Trichlorobenzene	0.657	mg/kg	0.0014	ND
1,2-Dibromo-3-chloropropane	0.657	mg/kg	0.0014	ND
1,2-Dibromoethane	0.657	mg/kg	0.00056	ND
1,2-Dichlorobenzene	0.657	mg/kg	0.0014	ND
1,2-Dichloroethane	0.657	mg/kg	0.0014	ND
1,2-Dichloropropane	0.657	mg/kg	0.0014	ND
1,3-Dichlorobenzene	0.657	mg/kg	0.0014	ND
1,4-Dichlorobenzene	0.657	mg/kg	0.0014	ND
1,4-Dioxane	0.657	mg/kg	0.072	ND
2-Butanone	0.657	mg/kg	0.0014	ND
2-Hexanone	0.657	mg/kg	0.0014	ND
4-Methyl-2-pentanone	0.657	mg/kg	0.0014	ND
Acetone	0.657	mg/kg	0.0072	ND
Benzene	0.657	mg/kg	0.00072	ND
Bromochloromethane	0.657	mg/kg	0.0014	ND
Bromodichloromethane	0.657	mg/kg	0.0014	ND
Bromoform	0.657	mg/kg	0.0014	ND
Bromomethane	0.657	mg/kg	0.0014	ND
Carbon disulfide	**0.657**	**mg/kg**	**0.0014**	**0.0021**
Carbon tetrachloride	0.657	mg/kg	0.0014	ND
Chlorobenzene	0.657	mg/kg	0.0014	ND
Chloroethane	0.657	mg/kg	0.0014	ND
Chloroform	0.657	mg/kg	0.0014	ND
Chloromethane	0.657	mg/kg	0.0014	ND
cis-1,2-Dichloroethene	0.657	mg/kg	0.0014	ND
cis-1,3-Dichloropropene	0.657	mg/kg	0.0014	ND
Cyclohexane	0.657	mg/kg	0.0014	ND
Dibromochloromethane	0.657	mg/kg	0.0014	ND
Dichlorodifluoromethane	0.657	mg/kg	0.0014	ND
Ethylbenzene	0.657	mg/kg	0.00072	ND
Isopropylbenzene	0.657	mg/kg	0.00072	ND
m&p-Xylenes	0.657	mg/kg	0.00072	ND
Methyl Acetate	0.657	mg/kg	0.0014	ND
Methylcyclohexane	0.657	mg/kg	0.0014	ND
Methylene chloride	0.657	mg/kg	0.0014	ND
Methyl-t-butyl ether	0.657	mg/kg	0.00072	ND
o-Xylene	0.657	mg/kg	0.00072	ND
Styrene	0.657	mg/kg	0.0014	ND
Tetrachloroethene	0.657	mg/kg	0.0014	ND
Toluene	0.657	mg/kg	0.00072	ND
trans-1,2-Dichloroethene	0.657	mg/kg	0.0014	ND
trans-1,3-Dichloropropene	0.657	mg/kg	0.0014	ND
Trichloroethene	0.657	mg/kg	0.0014	ND
Trichlorofluoromethane	0.657	mg/kg	0.0014	ND
Vinyl chloride	0.657	mg/kg	0.0014	ND
Xylenes (Total)	0.657	mg/kg	0.00072	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.48	30	68	122	102	
Dibromofluoromethane	39.64	30	63	140	132	
Bromofluorobenzene	30.73	30	64	129	102	
1,2-Dichloroethane-d4	34.44	30	63	143	115	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-101-12 GRAB **Collection Date: 2/14/2020**
Lab#: AD15739-012 **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.657	mg/kg	NA	ND
TotalVolatileTic	0.657	mg/kg	NA	ND

Sample ID: TB-101-13 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-013 **Receipt Date: 2/14/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**76**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0066	ND
Aldrin	1	mg/kg	0.0066	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0066	ND
delta-BHC	1	mg/kg	0.0066	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0066	ND
Endosulfan II	1	mg/kg	0.0066	ND
Endosulfan Sulfate	1	mg/kg	0.0066	ND
Endrin	1	mg/kg	0.0066	ND
Endrin Aldehyde	1	mg/kg	0.0066	ND
Endrin Ketone	1	mg/kg	0.0066	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0066	ND
Heptachlor Epoxide	1	mg/kg	0.0066	ND
Methoxychlor	1	mg/kg	0.0066	ND
p,p'-DDD	1	mg/kg	0.0033	ND
p,p'-DDE	1	mg/kg	0.0033	ND
p,p'-DDT	1	mg/kg	0.0033	ND
Toxaphene	1	mg/kg	0.033	ND
y-Chlordane	1	mg/kg	0.0066	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	95.01	100	37	141	95	
TCMX-Surrogate	98.77	100	37	141	99	
DCB-Surrogate	94.24	100	33	146	94	
DCB-Surrogate	96.50	100	33	146	96	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.033	ND
Aroclor-1016	1	mg/kg	0.033	ND
Aroclor-1221	1	mg/kg	0.033	ND
Aroclor-1232	1	mg/kg	0.033	ND
Aroclor-1242	1	mg/kg	0.033	ND
Aroclor-1248	1	mg/kg	0.033	ND
Aroclor-1254	1	mg/kg	0.033	ND
Aroclor-1260	1	mg/kg	0.033	ND
Aroclor-1262	1	mg/kg	0.033	ND
Aroclor-1268	1	mg/kg	0.033	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	99.27	100	37	141	99	
TCMX-Surrogate	97.53	100	37	141	98	
DCB-Surrogate	91.16	100	34	146	91	
DCB-Surrogate	90.07	100	34	146	90	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.044	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.044	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.044	ND
2,4,5-Trichlorophenol	1	mg/kg	0.044	ND

Sample ID: TB-101-13 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-013 **Receipt Date: 2/14/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.044	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.044	ND
2,6-Dinitrotoluene	1	mg/kg	0.044	ND
2-Chloronaphthalene	1	mg/kg	0.044	ND
2-Chlorophenol	1	mg/kg	0.044	ND
2-Methylnaphthalene	1	mg/kg	0.044	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.044	ND
2-Nitrophenol	1	mg/kg	0.044	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.044	ND
3-Nitroaniline	1	mg/kg	0.044	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.044	ND
4-Chloro-3-methylphenol	1	mg/kg	0.044	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.044	ND
4-Nitroaniline	1	mg/kg	0.044	ND
4-Nitrophenol	1	mg/kg	0.044	ND
Acenaphthene	1	mg/kg	0.044	ND
Acenaphthylene	1	mg/kg	0.044	ND
Acetophenone	1	mg/kg	0.044	ND
Anthracene	1	mg/kg	0.044	ND
Atrazine	1	mg/kg	0.044	ND
Benzaldehyde	1	mg/kg	0.044	ND
Benzo[a]anthracene	1	mg/kg	0.044	ND
Benzo[a]pyrene	1	mg/kg	0.044	ND
Benzo[b]fluoranthene	1	mg/kg	0.044	ND
Benzo[g,h,i]perylene	1	mg/kg	0.044	ND
Benzo[k]fluoranthene	1	mg/kg	0.044	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.044	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.044	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.044	ND
Butylbenzylphthalate	1	mg/kg	0.044	ND
Caprolactam	1	mg/kg	0.044	ND
Carbazole	1	mg/kg	0.044	ND
Chrysene	1	mg/kg	0.044	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.044	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.044	ND
Dimethylphthalate	1	mg/kg	0.044	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.044	ND
Fluoranthene	1	mg/kg	0.044	ND
Fluorene	1	mg/kg	0.044	ND
Hexachlorobenzene	1	mg/kg	0.044	ND
Hexachlorobutadiene	1	mg/kg	0.044	ND
Hexachlorocyclopentadiene	1	mg/kg	0.044	ND
Hexachloroethane	1	mg/kg	0.044	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.044	ND
Isophorone	1	mg/kg	0.044	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.044	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.044	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.044	ND
Phenol	1	mg/kg	0.044	ND
Pyrene	1	mg/kg	0.044	ND

Sample ID: TB-101-13 COMP **Collection Date: 2/14/2020**
Lab#: AD15739-013 **Receipt Date: 2/14/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	43.49	50	58	148	87	
Phenol-d5	60.01	100	49	129	60	
Nitrobenzene-d5	27.76	50	52	129	56	
2-Fluorophenol	58.31	100	43	128	58	
2-Fluorobiphenyl	32.97	50	58	125	66	
2,4,6-Tribromophenol	69.99	100	54	145	70	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.0JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.11JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.42**	**0.22J**
Cyclohexasiloxane, dodecamethyl-	**1**	**mg/kg**	**7.2**	**0.33J**
unknown	**1**	**mg/kg**	**7.94**	**0.17J**
unknown	**1**	**mg/kg**	**8.67**	**0.094J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**1300**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.6**	**7.3**
Cobalt	1	mg/kg	3.3	ND
Copper	1	mg/kg	6.6	ND
Iron	**1**	**mg/kg**	**260**	**3000**
Lead	1	mg/kg	6.6	ND
Magnesium	1	mg/kg	660	ND
Manganese	**1**	**mg/kg**	**13**	**18**
Nickel	1	mg/kg	6.6	ND
Potassium	1	mg/kg	660	ND
Sodium	1	mg/kg	330	ND
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.26**	**1.3**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.53	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.53	ND

Sample ID: TB-101-13 GRAB **Collection Date: 2/14/2020**
Lab#: AD15739-014 **Receipt Date: 2/14/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.03	mg/kg	0.0027	ND
1,1,2,2-Tetrachloroethane	1.03	mg/kg	0.0027	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.03	mg/kg	0.0027	ND
1,1,2-Trichloroethane	1.03	mg/kg	0.0027	ND
1,1-Dichloroethane	1.03	mg/kg	0.0027	ND
1,1-Dichloroethene	1.03	mg/kg	0.0027	ND
1,2,3-Trichlorobenzene	1.03	mg/kg	0.0027	ND
1,2,4-Trichlorobenzene	1.03	mg/kg	0.0027	ND
1,2-Dibromo-3-chloropropane	1.03	mg/kg	0.0027	ND
1,2-Dibromoethane	1.03	mg/kg	0.0010	ND
1,2-Dichlorobenzene	1.03	mg/kg	0.0027	ND
1,2-Dichloroethane	1.03	mg/kg	0.0027	ND
1,2-Dichloropropane	1.03	mg/kg	0.0027	ND
1,3-Dichlorobenzene	1.03	mg/kg	0.0027	ND
1,4-Dichlorobenzene	1.03	mg/kg	0.0027	ND
1,4-Dioxane	1.03	mg/kg	0.13	ND
2-Butanone	1.03	mg/kg	0.0027	ND
2-Hexanone	1.03	mg/kg	0.0027	ND
4-Methyl-2-pentanone	1.03	mg/kg	0.0027	ND
Acetone	1.03	mg/kg	0.013	ND
Benzene	1.03	mg/kg	0.0013	ND
Bromochloromethane	1.03	mg/kg	0.0027	ND
Bromodichloromethane	1.03	mg/kg	0.0027	ND
Bromoform	1.03	mg/kg	0.0027	ND
Bromomethane	1.03	mg/kg	0.0027	ND
Carbon disulfide	1.03	mg/kg	0.0027	ND
Carbon tetrachloride	1.03	mg/kg	0.0027	ND
Chlorobenzene	1.03	mg/kg	0.0027	ND
Chloroethane	1.03	mg/kg	0.0027	ND
Chloroform	1.03	mg/kg	0.0027	ND
Chloromethane	1.03	mg/kg	0.0027	ND
cis-1,2-Dichloroethene	1.03	mg/kg	0.0027	ND
cis-1,3-Dichloropropene	1.03	mg/kg	0.0027	ND
Cyclohexane	1.03	mg/kg	0.0027	ND
Dibromochloromethane	1.03	mg/kg	0.0027	ND
Dichlorodifluoromethane	1.03	mg/kg	0.0027	ND
Ethylbenzene	1.03	mg/kg	0.0013	ND
Isopropylbenzene	1.03	mg/kg	0.0013	ND
m&p-Xylenes	1.03	mg/kg	0.0013	ND
Methyl Acetate	1.03	mg/kg	0.0027	ND
Methylcyclohexane	1.03	mg/kg	0.0027	ND
Methylene chloride	1.03	mg/kg	0.0027	ND
Methyl-t-butyl ether	1.03	mg/kg	0.0013	ND
o-Xylene	1.03	mg/kg	0.0013	ND
Styrene	1.03	mg/kg	0.0027	ND
Tetrachloroethene	1.03	mg/kg	0.0027	ND
Toluene	1.03	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	1.03	mg/kg	0.0027	ND
trans-1,3-Dichloropropene	1.03	mg/kg	0.0027	ND
Trichloroethene	1.03	mg/kg	0.0027	ND
Trichlorofluoromethane	1.03	mg/kg	0.0027	ND
Vinyl chloride	1.03	mg/kg	0.0027	ND
Xylenes (Total)	1.03	mg/kg	0.0013	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.79	30	68	122	99	
Dibromofluoromethane	27.00	30	63	140	90	
Bromofluorobenzene	30.13	30	64	129	100	
1,2-Dichloroethane-d4	31.38	30	63	143	105	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID:	**TB-101-13 GRAB**	**Collection Date:**	**2/14/2020**
Lab#:	**AD15739-014**	**Receipt Date:**	**2/14/2020**
Matrix:	**Soil/Terracore**		

Acetic acid, ethyl ester	**1.03**	**mg/kg**	**4.7**	**0.0060J**
TotalVolatileTic	**1.03**	**mg/kg**	**NA**	**0.006J**

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

CHAIN OF CUSTODY RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): G0121 0021432

Page 1 of 1

Customer Information

1a) Customer: Arcadis
Address: 17-17 St rt 208 N
Fair Lawn NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmour@arcadis.com
1d) Send Report to: Max.Goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 3001615.00040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
6 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 Days		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AN0739

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TCL VOA+15	TCL SVOC+BNA+15	TAL Metals	TAL CN	TCL PCB	TCL Pest	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	TB-110-7	So	2/14/20	0900	X	X	X	X	X	X	X	X	4	1							
003/004	TB-110-8	So	2/14/20	0815	X	X	X	X	X	X	X	X	4	1							
005/006	TB-110-9	So	2/14/20	0830	X	X	X	X	X	X	X	X	4	1							
007/008	TB-110-10	So	2/14/20	0900	X	X	X	X	X	X	X	X	4	1							
009/010	TB-110-11	So	2/14/20	0930	X	X	X	X	X	X	X	X	4	1							
011/012	TB-110-12	So	2/14/20	1000	X	X	X	X	X	X	X	X	4	1							
013/014	TB-110-13	So	2/14/20	1030	X	X	X	X	X	X	X	X	4	1							

10) Relinquished by:	Accepted by:	Date	Time
Max H Goldstein		2/14/20	1630
		2/14/20	1640

11) Sampler (print name): Max H. Goldstein Date: 2/14/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 3.2

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
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WWW.HCVLAB.COM

Project: Long Beach

Client PO: 3001615.00040

Report To: ARCADIS
17-17 Route 208 North
2nd Floor
Fairlawn, NJ 07410
Attn: Richard Gilmour/Chris Goldsmith

Received Date: 3/4/2020

Report Date: 3/23/2020

Deliverables: NYDOH-R

Lab ID: AD16022

Lab Project No: 0030402

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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Form 1 Sample Results

Inorganic Spreadsheet / QC Summary

Sample Summary

Client: ARCADIS

Project: Long Beach

HC Project #: 0030402

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AD16022-001	TB-102-1 COMP	Soil	3/3/2020	3/4/2020
AD16022-002	TB-102-1 GRAB	Soil/Terracore	3/3/2020	3/4/2020

HC Case Narrative

Client: ARCADIS
Project: Long Beach

HC Project: 0030402

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 84540 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Base Neutral/Acid Extractable Analysis:

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 83709 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Samples AD15667-07, -007(MS), -007(MSD) were extracted past the holding.

PCB Analysis:

Data conforms to method requirements.

Pesticide Analysis:

Data conforms to method requirements.

Metals Analysis:

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batches 82711, 82712 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The serial dilution for batch 82711 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 82712. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

Data conforms to method requirements.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	3/23/20 Date

HC Executive Summary

Client: ARCADIS

Project: Long Beach

HC Project #: 0030402

Lab#: AD16022-001 **Sample ID: TB-102-1 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	260	3000	EPA 6010D
Barium	mg/kg	13	17	EPA 6010D
Chromium	mg/kg	6.5	14	EPA 6010D
Cobalt	mg/kg	3.2	4.2	EPA 6010D
Iron	mg/kg	260	11000	EPA 6010D
Magnesium	mg/kg	650	1400	EPA 6010D
Manganese	mg/kg	13	84	EPA 6010D
Nickel	mg/kg	6.5	9.8	EPA 6010D
Potassium	mg/kg	650	1600	EPA 6010D
Sodium	mg/kg	320	2700	EPA 6010D
Vanadium	mg/kg	13	16	EPA 6010D
Zinc	mg/kg	13	50	EPA 6010D
Arsenic	mg/kg	0.26	0.32	EPA 6020B
TotalSemiVolatileTic	mg/kg	NA	5.5J	EPA 8270D

Lab#: AD16022-002 **Sample ID: TB-102-1 GRAB**

Analyte	Units	RL	Result	Analytical Method
Methylene chloride	mg/kg	0.0015	0.0020	EPA 8260C
TotalVolatileTic	mg/kg	NA	0.026J	EPA 8260C

HC Report of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0030402

Sample ID: TB-102-1 COMP
Lab#: AD16022-001
Matrix: Soil

Collection Date: 3/3/2020
Receipt Date: 3/4/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0065	ND
Aldrin	1	mg/kg	0.0065	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0065	ND
delta-BHC	1	mg/kg	0.0065	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0065	ND
Endosulfan II	1	mg/kg	0.0065	ND
Endosulfan Sulfate	1	mg/kg	0.0065	ND
Endrin	1	mg/kg	0.0065	ND
Endrin Aldehyde	1	mg/kg	0.0065	ND
Endrin Ketone	1	mg/kg	0.0065	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0065	ND
Heptachlor Epoxide	1	mg/kg	0.0065	ND
Methoxychlor	1	mg/kg	0.0065	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0065	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Sample ID: TB-102-1 COMP
Lab#: AD16022-001
Matrix: Soil

Collection Date: 3/3/2020
Receipt Date: 3/4/2020

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND
2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND

Sample ID: TB-102-1 COMP **Collection Date: 3/3/2020**
Lab#: AD16022-001 **Receipt Date: 3/4/2020**
Matrix: Soil

Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Phenol, 4,4'-(1-methylethylidene)bis-	**1**	**mg/kg**	**11.37**	**0.11J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**5.3JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.11J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**5.5J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**3000**
Barium	**1**	**mg/kg**	**13**	**17**
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.5**	**14**
Cobalt	**1**	**mg/kg**	**3.2**	**4.2**
Copper	1	mg/kg	6.5	ND
Iron	**1**	**mg/kg**	**260**	**11000**
Lead	1	mg/kg	6.5	ND
Magnesium	**1**	**mg/kg**	**650**	**1400**
Manganese	**1**	**mg/kg**	**13**	**84**
Nickel	**1**	**mg/kg**	**6.5**	**9.8**
Potassium	**1**	**mg/kg**	**650**	**1600**
Sodium	**1**	**mg/kg**	**320**	**2700**
Vanadium	**1**	**mg/kg**	**13**	**16**
Zinc	**1**	**mg/kg**	**13**	**50**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**0.32**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID: TB-102-1 GRAB
Lab#: AD16022-002
Matrix: Soil/Terracore

Collection Date: 3/3/2020
Receipt Date: 3/4/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		79

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.606	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.606	mg/kg	0.0015	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.606	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.606	mg/kg	0.0015	ND
1,1-Dichloroethane	0.606	mg/kg	0.0015	ND
1,1-Dichloroethene	0.606	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.606	mg/kg	0.0015	ND
1,2,4-Trichlorobenzene	0.606	mg/kg	0.0015	ND
1,2-Dibromo-3-chloropropane	0.606	mg/kg	0.0015	ND
1,2-Dibromoethane	0.606	mg/kg	0.00077	ND
1,2-Dichlorobenzene	0.606	mg/kg	0.0015	ND
1,2-Dichloroethane	0.606	mg/kg	0.0012	ND
1,2-Dichloropropane	0.606	mg/kg	0.0015	ND
1,3-Dichlorobenzene	0.606	mg/kg	0.0015	ND
1,4-Dichlorobenzene	0.606	mg/kg	0.0015	ND
1,4-Dioxane	0.606	mg/kg	0.077	ND
2-Butanone	0.606	mg/kg	0.0015	ND
2-Hexanone	0.606	mg/kg	0.0015	ND
4-Methyl-2-pentanone	0.606	mg/kg	0.0015	ND
Acetone	0.606	mg/kg	0.0077	ND
Benzene	0.606	mg/kg	0.00077	ND
Bromochloromethane	0.606	mg/kg	0.0015	ND
Bromodichloromethane	0.606	mg/kg	0.0015	ND
Bromoform	0.606	mg/kg	0.0015	ND
Bromomethane	0.606	mg/kg	0.0015	ND
Carbon disulfide	0.606	mg/kg	0.0015	ND
Carbon tetrachloride	0.606	mg/kg	0.0015	ND
Chlorobenzene	0.606	mg/kg	0.0015	ND
Chloroethane	0.606	mg/kg	0.0015	ND
Chloroform	0.606	mg/kg	0.0015	ND
Chloromethane	0.606	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.606	mg/kg	0.0015	ND
cis-1,3-Dichloropropene	0.606	mg/kg	0.0015	ND
Cyclohexane	0.606	mg/kg	0.0015	ND
Dibromochloromethane	0.606	mg/kg	0.0015	ND
Dichlorodifluoromethane	0.606	mg/kg	0.0015	ND
Ethylbenzene	0.606	mg/kg	0.00077	ND
Isopropylbenzene	0.606	mg/kg	0.00077	ND
m&p-Xylenes	0.606	mg/kg	0.00077	ND
Methyl Acetate	0.606	mg/kg	0.0015	ND
Methylcyclohexane	0.606	mg/kg	0.0015	ND
Methylene chloride	**0.606**	**mg/kg**	**0.0015**	**0.0020**
Methyl-t-butyl ether	0.606	mg/kg	0.00077	ND
o-Xylene	0.606	mg/kg	0.00077	ND
Styrene	0.606	mg/kg	0.0015	ND
Tetrachloroethene	0.606	mg/kg	0.0015	ND
Toluene	0.606	mg/kg	0.00077	ND
trans-1,2-Dichloroethene	0.606	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.606	mg/kg	0.0015	ND
Trichloroethene	0.606	mg/kg	0.0015	ND

Sample ID: TB-102-1 GRAB
Lab#: AD16022-002
Matrix: Soil/Terracore

Collection Date: 3/3/2020
Receipt Date: 3/4/2020

Trichlorofluoromethane	0.606	mg/kg	0.0015	ND
Vinyl chloride	0.606	mg/kg	0.0015	ND
Xylenes (Total)	0.606	mg/kg	0.00077	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
unknown	**0.606**	**mg/kg**	**2.01**	**0.0024J**
Ethanol	**0.606**	**mg/kg**	**2.7**	**0.024J**
TotalVolatileTic	**0.606**	**mg/kg**	**NA**	**0.026J**

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Laboratory Chronicle

Client: ARCADIS
Project: Long Beach

HC Project #: 0030402

Lab#: AD16022-001 **Sample ID: TB-102-1 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	3/5/20 00:00	BEENA
Cyanide (Soil/Waste) 9012B		03/06/20	asilva	EPA 9012B	3/6/20 12:53	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	03/05/20 08:00	bransaw	EPA 7471B	3/5/20 13:49	BA
Organochlorine Pesticides 8081	3510C/3550C	03/05/20 17:29	MSL	EPA 8081B	3/6/20 12:33	MS/MLC
PCB 8082	3510C/3550C	03/05/20 17:29	MSL	EPA 8082A	3/6/20 11:22	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	03/05/20 11:00	Lynda	EPA 8270D	3/5/20 18:22	AB/JB
TAL Metals 6010D	3005&10/3050	03/05/20 08:00	bransaw	EPA 6010D	3/6/20 00:30	CJA
TAL Metals 6010D	3005&10/3050	03/05/20 08:00	bransaw	EPA 6010D	3/5/20 15:44	OA
TAL Metals 6020B	3005&10/3050	03/05/20 08:00	bransaw	EPA 6020B	3/6/20 22:48	PC

Lab#: AD16022-002 **Sample ID: TB-102-1 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	3/5/20 00:00	BEENA
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	3/5/20 20:17	SG

Chain of Custody

00030402 00012

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0030402

Page 1 of 1

Customer Information

1a) Customer: Arcadis
Address: 17-17 Route 208 North
Fair Lawn, NJ 07410
1b) Email/Cell/Fax/Ph: christopher.goldsmith@arcadis.com
1c) Send Invoice to: richard.gilmour@arcadis.com
1d) Send Report to: max.goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 30016IS.00040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 days		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD16022

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA+15	TCL SVOC-BNA+15	TAL Metals	TAL 3	TCL PCB	TCL Pest	8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
002/001	TB-102-1	Sa	03-03-20	0900	X	X	X	X	X	X	X	X	4	1							

10) Relinquished by:	Accepted by:	Date	Time
Kim Hanson	FEDEX	03.03.20	1545
FEDEX	[illegible]	3/4/20	10:00

11) Sampler (print name): Kim Hanson Date: 03.03.2020

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.4

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD16022

Entered By: maxwell
Date Entered 3/4/2020 10:04:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	No	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.4
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD16022-001	03/04/20 10:00	MAXW	0	M	Received
AD16022-001	03/04/20 10:03	MAXW	0	M	Login
AD16022-001	03/04/20 10:47	R12	1	A	NONE
AD16022-001	03/04/20 21:01	PA	1	A	mix
AD16022-001	03/04/20 21:02	R12	1	A	NONE
AD16022-001	03/05/20 08:19	BR	1	A	TDSI/HG
AD16022-001	03/05/20 08:20	BR	1	A	R12
AD16022-001	03/05/20 10:49	R12	1	A	NONE
AD16022-001	03/05/20 11:00	LV	1	A	BN/BNA
AD16022-001	03/05/20 11:01	R12	1	A	NONE
AD16022-001	03/05/20 17:29	MSL	1	A	P/P
AD16022-001	03/05/20 17:31	R12	1	A	NONE
AD16022-001	03/06/20 09:27	ANS	1	A	CNS
AD16022-001	03/06/20 09:58	R12	1	A	NONE
AD16022-002	03/04/20 10:00	MAXW	0	M	Received
AD16022-002	03/04/20 10:03	MAXW	0	M	Login
AD16022-002	03/04/20 10:47	R12	1	A	NONE
AD16022-002	03/04/20 21:02	R12	1	A	NONE
AD16022-002	03/05/20 08:38	BCT	1	A	% SOLIDS
AD16022-002	03/05/20 10:49	R12	1	A	NONE
AD16022-002	03/04/20 10:16	R31	2	A	NONE
AD16022-002	03/04/20 12:36	R31	2	A	NONE
AD16022-002	03/04/20 12:36	WP	2	A	VOA
AD16022-002	03/04/20 10:16	F19	3	A	NONE
AD16022-002	03/04/20 10:16	F19	4	A	NONE
AD16022-002	03/05/20 10:44	WP	4	A	VOA

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD16022-002
Client Id: TB-102-1 GRAB
Data File: 6M125544.D
Analysis Date: 03/05/20 20:17
Date Rec/Extracted: 03/04/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 8.25g
Final Vol: NA
Dilution: 0.606
Solids: 79

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0015	U	56-23-5	Carbon Tetrachloride	0.0015	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0015	U	108-90-7	Chlorobenzene	0.0015	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0015	U	75-00-3	Chloroethane	0.0015	U
79-00-5	1,1,2-Trichloroethane	0.0015	U	67-66-3	Chloroform	0.0015	U
75-34-3	1,1-Dichloroethane	0.0015	U	74-87-3	Chloromethane	0.0015	U
75-35-4	1,1-Dichloroethene	0.0015	U	156-59-2	cis-1,2-Dichloroethene	0.0015	U
87-61-6	1,2,3-Trichlorobenzene	0.0015	U	10061-01-5	cis-1,3-Dichloropropene	0.0015	U
120-82-1	1,2,4-Trichlorobenzene	0.0015	U	110-82-7	Cyclohexane	0.0015	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0015	U	124-48-1	Dibromochloromethane	0.0015	U
106-93-4	1,2-Dibromoethane	0.00077	U	75-71-8	Dichlorodifluoromethane	0.0015	U
95-50-1	1,2-Dichlorobenzene	0.0015	U	100-41-4	Ethylbenzene	0.00077	U
107-06-2	1,2-Dichloroethane	0.0012	U	98-82-8	Isopropylbenzene	0.00077	U
78-87-5	1,2-Dichloropropane	0.0015	U	79601-23-1	m&p-Xylenes	0.00077	U
541-73-1	1,3-Dichlorobenzene	0.0015	U	79-20-9	Methyl Acetate	0.0015	U
106-46-7	1,4-Dichlorobenzene	0.0015	U	108-87-2	Methylcyclohexane	0.0015	U
123-91-1	1,4-Dioxane	0.077	U	**75-09-2**	**Methylene Chloride**	**0.0015**	**0.0020**
78-93-3	2-Butanone	0.0015	U	1634-04-4	Methyl-t-butyl ether	0.00077	U
591-78-6	2-Hexanone	0.0015	U	95-47-6	o-Xylene	0.00077	U
108-10-1	4-Methyl-2-Pentanone	0.0015	U	100-42-5	Styrene	0.0015	U
67-64-1	Acetone	0.0077	U	127-18-4	Tetrachloroethene	0.0015	U
71-43-2	Benzene	0.00077	U	108-88-3	Toluene	0.00077	U
74-97-5	Bromochloromethane	0.0015	U	156-60-5	trans-1,2-Dichloroethene	0.0015	U
75-27-4	Bromodichloromethane	0.0015	U	10061-02-6	trans-1,3-Dichloropropene	0.0015	U
75-25-2	Bromoform	0.0015	U	79-01-6	Trichloroethene	0.0015	U
74-83-9	Bromomethane	0.0015	U	75-69-4	Trichlorofluoromethane	0.0015	U
75-15-0	Carbon Disulfide	0.0015	U	75-01-4	Vinyl Chloride	0.0015	U
1330-20-7	Xylenes (Total)	0.00077	U				

Worksheet #: 547901 *Total Target Concentration* 0.002 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD16022-002
Client Id: TB-102-1 GRAB
Data File: 6M125544.D
Analysis Date: 03/05/20 20:17
Date Rec/Extracted: 03/04/20-NA

Matrix: Soil
Initial Vol: 8.25g
Final Vol: NA
Dilution: 0.606
Solids: 79
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		unknown	2.01	0.0024 J
2	64-17-5	Ethanol	2.70	0.024 J

Worksheet #: 547901

Total Tentatively Identified Concentration 0.026

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

0030402 0018

SampleID : AD16022-002 Operator : SG Qt Meth : 6M_S0223.M
Data File: 6M125544.D Sam Mult : 1 Vial# : 26 Qt On : 03/06/20 06:50
Acq On : 03/05/20 20:17 Misc : S,5G!4 Qt Upd On: 02/24/20 05:59

Data Path : G:\GcMsData\2020\GCMS_6\Data\03-05-20\
Qt Path : G:\GcMsData\2020\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	155384	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	131031	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	75933	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	42071	30.13	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.43%			
39) 1,2-Dichloroethane-d4	4.934	67	22898	33.30	ug/l	0.00
Spiked Amount 30.000			Recovery = 111.00%			
66) Toluene-d8	5.983	98	162678	29.36	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.87%			
76) Bromofluorobenzene	7.397	174	58968	29.93	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.77%			
Target Compounds						Qvalue
15) Methylene Chloride	3.434	84	2963	2.6419	ug/l	93
Library Search Internal Standards TIC Results						
1) Fluorobenzene	5.123		312227	30.00	ug/l	--
2) Chlorobenzene-d5	6.763		376741	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	8.056		432942	30.00	ug/l	--
Library Search Compounds						
1) UNKNOWN	2.010		32736	3.15	ug/l	--
2) 64-17-5	2.700		326023	31.33	ug/l	64

(#) = qualifier out of range (m) = manual integration (+) = signals summed

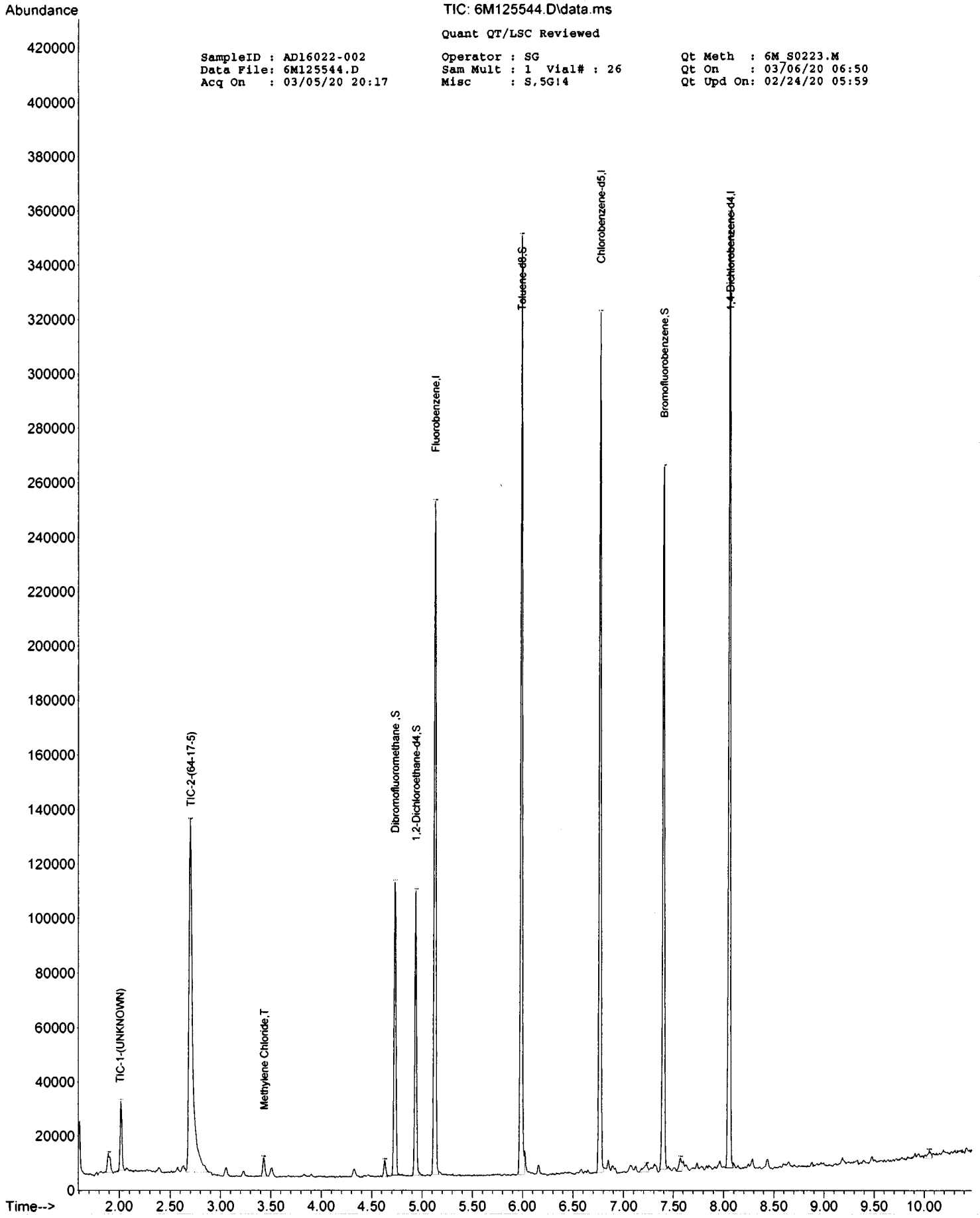
TIC: 6M125544.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD16022-002
Data File: 6M125544.D
Acq On : 03/05/20 20:17

Operator : SG
Sam Mult : 1 Vial# : 26
Misc : S,5G14

Qt Meth : 6M_S0223.M
Qt On : 03/06/20 06:50
Qt Upd On: 02/24/20 05:59



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M125520.D
Analysis Date: 03/05/20 10:45
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0016	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	108-88-3	Toluene	0.0010	U
74-97-5	Bromochloromethane	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-25-2	Bromoform	0.0020	U	79-01-6	Trichloroethene	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 547901

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 6M125520.D
Analysis Date: 03/05/20 10:45
Date Rec/Extracted:

Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 547901

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

0030402 0022

SampleID : DAILY BLANK
Data File: 6M125520.D
Acq On : 03/05/20 10:45

Operator : WP
Sam Mult : 1 Vial# : 2
Misc : S,5G

Qt Meth : 6M_S0223.M
Qt On : 03/05/20 10:59
Qt Upd On: 02/24/20 05:59

Data Path : G:\GcMsData\2020\GCMS_6\Data\03-05-20\
Qt Path : G:\GcMsData\2020\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	169653	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	143399	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	80692	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	45654	29.95	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.83%			
39) 1,2-Dichloroethane-d4	4.934	67	23632	31.48	ug/l	0.00
Spiked Amount 30.000			Recovery = 104.93%			
66) Toluene-d8	5.983	98	177906	29.34	ug/l	0.00
Spiked Amount 30.000			Recovery = 97.80%			
76) Bromofluorobenzene	7.397	174	63899	30.52	ug/l	0.00
Spiked Amount 30.000			Recovery = 101.73%			

Target Compounds Qvalue

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed

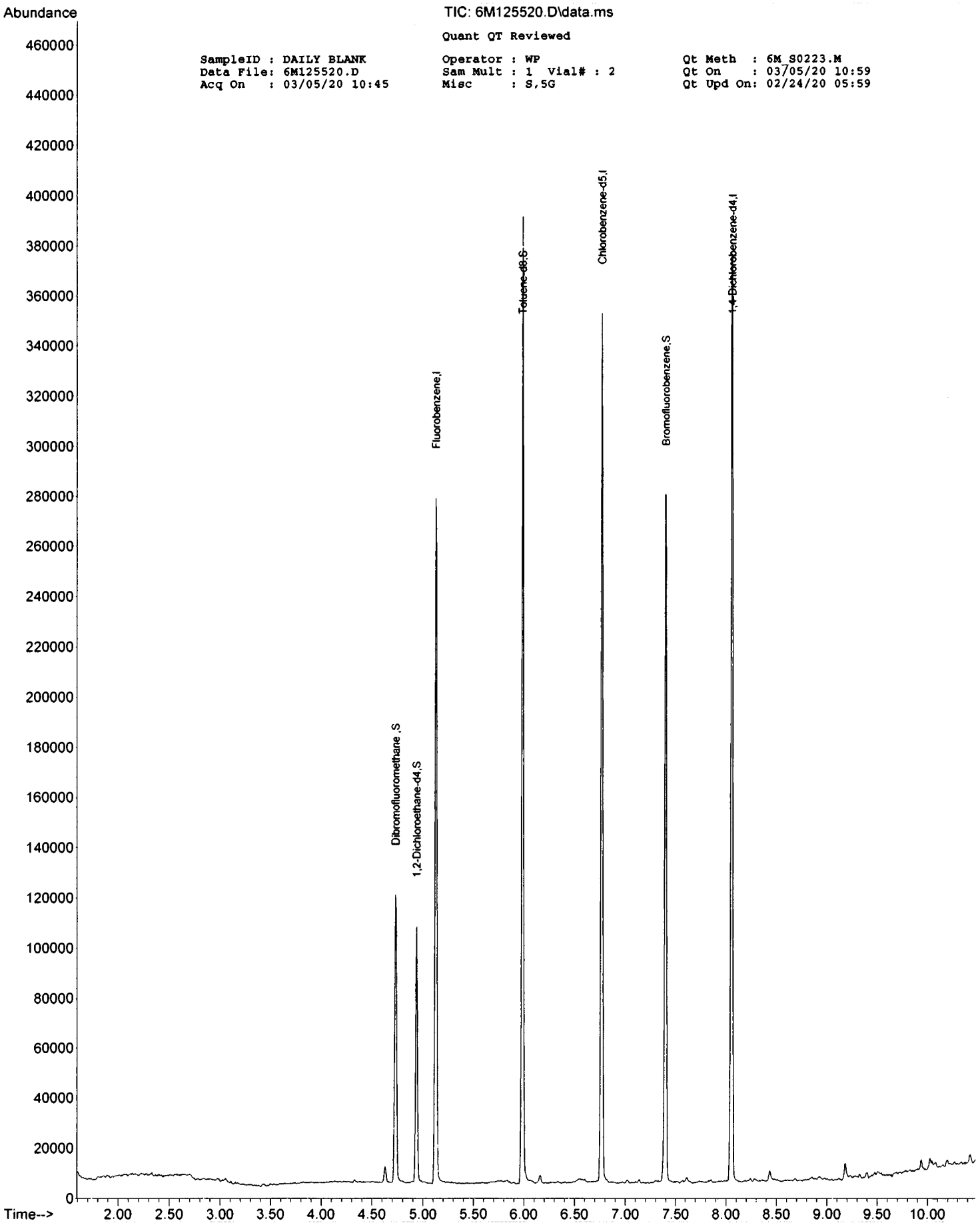
TIC: 6M125520.D\data.ms

Quant QT Reviewed

SampleID : DAILY BLANK
Data File: 6M125520.D
Acq On : 03/05/20 10:45

Operator : WP
Sam Mult : 1 Vial# : 2
Misc : S,5G

Qt Meth : 6M_S0223.M
Qt On : 03/05/20 10:59
Qt Upd On: 02/24/20 05:59



FORM2

Surrogate Recovery

Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M125520.D	DAILY BLANK	S	03/05/20 10:45	1		100	105	98	102		
6M125544.D	AD16022-002	S	03/05/20 20:17	1		100	111	98	100		
6M125522.D	AD16020-002	S	03/05/20 11:33	1		102	111	96	102		
6M125527.D	AD16020-002(MS)	S	03/05/20 13:32	1		95	100	97	115		
6M125530.D	AD16020-002(MSD)	S	03/05/20 14:43	1		98	105	97	117		
6M125531.D	MBS84540	S	03/05/20 15:07	1		98	100	98	98		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84540

Data File	Sample ID:	Analysis Date
Spike or Dup: 6M125531.D	MBS84540	3/5/2020 3:07:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	41.1237	0	50	82	20	130
Dichlorodifluoromethane	**1**	**40.8097**	**0**	**50**	**82**	**20**	**130**
Chloromethane	**1**	**45.6647**	**0**	**50**	**91**	**20**	**130**
Bromomethane	**1**	**42.715**	**0**	**50**	**85**	**20**	**130**
Vinyl Chloride	**1**	**46.9892**	**0**	**50**	**94**	**20**	**130**
Chloroethane	**1**	**44.3022**	**0**	**50**	**89**	**20**	**130**
Trichlorofluoromethane	**1**	**46.23**	**0**	**50**	**92**	**20**	**130**
Ethyl ether	1	45.4265	0	50	91	50	130
Furan	1	46.1076	0	50	92	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**50.1936**	**0**	**50**	**100**	**50**	**130**
Methylene Chloride	**1**	**49.0307**	**0**	**50**	**98**	**50**	**130**
Acrolein	1	218.8769	0	200	109	20	130
Acrylonitrile	1	46.2359	0	50	92	20	130
Iodomethane	1	45.2732	0	50	91	50	130
Acetone	**1**	**236.0911**	**0**	**200**	**118**	**20**	**130**
Carbon Disulfide	**1**	**41.9147**	**0**	**50**	**84**	**50**	**130**
t-Butyl Alcohol	1	210.3852	0	200	105	20	130
n-Hexane	1	55.7234	0	50	111	50	130
Di-isopropyl-ether	1	51.5893	0	50	103	50	130
1,1-Dichloroethene	**1**	**48.5418**	**0**	**50**	**97**	**50**	**130**
Methyl Acetate	**1**	**46.8575**	**0**	**50**	**94**	**50**	**130**
Methyl-t-butyl ether	**1**	**48.7755**	**0**	**50**	**98**	**50**	**130**
1,1-Dichloroethane	**1**	**48.1296**	**0**	**50**	**96**	**50**	**130**
trans-1,2-Dichloroethene	**1**	**45.1829**	**0**	**50**	**90**	**50**	**130**
Ethyl-t-butyl ether	1	51.8447	0	50	104	50	130
cis-1,2-Dichloroethene	**1**	**48.2813**	**0**	**50**	**97**	**50**	**130**
Bromochloromethane	**1**	**50.0404**	**0**	**50**	**100**	**50**	**130**
2,2-Dichloropropane	1	49.1503	0	50	98	50	130
Ethyl acetate	1	46.5081	0	50	93	50	130
1,4-Dioxane	**1**	**2192.946**	**0**	**2500**	**88**	**50**	**130**
1,1-Dichloropropene	1	49.3991	0	50	99	50	130
Chloroform	**1**	**45.5114**	**0**	**50**	**91**	**50**	**130**
Cyclohexane	**1**	**51.8535**	**0**	**50**	**104**	**50**	**130**
1,2-Dichloroethane	**1**	**49.3247**	**0**	**50**	**99**	**50**	**130**
2-Butanone	**1**	**45.6486**	**0**	**50**	**91**	**20**	**130**
1,1,1-Trichloroethane	**1**	**47.6013**	**0**	**50**	**95**	**50**	**130**
Carbon Tetrachloride	**1**	**48.3128**	**0**	**50**	**97**	**50**	**130**
Vinyl Acetate	1	49.7032	0	50	99	50	130
Bromodichloromethane	**1**	**48.1**	**0**	**50**	**96**	**50**	**130**
Methylcyclohexane	**1**	**53.453**	**0**	**50**	**107**	**50**	**130**
Dibromomethane	1	45.906	0	50	92	50	130
1,2-Dichloropropane	**1**	**50.4682**	**0**	**50**	**101**	**50**	**130**
Trichloroethene	**1**	**46.8143**	**0**	**50**	**94**	**50**	**130**
Benzene	**1**	**47.6639**	**0**	**50**	**95**	**50**	**130**
tert-Amyl methyl ether	1	50.8449	0	50	102	50	130
Iso-propylacetate	1	48.1858	0	50	96	50	130
Methyl methacrylate	1	50.2668	0	50	101	50	130
Dibromochloromethane	**1**	**46.7085**	**0**	**50**	**93**	**50**	**130**
2-Chloroethylvinylether	1	51.7056	0	50	103	50	130
cis-1,3-Dichloropropene	**1**	**50.2479**	**0**	**50**	**100**	**50**	**130**
trans-1,3-Dichloropropene	**1**	**49.9197**	**0**	**50**	**100**	**50**	**130**
Ethyl methacrylate	1	52.4813	0	50	105	50	130
1,1,2-Trichloroethane	**1**	**49.435**	**0**	**50**	**99**	**50**	**130**
1,2-Dibromoethane	**1**	**48.841**	**0**	**50**	**98**	**50**	**130**
1,3-Dichloropropane	1	49.7835	0	50	100	50	130
4-Methyl-2-Pentanone	**1**	**48.3678**	**0**	**50**	**97**	**20**	**130**
2-Hexanone	**1**	**47.8424**	**0**	**50**	**96**	**20**	**130**
Tetrachloroethene	**1**	**46.0318**	**0**	**50**	**92**	**50**	**130**
Toluene	**1**	**47.36**	**0**	**50**	**95**	**50**	**130**
1,1,1,2-Tetrachloroethane	1	47.817	0	50	96	50	130
Chlorobenzene	**1**	**47.2328**	**0**	**50**	**94**	**50**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84540

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	53.1412	0	50	106	50	130
n-Amyl acetate	1	52.2828	0	50	105	50	130
Bromoform	**1**	**47.2901**	**0**	**50**	**95**	**20**	**130**
Ethylbenzene	**1**	**45.5912**	**0**	**50**	**91**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**50.7813**	**0**	**50**	**102**	**50**	**130**
Styrene	**1**	**49.6375**	**0**	**50**	**99**	**50**	**130**
m&p-Xylenes	**1**	**95.6001**	**0**	**100**	**96**	**50**	**130**
o-Xylene	**1**	**47.39**	**0**	**50**	**95**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	49.4849	0	50	99	20	130
1,3-Dichlorobenzene	**1**	**49.3953**	**0**	**50**	**99**	**50**	**130**
1,4-Dichlorobenzene	**1**	**48.3932**	**0**	**50**	**97**	**50**	**130**
1,2-Dichlorobenzene	**1**	**49.1119**	**0**	**50**	**98**	**50**	**130**
Isopropylbenzene	**1**	**49.3787**	**0**	**50**	**99**	**50**	**130**
Cyclohexanone	1	216.9298	0	250	87	50	130
Camphene	1	52.7859	0	50	106	50	130
1,2,3-Trichloropropane	1	48.7982	0	50	98	50	130
2-Chlorotoluene	1	51.127	0	50	102	50	130
p-Ethyltoluene	1	52.9324	0	50	106	50	130
4-Chlorotoluene	1	50.7243	0	50	101	50	130
n-Propylbenzene	1	51.0406	0	50	102	50	130
Bromobenzene	1	50.4072	0	50	101	50	130
1,3,5-Trimethylbenzene	1	50.0347	0	50	100	50	130
Butyl methacrylate	1	53.0147	0	50	106	50	130
t-Butylbenzene	1	50.7506	0	50	102	50	130
1,2,4-Trimethylbenzene	1	50.0674	0	50	100	50	130
sec-Butylbenzene	1	52.2363	0	50	104	50	130
4-Isopropyltoluene	1	52.3956	0	50	105	50	130
n-Butylbenzene	1	55.6772	0	50	111	50	130
p-Diethylbenzene	1	54.305	0	50	109	50	130
1,2,4,5-Tetramethylbenzene	1	53.1628	0	50	106	50	130
1,2-Dibromo-3-Chloropropane	**1**	**45.1102**	**0**	**50**	**90**	**50**	**130**
Camphor	1	497.2942	0	500	99	50	130
Hexachlorobutadiene	1	52.3002	0	50	105	50	130
1,2,4-Trichlorobenzene	**1**	**50.5784**	**0**	**50**	**101**	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**49.8867**	**0**	**50**	**100**	**50**	**130**
Naphthalene	1	48.67	0	50	97	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84540

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125527.D	AD16020-002(MS)	3/5/2020 1:32:00 PM
Non Spike(If applicable):	6M125522.D	AD16020-002	3/5/2020 11:33:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	48.8232	0	50	98	20	130
Dichlorodifluoromethane	1	50.484	0	50	101	20	130
Chloromethane	1	65.5027	0	50	131*	20	130
Bromomethane	1	47.1425	0	50	94	20	130
Vinyl Chloride	1	61.2222	0	50	122	20	130
Chloroethane	1	49.6284	0	50	99	20	130
Trichlorofluoromethane	1	50.8014	0	50	102	20	130
Ethyl ether	1	43.835	0	50	88	50	130
Furan	1	45.1666	0	50	90	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.1481	0	50	104	50	130
Methylene Chloride	1	48.0481	2.2393	50	92	50	130
Acrolein	1	223.8373	0	200	112	20	130
Acrylonitrile	1	45.4643	0	50	91	20	130
Iodomethane	1	48.7467	0	50	97	50	130
Acetone	1	221.1712	0	200	111	20	130
Carbon Disulfide	1	44.9591	0	50	90	50	130
t-Butyl Alcohol	1	219.4962	0	200	110	20	130
n-Hexane	1	58.7956	0	50	118	50	130
Di-isopropyl-ether	1	53.8182	0	50	108	50	130
1,1-Dichloroethene	1	50.317	0	50	101	50	130
Methyl Acetate	1	45.3491	0	50	91	50	130
Methyl-t-butyl ether	1	49.5528	0	50	99	50	130
1,1-Dichloroethane	1	50.4129	0	50	101	50	130
trans-1,2-Dichloroethene	1	47.3761	0	50	95	50	130
Ethyl-t-butyl ether	1	52.6054	0	50	105	50	130
cis-1,2-Dichloroethene	1	50.2423	0	50	100	50	130
Bromochloromethane	1	51.5137	0	50	103	50	130
2,2-Dichloropropane	1	51.7773	0	50	104	50	130
Ethyl acetate	1	45.6892	0	50	91	50	130
1,4-Dioxane	1	2161.612	0	2500	86	50	130
1,1-Dichloropropene	1	52.0597	0	50	104	50	130
Chloroform	1	46.6346	0	50	93	50	130
Cyclohexane	1	55.9258	0	50	112	50	130
1,2-Dichloroethane	1	50.1664	0	50	100	50	130
2-Butanone	1	46.8297	0	50	94	20	130
1,1,1-Trichloroethane	1	49.704	0	50	99	50	130
Carbon Tetrachloride	1	49.7865	0	50	100	50	130
Vinyl Acetate	1	51.1286	0	50	102	50	130
Bromodichloromethane	1	50.9571	0	50	102	50	130
Methylcyclohexane	1	58.7716	0	50	118	50	130
Dibromomethane	1	46.9245	0	50	94	50	130
1,2-Dichloropropane	1	53.1815	0	50	106	50	130
Trichloroethene	1	49.3959	0	50	99	50	130
Benzene	1	50.6187	0	50	101	50	130
tert-Amyl methyl ether	1	52.293	0	50	105	50	130
Iso-propylacetate	1	49.0393	0	50	98	50	130
Methyl methacrylate	1	50.3774	0	50	101	50	130
Dibromochloromethane	1	52.7841	0	50	106	50	130
2-Chloroethylvinylether	1	50.3836	0	50	101	50	130
cis-1,3-Dichloropropene	1	50.7674	0	50	102	50	130
trans-1,3-Dichloropropene	1	52.2685	0	50	105	50	130
Ethyl methacrylate	1	55.0685	0	50	110	50	130
1,1,2-Trichloroethane	1	51.7193	0	50	103	50	130
1,2-Dibromoethane	1	51.7418	0	50	103	50	130
1,3-Dichloropropane	1	51.9707	0	50	104	50	130
4-Methyl-2-Pentanone	1	49.0314	0	50	98	20	130
2-Hexanone	1	51.3829	0	50	103	20	130
Tetrachloroethene	1	48.5935	0	50	97	50	130
Toluene	1	48.8125	0	50	98	50	130
1,1,1,2-Tetrachloroethane	1	51.2343	0	50	102	50	130
Chlorobenzene	1	49.8794	0	50	100	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84540

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	75.2944	0	50	151*	50	130
n-Amyl acetate	1	62.6076	0	50	125	50	130
Bromoform	**1**	**56.9181**	**0**	**50**	**114**	**20**	**130**
Ethylbenzene	**1**	**55.2219**	**0**	**50**	**110**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**65.4946**	**0**	**50**	**131***	**50**	**130**
Styrene	**1**	**61.9393**	**0**	**50**	**124**	**50**	**130**
m&p-Xylenes	**1**	**116.0033**	**0**	**100**	**116**	**50**	**130**
o-Xylene	**1**	**59.6006**	**0**	**50**	**119**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	61.8012	0	50	124	20	130
1,3-Dichlorobenzene	**1**	**49.4574**	**0**	**50**	**99**	**50**	**130**
1,4-Dichlorobenzene	**1**	**45.9767**	**0**	**50**	**92**	**50**	**130**
1,2-Dichlorobenzene	**1**	**46.013**	**0**	**50**	**92**	**50**	**130**
Isopropylbenzene	**1**	**61.5124**	**0**	**50**	**123**	**50**	**130**
Cyclohexanone	1	258.8814	0	250	104	50	130
Camphene	1	66.755	0	50	134*	50	130
1,2,3-Trichloropropane	1	61.1163	0	50	122	50	130
2-Chlorotoluene	1	63.772	0	50	128	50	130
p-Ethyltoluene	1	64.9905	0	50	130	50	130
4-Chlorotoluene	1	54.5485	0	50	109	50	130
n-Propylbenzene	1	63.0646	0	50	126	50	130
Bromobenzene	1	62.6103	0	50	125	50	130
1,3,5-Trimethylbenzene	1	59.7327	0	50	119	50	130
Butyl methacrylate	1	55.6895	0	50	111	50	130
t-Butylbenzene	1	58.6352	0	50	117	50	130
1,2,4-Trimethylbenzene	1	54.289	0	50	109	50	130
sec-Butylbenzene	1	55.9685	0	50	112	50	130
4-Isopropyltoluene	1	54.2786	0	50	109	50	130
n-Butylbenzene	1	48.4354	0	50	97	50	130
p-Diethylbenzene	1	53.4686	0	50	107	50	130
1,2,4,5-Tetramethylbenzene	1	63.2339	0	50	126	50	130
1,2-Dibromo-3-Chloropropane	**1**	**56.622**	**0**	**50**	**113**	**50**	**130**
Camphor	1	623.2486	0	500	125	50	130
Hexachlorobutadiene	1	58.2682	0	50	117	50	130
1,2,4-Trichlorobenzene	**1**	**55.7257**	**0**	**50**	**111**	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**57.0584**	**0**	**50**	**114**	**50**	**130**
Naphthalene	1	58.5994	0	50	117	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84540

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125530.D	AD16020-002(MSD)	3/5/2020 2:43:00 PM
Non Spike(If applicable):	6M125522.D	AD16020-002	3/5/2020 11:33:00 AM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	50.9236	0	50	102	20	130
Dichlorodifluoromethane	1	47.6113	0	50	95	20	130
Chloromethane	1	60.9559	0	50	122	20	130
Bromomethane	1	44.3766	0	50	89	20	130
Vinyl Chloride	1	56.9623	0	50	114	20	130
Chloroethane	1	48.6055	0	50	97	20	130
Trichlorofluoromethane	1	49.4326	0	50	99	20	130
Ethyl ether	1	43.985	0	50	88	50	130
Furan	1	44.9401	0	50	90	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	52.6849	0	50	105	50	130
Methylene Chloride	1	46.1712	2.2393	50	88	50	130
Acrolein	1	208.0029	0	200	104	20	130
Acrylonitrile	1	42.9958	0	50	86	20	130
Iodomethane	1	46.122	0	50	92	50	130
Acetone	1	210.8354	0	200	105	20	130
Carbon Disulfide	1	44.0937	0	50	88	50	130
t-Butyl Alcohol	1	180.1257	0	200	90	20	130
n-Hexane	1	58.8879	0	50	118	50	130
Di-isopropyl-ether	1	51.2887	0	50	103	50	130
1,1-Dichloroethene	1	50.197	0	50	100	50	130
Methyl Acetate	1	43.1222	0	50	86	50	130
Methyl-t-butyl ether	1	47.2681	0	50	95	50	130
1,1-Dichloroethane	1	49.1923	0	50	98	50	130
trans-1,2-Dichloroethene	1	46.6645	0	50	93	50	130
Ethyl-t-butyl ether	1	50.2856	0	50	101	50	130
cis-1,2-Dichloroethene	1	48.3718	0	50	97	50	130
Bromochloromethane	1	48.5639	0	50	97	50	130
2,2-Dichloropropane	1	48.7749	0	50	98	50	130
Ethyl acetate	1	45.0285	0	50	90	50	130
1,4-Dioxane	1	1853.057	0	2500	74	50	130
1,1-Dichloropropene	1	50.8042	0	50	102	50	130
Chloroform	1	45.1738	0	50	90	50	130
Cyclohexane	1	54.7013	0	50	109	50	130
1,2-Dichloroethane	1	47.3032	0	50	95	50	130
2-Butanone	1	42.1527	0	50	84	20	130
1,1,1-Trichloroethane	1	48.2641	0	50	97	50	130
Carbon Tetrachloride	1	48.0189	0	50	96	50	130
Vinyl Acetate	1	47.8906	0	50	96	50	130
Bromodichloromethane	1	47.0172	0	50	94	50	130
Methylcyclohexane	1	58.0513	0	50	116	50	130
Dibromomethane	1	42.8391	0	50	86	50	130
1,2-Dichloropropane	1	50.9222	0	50	102	50	130
Trichloroethene	1	47.3392	0	50	95	50	130
Benzene	1	49.3447	0	50	99	50	130
tert-Amyl methyl ether	1	49.3444	0	50	99	50	130
Iso-propylacetate	1	44.128	0	50	88	50	130
Methyl methacrylate	1	45.6201	0	50	91	50	130
Dibromochloromethane	1	45.9966	0	50	92	50	130
2-Chloroethylvinylether	1	48.2163	0	50	96	50	130
cis-1,3-Dichloropropene	1	45.8205	0	50	92	50	130
trans-1,3-Dichloropropene	1	45.7819	0	50	92	50	130
Ethyl methacrylate	1	49.8634	0	50	100	50	130
1,1,2-Trichloroethane	1	44.7973	0	50	90	50	130
1,2-Dibromoethane	1	45.855	0	50	92	50	130
1,3-Dichloropropane	1	45.9022	0	50	92	50	130
4-Methyl-2-Pentanone	1	42.3048	0	50	85	20	130
2-Hexanone	1	43.7187	0	50	87	20	130
Tetrachloroethene	1	45.354	0	50	91	50	130
Toluene	1	45.7155	0	50	91	50	130
1,1,1,2-Tetrachloroethane	1	45.4252	0	50	91	50	130
Chlorobenzene	1	45.6185	0	50	91	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84540

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	57.5752	0	50	115	50	130
n-Amyl acetate	1	50.2563	0	50	101	50	130
Bromoform	**1**	**46.0782**	**0**	**50**	**92**	**20**	**130**
Ethylbenzene	**1**	**49.4875**	**0**	**50**	**99**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**55.2931**	**0**	**50**	**111**	**50**	**130**
Styrene	**1**	**53.5155**	**0**	**50**	**107**	**50**	**130**
m&p-Xylenes	**1**	**101.8226**	**0**	**100**	**102**	**50**	**130**
o-Xylene	**1**	**51.9012**	**0**	**50**	**104**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	51.745	0	50	103	20	130
1,3-Dichlorobenzene	**1**	**45.4395**	**0**	**50**	**91**	**50**	**130**
1,4-Dichlorobenzene	**1**	**42.6485**	**0**	**50**	**85**	**50**	**130**
1,2-Dichlorobenzene	**1**	**43.3707**	**0**	**50**	**87**	**50**	**130**
Isopropylbenzene	**1**	**54.3856**	**0**	**50**	**109**	**50**	**130**
Cyclohexanone	1	214.2022	0	250	86	50	130
Camphene	1	59.5989	0	50	119	50	130
1,2,3-Trichloropropane	1	49.7063	0	50	99	50	130
2-Chlorotoluene	1	53.7716	0	50	108	50	130
p-Ethyltoluene	1	56.2395	0	50	112	50	130
4-Chlorotoluene	1	49.5855	0	50	99	50	130
n-Propylbenzene	1	55.4124	0	50	111	50	130
Bromobenzene	1	53.2419	0	50	106	50	130
1,3,5-Trimethylbenzene	1	53.3871	0	50	107	50	130
Butyl methacrylate	1	48.5328	0	50	97	50	130
t-Butylbenzene	1	52.8421	0	50	106	50	130
1,2,4-Trimethylbenzene	1	49.5516	0	50	99	50	130
sec-Butylbenzene	1	52.7495	0	50	105	50	130
4-Isopropyltoluene	1	51.0093	0	50	102	50	130
n-Butylbenzene	1	47.6915	0	50	95	50	130
p-Diethylbenzene	1	50.6422	0	50	101	50	130
1,2,4,5-Tetramethylbenzene	1	55.8621	0	50	112	50	130
1,2-Dibromo-3-Chloropropane	**1**	**44.0859**	**0**	**50**	**88**	**50**	**130**
Camphor	1	495.0568	0	500	99	50	130
Hexachlorobutadiene	1	52.1631	0	50	104	50	130
1,2,4-Trichlorobenzene	**1**	**47.8383**	**0**	**50**	**96**	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**48.7173**	**0**	**50**	**97**	**50**	**130**
Naphthalene	1	48.8578	0	50	98	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84540

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125530.D	AD16020-002(MSD)	3/5/2020 2:43:00 PM
Duplicate(If applicable):	6M125527.D	AD16020-002(MS)	3/5/2020 1:32:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	50.9236	48.8232	4.2	30
Dichlorodifluoromethane	**1**	**47.6113**	**50.484**	**5.9**	**30**
Chloromethane	**1**	**60.9559**	**65.5027**	**7.2**	**30**
Bromomethane	**1**	**44.3766**	**47.1425**	**6**	**30**
Vinyl Chloride	**1**	**56.9623**	**61.2222**	**7.2**	**40**
Chloroethane	**1**	**48.6055**	**49.6284**	**2.1**	**30**
Trichlorofluoromethane	**1**	**49.4326**	**50.8014**	**2.7**	**30**
Ethyl ether	1	43.985	43.835	0.34	30
Furan	1	44.9401	45.1666	0.5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**52.6849**	**52.1481**	**1**	**30**
Methylene Chloride	**1**	**46.1712**	**48.0481**	**4**	**30**
Acrolein	1	208.0029	223.8373	7.3	30
Acrylonitrile	1	42.9958	45.4643	5.6	30
Iodomethane	1	46.122	48.7467	5.5	30
Acetone	**1**	**210.8354**	**221.1712**	**4.8**	**30**
Carbon Disulfide	**1**	**44.0937**	**44.9591**	**1.9**	**30**
t-Butyl Alcohol	1	180.1257	219.4962	20	30
n-Hexane	1	58.8879	58.7956	0.16	30
Di-isopropyl-ether	1	51.2887	53.8182	4.8	30
1,1-Dichloroethene	**1**	**50.197**	**50.317**	**0.24**	**40**
Methyl Acetate	**1**	**43.1222**	**45.3491**	**5**	**30**
Methyl-t-butyl ether	**1**	**47.2681**	**49.5528**	**4.7**	**30**
1,1-Dichloroethane	**1**	**49.1923**	**50.4129**	**2.5**	**40**
trans-1,2-Dichloroethene	**1**	**46.6645**	**47.3761**	**1.5**	**30**
Ethyl-t-butyl ether	1	50.2856	52.6054	4.5	30
cis-1,2-Dichloroethene	**1**	**48.3718**	**50.2423**	**3.8**	**30**
Bromochloromethane	**1**	**48.5639**	**51.5137**	**5.9**	**30**
2,2-Dichloropropane	1	48.7749	51.7773	6	30
Ethyl acetate	1	45.0285	45.6892	1.5	30
1,4-Dioxane	**1**	**1853.057**	**2161.612**	**15**	**30**
1,1-Dichloropropene	1	50.8042	52.0597	2.4	30
Chloroform	**1**	**45.1738**	**46.6346**	**3.2**	**40**
Cyclohexane	**1**	**54.7013**	**55.9258**	**2.2**	**30**
1,2-Dichloroethane	**1**	**47.3032**	**50.1664**	**5.9**	**40**
2-Butanone	**1**	**42.1527**	**46.8297**	**11**	**40**
1,1,1-Trichloroethane	**1**	**48.2641**	**49.704**	**2.9**	**30**
Carbon Tetrachloride	**1**	**48.0189**	**49.7865**	**3.6**	**40**
Vinyl Acetate	1	47.8906	51.1286	6.5	30
Bromodichloromethane	**1**	**47.0172**	**50.9571**	**8**	**30**
Methylcyclohexane	**1**	**58.0513**	**58.7716**	**1.2**	**30**
Dibromomethane	1	42.8391	46.9245	9.1	30
1,2-Dichloropropane	**1**	**50.9222**	**53.1815**	**4.3**	**30**
Trichloroethene	**1**	**47.3392**	**49.3959**	**4.3**	**40**
Benzene	**1**	**49.3447**	**50.6187**	**2.5**	**40**
tert-Amyl methyl ether	1	49.3444	52.293	5.8	30
Iso-propylacetate	1	44.128	49.0393	11	30
Methyl methacrylate	1	45.6201	50.3774	9.9	30
Dibromochloromethane	**1**	**45.9966**	**52.7841**	**14**	**30**
2-Chloroethylvinylether	1	48.2163	50.3836	4.4	30
cis-1,3-Dichloropropene	**1**	**45.8205**	**50.7674**	**10**	**30**
trans-1,3-Dichloropropene	**1**	**45.7819**	**52.2685**	**13**	**30**
Ethyl methacrylate	1	49.8634	55.0685	9.9	30
1,1,2-Trichloroethane	**1**	**44.7973**	**51.7193**	**14**	**30**
1,2-Dibromoethane	**1**	**45.855**	**51.7418**	**12**	**30**
1,3-Dichloropropane	1	45.9022	51.9707	12	30
4-Methyl-2-Pentanone	**1**	**42.3048**	**49.0314**	**15**	**30**
2-Hexanone	**1**	**43.7187**	**51.3829**	**16**	**30**
Tetrachloroethene	**1**	**45.354**	**48.5935**	**6.9**	**40**
Toluene	**1**	**45.7155**	**48.8125**	**6.6**	**40**
1,1,1,2-Tetrachloroethane	1	45.4252	51.2343	12	30
Chlorobenzene	**1**	**45.6185**	**49.8794**	**8.9**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84540

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	57.5752	75.2944	27	30
n-Amyl acetate	1	50.2563	62.6076	22	30
Bromoform	**1**	**46.0782**	**56.9181**	**21**	**30**
Ethylbenzene	**1**	**49.4875**	**55.2219**	**11**	**30**
1,1,2,2-Tetrachloroethane	**1**	**55.2931**	**65.4946**	**17**	**30**
Styrene	**1**	**53.5155**	**61.9393**	**15**	**30**
m&p-Xylenes	**1**	**101.8226**	**116.0033**	**13**	**30**
o-Xylene	**1**	**51.9012**	**59.6006**	**14**	**30**
trans-1,4-Dichloro-2-butene	1	51.745	61.8012	18	30
1,3-Dichlorobenzene	**1**	**45.4395**	**49.4574**	**8.5**	**30**
1,4-Dichlorobenzene	**1**	**42.6485**	**45.9767**	**7.5**	**40**
1,2-Dichlorobenzene	**1**	**43.3707**	**46.013**	**5.9**	**40**
Isopropylbenzene	**1**	**54.3856**	**61.5124**	**12**	**30**
Cyclohexanone	1	214.2022	258.8814	19	30
Camphene	1	59.5989	66.755	11	30
1,2,3-Trichloropropane	1	49.7063	61.1163	21	30
2-Chlorotoluene	1	53.7716	63.772	17	30
p-Ethyltoluene	1	56.2395	64.9905	14	30
4-Chlorotoluene	1	49.5855	54.5485	9.5	30
n-Propylbenzene	1	55.4124	63.0646	13	40
Bromobenzene	1	53.2419	62.6103	16	30
1,3,5-Trimethylbenzene	1	53.3871	59.7327	11	30
Butyl methacrylate	1	48.5328	55.6895	14	30
t-Butylbenzene	1	52.8421	58.6352	10	30
1,2,4-Trimethylbenzene	1	49.5516	54.289	9.1	30
sec-Butylbenzene	1	52.7495	55.9685	5.9	40
4-Isopropyltoluene	1	51.0093	54.2786	6.2	30
n-Butylbenzene	1	47.6915	48.4354	1.5	30
p-Diethylbenzene	1	50.6422	53.4686	5.4	30
1,2,4,5-Tetramethylbenzene	1	55.8621	63.2339	12	30
1,2-Dibromo-3-Chloropropane	**1**	**44.0859**	**56.622**	**25**	**30**
Camphor	1	495.0568	623.2486	23	30
Hexachlorobutadiene	1	52.1631	58.2682	11	30
1,2,4-Trichlorobenzene	**1**	**47.8383**	**55.7257**	**15**	**30**
1,2,3-Trichlorobenzene	**1**	**48.7173**	**57.0584**	**16**	**30**
Naphthalene	1	48.8578	58.5994	18	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M125520.D
Matrix: Soil

Blank Analysis Date: 03/05/20 10:45
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD16022-002	6M125544.D	03/05/20 20:17
MBS84540	6M125531.D	03/05/20 15:07
AD16020-002(MSD	6M125530.D	03/05/20 14:43
AD16020-002(MS)	6M125527.D	03/05/20 13:32
AD16020-002	6M125522.D	03/05/20 11:33

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M125074.D
Analysis Date: 02/23/20 19:19
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

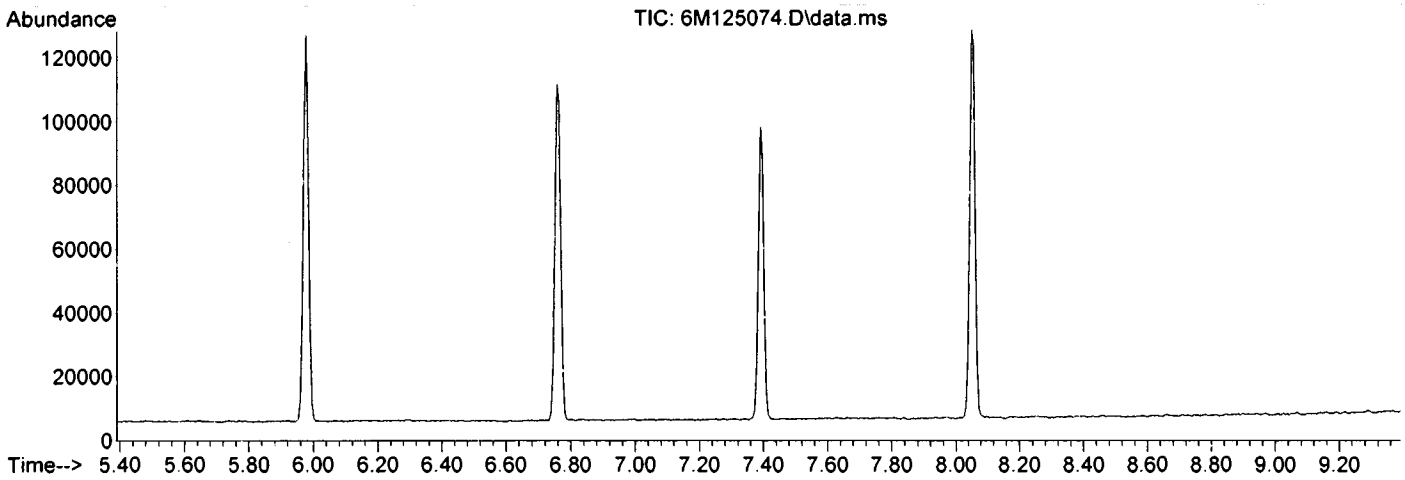
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.6	2677	PASS
75	95	30	60	49.3	7516	PASS
95	95	100	100	100.0	15251	PASS
96	95	5	9	6.2	947	PASS
173	174	0.00	2	0.5	67	PASS
174	95	50	100	91.8	13997	PASS
175	174	5	9	7.5	1047	PASS
176	174	95	101	98.2	13740	PASS
177	176	5	9	6.7	922	PASS

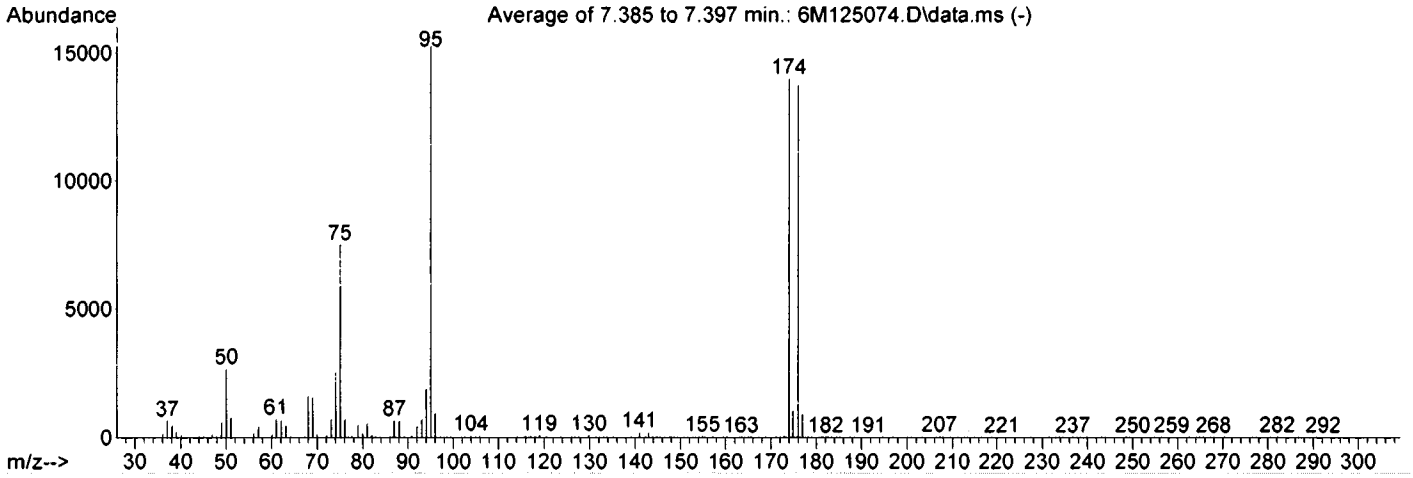
Data File	Sample Number	Analysis Date:
6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33
6M125078.D	CAL @ 1 PPB	02/23/20 20:56
6M125079.D	CAL @ 2 PPB	02/23/20 21:20
6M125080.D	CAL @ 5 PPB	02/23/20 21:44
6M125081.D	CAL @ 20 PPB	02/23/20 22:07
6M125082.D	CAL @ 50 PPB	02/23/20 22:31
6M125083.D	CAL @ 100 PPB	02/23/20 22:55
6M125084.D	250 PPB	02/23/20 23:19
6M125085.D	BLK	02/24/20 00:52
6M125086.D	CAL @ 250 PPB	02/24/20 01:15
6M125087.D	CAL @ 500 PPB	02/24/20 01:41
6M125088.D	BLK	02/24/20 02:05
6M125089.D	BLK	02/24/20 02:29
6M125090.D	BLK	02/24/20 02:53
6M125091.D	BLK	02/24/20 03:16
6M125092.D	ICV	02/24/20 03:40
6M125093.D	BLK	02/24/20 04:04
6M125094.D	BLK	02/24/20 04:28
6M125095.D	BLK	02/24/20 04:51
6M125096.D	BLK	02/24/20 05:15
6M125097.D	DAILY BLANK	02/24/20 05:39

Data Path : G:\GcMsData\2020\GCMS_6\Data\02-23-20\
Data File : 6M125074.D
Acq On : 23 Feb 2020 19:19
Operator : BK
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_6\MethodQt\6M_S0223.M
Title : @GCMS_6,ug,624,8260
Last Update : Mon Feb 24 05:59:51 2020





Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	2677	PASS
75	95	30	60	49.3	7516	PASS
95	95	100	100	100.0	15251	PASS
96	95	5	9	6.2	947	PASS
173	174	0.00	2	0.5	67	PASS
174	95	50	100	91.8	13997	PASS
175	174	5	9	7.5	1047	PASS
176	174	95	101	98.2	13740	PASS
177	176	5	9	6.7	922	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M125516.D
Analysis Date: 03/05/20 09:18
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.361 to 7.421 min

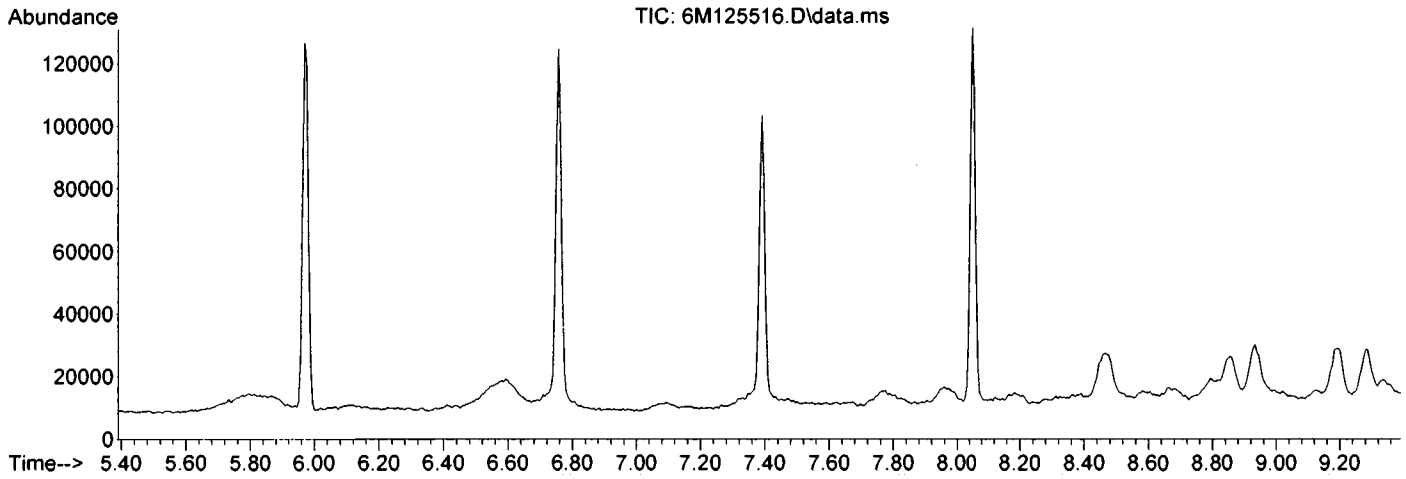
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.8	994	PASS
75	95	30	60	49.6	2631	PASS
95	95	100	100	100.0	5299	PASS
96	95	5	9	7.7	409	PASS
173	174	0.00	2	1.8	88	PASS
174	95	50	100	91.8	4862	PASS
175	174	5	9	7.8	380	PASS
176	174	95	101	95.8	4656	PASS
177	176	5	9	6.9	322	PASS

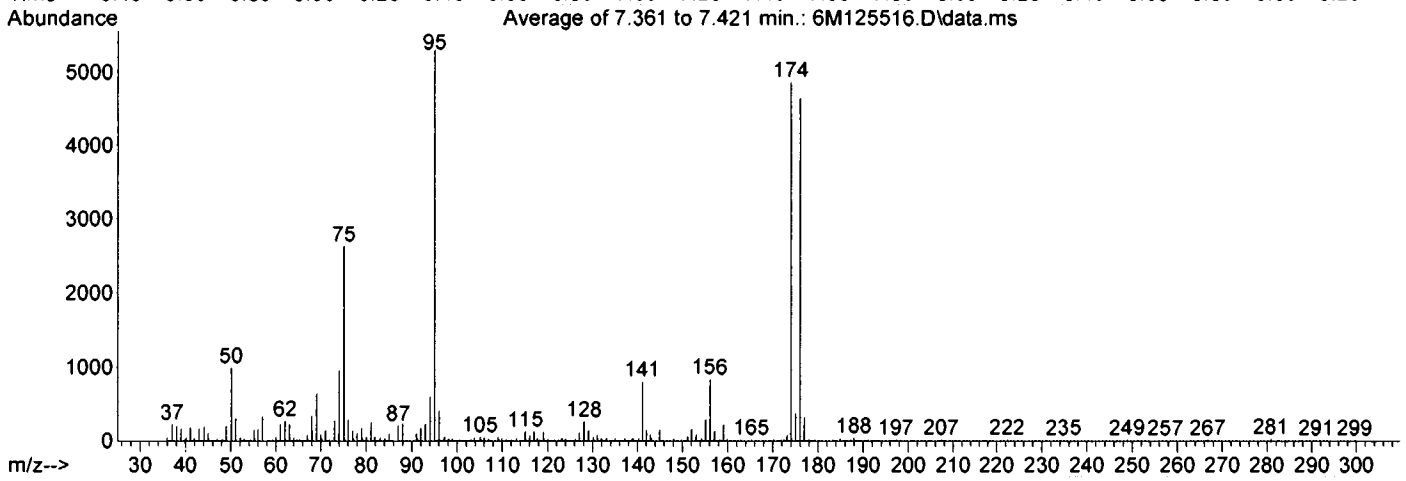
Data File	Sample Number	Analysis Date:
6M125518.D	CAL @ 50 PPB	03/05/20 09:58
6M125519.D	BLK	03/05/20 10:21
6M125520.D	DAILY BLANK	03/05/20 10:45
6M125521.D	AD15826-006	03/05/20 11:09
6M125522.D	AD16020-002	03/05/20 11:33
6M125523.D	AD16003-002	03/05/20 11:57
6M125524.D	AD16020-003	03/05/20 12:20
6M125525.D	MBS84538	03/05/20 12:44
6M125526.D	AD16014-002	03/05/20 13:08
6M125527.D	AD16020-002(MS)	03/05/20 13:32
6M125528.D	AD16011-007	03/05/20 13:56
6M125529.D	15969-003	03/05/20 14:20
6M125530.D	AD16020-002(MSD	03/05/20 14:43
6M125531.D	MBS84540	03/05/20 15:07
6M125532.D	BLK-DI	03/05/20 15:31
6M125533.D	AD16013-001	03/05/20 15:55
6M125534.D	AD16013-002	03/05/20 16:19
6M125535.D	AD16013-003	03/05/20 16:43
6M125536.D	AD16013-004	03/05/20 17:06
6M125537.D	AD16013-005	03/05/20 17:30
6M125538.D	AD16013-006	03/05/20 17:54
6M125539.D	AD16013-007	03/05/20 18:18
6M125540.D	AD16013-008	03/05/20 18:42
6M125541.D	AD16001-001	03/05/20 19:06
6M125542.D	AD16001-004	03/05/20 19:29
6M125543.D	AD16001-005	03/05/20 19:53
6M125544.D	AD16022-002	03/05/20 20:17
6M125545.D	AD16001-003	03/05/20 20:41
6M125546.D	AD16011-009	03/05/20 21:04
6M125547.D	AD16011-008	03/05/20 21:28
6M125548.D	BLK	03/05/20 21:52
6M125549.D	BLK	03/05/20 22:16

Data Path : G:\GcMsData\2020\GCMS_6\Data\03-05-20\
Data File : 6M125516.D
Acq On : 05 Mar 2020 09:18
Operator : WP
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 34 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GCMSDATA\2020\GCMS_2\METHODQT\2M_A0211A.M
Title : @GCMS_2,ug,624,8260
Last Update : Wed Feb 19 09:18:54 2020





Spectrum Information: Average of 7.361 to 7.421 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.8	994	PASS
75	95	30	60	49.6	2631	PASS
95	95	100	100	100.0	5299	PASS
96	95	5	9	7.7	409	PASS
173	174	0.00	2	1.8	88	PASS
174	95	50	100	91.8	4862	PASS
175	174	5	9	7.8	380	PASS
176	174	95	101	95.8	4656	PASS
177	176	5	9	6.9	322	PASS

0030402 0038

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M125081.D	CAL @ 20 PPB	02/23/20 22:07	2	6M125080.D	CAL @ 5 PPB	02/23/20 21:44
3	6M125079.D	CAL @ 2 PPB	02/23/20 21:20	4	6M125082.D	CAL @ 50 PPB	02/23/20 22:31
5	6M125083.D	CAL @ 100 PPB	02/23/20 22:55	6	6M125086.D	CAL @ 250 PPB	02/24/20 01:15
7	6M125087.D	CAL @ 500 PPB	02/24/20 01:41	8	6M125078.D	CAL @ 1 PPB	02/23/20 20:56
9	6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2553	0.2806	0.2925	0.2602	0.2677	0.2267	0.2773	-----	-----	0.266	1.65	0.992	0.998	8.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluorometha	1	0	Avg	0.1520	0.1576	0.1886	0.1555	0.1635	0.1292	0.1819	-----	-----	0.161	1.64	0.980	0.995	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Avg	0.1668	0.1888	0.1872	0.1614	0.1650	0.1556	0.1696	-----	-----	0.171	1.81	0.998	1.00	7.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.1300	0.1496	0.1580	0.1308	0.1423	0.1604	0.1874	-----	-----	0.151	2.23	0.994	1.00	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.2236	0.2442	0.2401	0.2242	0.2301	0.1922	0.2407	-----	-----	0.228	1.92	0.990	0.997	7.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.1402	0.1521	0.1497	0.1357	0.1413	0.1278	0.1500	-----	-----	0.142	2.32	0.995	0.999	6.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethan	1	0	Avg	0.3386	0.3664	0.3793	0.3430	0.3691	0.2973	0.4161	-----	-----	0.359	2.56	0.980	0.996	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1338	0.1360	0.1507	0.1325	0.1363	0.1297	0.1193	-----	-----	0.134	2.80	0.998	1.00	7.0	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.2354	0.2643	0.2720	0.2402	0.2466	0.2260	0.2469	-----	-----	0.247	2.84	0.998	0.999	6.5	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1557	0.1625	0.1631	0.1508	0.1637	0.1284	0.1858	-----	-----	0.159	3.01	0.977	0.995	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Avg	0.2108	0.2376	0.2347	0.2107	0.2143	0.2055	0.2019	-----	-----	0.217	3.43	1.00	1.00	6.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0252	0.0243	0.0250	0.0255	0.0257	0.0261	0.0250	-----	-----	0.0253	2.92	0.999	1.00	2.4		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.0633	0.0676	0.0611	0.0627	0.0638	0.0645	0.0626	-----	-----	0.0637	3.64	1.00	1.00	3.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Qua	0.1310	0.1147	0.1011	0.1869	0.2280	0.2269	0.2471	-----	-----	0.177	3.16	0.998	1.00	34		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	Avg	0.0479	0.0530	0.0570	0.0477	0.0470	0.0503	0.0525	-----	-----	0.0508	3.05	0.999	1.00	7.1	0.10 a	100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	0.5163	0.5708	0.6236	0.5339	0.5627	0.4871	0.6090	-----	-----	0.558	3.23	0.990	0.998	8.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0219	0.0231	0.0253	0.0217	0.0228	0.0241	0.0257	-----	-----	0.0236	3.51	0.999	1.00	6.7		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.2001	0.2104	0.2068	0.2085	0.2207	0.1572	0.2406	-----	-----	0.206	3.90	0.970	0.992	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.4238	0.4229	0.4357	0.4356	0.4503	0.4172	0.4219	-----	-----	0.430	4.06	1.00	1.00	2.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1-Dichloroethene	1	0	Avg	0.2577	0.2647	0.2843	0.2636	0.2726	0.2296	0.3000	-----	-----	0.268	3.01	0.987	0.997	8.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.1436	0.1520	0.1602	0.1428	0.1484	0.1479	0.1411	-----	-----	0.148	3.33	0.999	1.00	4.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.4804	0.4928	0.4821	0.4875	0.5046	0.4929	0.4585	0.5204	-----	0.490	3.67	0.999	1.00	3.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.3426	0.3504	0.3658	0.3408	0.3557	0.3258	0.3572	-----	-----	0.348	4.03	0.998	0.999	3.8	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,2-Dichloroethe	1	0	Avg	0.2142	0.2276	0.2727	0.2188	0.2267	0.2073	0.2377	-----	-----	0.229	3.67	0.996	0.999	9.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.4733	0.4727	0.4763	0.4856	0.5123	0.4900	0.4698	-----	-----	0.483	4.32	0.999	1.00	3.1	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,2-Dichloroethene	1	0	Avg	0.3250	0.3478	0.3513	0.3282	0.3430	0.3173	0.3442	-----	-----	0.337	4.43	0.999	1.00	3.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.1350	0.1490	0.1503	0.1421	0.1385	0.1264	0.1175	-----	-----	0.137	4.59	0.998	1.00	8.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2,2-Dichloropropane	1	0	Avg	0.2780	0.2926	0.2879	0.2906	0.3100	0.2766	0.3390	-----	-----	0.296	4.44	0.992	0.999	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.1791	0.1682	0.1753	0.1715	0.1771	0.1747	0.1689	-----	-----	0.174	4.46	1.00	1.00	2.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dioxane	1	0	Avg	0.0030	0.0027	0.0030	0.0030	0.0030	0.0032	0.0036	-----	-----	0.00311	5.52	0.998	1.00	8.3		1000.	250.0	100.0	2500.	5000.	12500	25000		
1,1-Dichloropropene	1	0	Avg	0.2747	0.2938	0.2784	0.2834	0.3000	0.2551	0.3211	-----	-----	0.287	4.85	0.990	0.998	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.3917	0.4647	0.5624	0.3818	0.3972	0.3730	0.3880	-----	-----	0.423	4.63	1.00	1.00	16	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethan	1	0	Avg	0.2647	0.2666	0.2696	0.2639	0.2720	0.2766	0.2688	0.2722	0.2714	0.270	4.73	-1	-1	1.5		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2619	0.2703	0.2737	0.2626	0.2853	0.2065	0.3061	-----	-----	0.267	4.80	0.974	0.993	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloroethane-d4	1	0	Avg	0.1313	0.1329	0.1285	0.1358	0.1352	0.1323	0.1251	0.1367	0.1365	0.133	4.93	-1	-1	3.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.2692	0.2812	0.2854	0.2662	0.2799	0.2676	0.2609	0.3067	-----	0.277	4.98	1.00	1.00	5.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
2-Butanone	1	0	Avg	0.0780	0.0758	0.0874	0.0795	0.0805	0.0846	0.0869	-----	-----	0.0819	4.43	1.00	1.00	5.5	0.10 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,1-Trichloroethane	1	0	Avg	0.3256	0.3530	0.3534	0.3398	0.3571	0.3183	0.3920	-----	-----	0.349	4.76	0.992	0.998	7.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.2912	0.3077	0.2841	0.2983	0.3224	0.2826	0.3702	-----	-----	0.308	4.86	0.987	0.998	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.3893	0.3956	0.3929	0.4086	0.4280	0.4113	0.3958	-----	-----	0.403	4.05	0.999	1.00	3.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethan	1	0	Avg	0.2672	0.2821	0.2510	0.2751	0.2914	0.2856	0.2855	-----	-----	0.277	5.59	1.00	1.00	5.0	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.244
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0030402 0039

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M125081.D	CAL @ 20 PPB	02/23/20 22:07	2	6M125080.D	CAL @ 5 PPB	02/23/20 21:44
3	6M125079.D	CAL @ 2 PPB	02/23/20 21:20	4	6M125082.D	CAL @ 50 PPB	02/23/20 22:31
5	6M125083.D	CAL @ 100 PPB	02/23/20 22:55	6	6M125086.D	CAL @ 250 PPB	02/24/20 01:15
7	6M125087.D	CAL @ 500 PPB	02/24/20 01:41	8	6M125078.D	CAL @ 1 PPB	02/23/20 20:56
9	6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2834	0.2784	0.2954	0.2952	0.3186	0.2417	0.3434	-----	-----	0.294	5.45	0.979	0.994	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1580	0.1537	0.1611	0.1606	0.1656	0.1641	0.1516	0.1763	-----	0.161	5.53	0.998	1.00	4.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.1900	0.1995	0.1777	0.1908	0.1994	0.1833	0.1813	-----	-----	0.189	5.46	1.00	1.00	4.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.2506	0.2669	0.2614	0.2563	0.2649	0.2459	0.2788	-----	-----	0.261	5.33	0.997	0.999	4.2	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	0.7959	0.8558	0.8335	0.8078	0.8484	0.7753	0.8491	0.7839	-----	0.819	4.98	0.998	0.999	3.9	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.4824	0.4701	0.4481	0.4924	0.5177	0.5030	0.4690	-----	-----	0.483	5.02	0.999	1.00	4.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.3395	0.3369	0.3208	0.3624	0.3839	0.3690	0.3437	-----	-----	0.351	4.98	0.998	1.00	6.2	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.1633	0.1673	0.1512	0.1765	0.1775	0.1736	0.1614	-----	-----	0.167	5.48	0.999	1.00	5.7	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethan	1	0	Avg	0.2751	0.2564	0.2579	0.2903	0.3066	0.3128	0.2956	-----	-----	0.285	6.45	0.999	1.00	7.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylethe	1	0	Avg	0.1320	0.1222	0.1262	0.1399	0.1482	0.1426	0.1286	-----	-----	0.134	5.73	0.997	1.00	7.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropen	1	0	Avg	0.3857	0.3659	0.3184	0.3964	0.4239	0.4059	0.3996	-----	-----	0.385	5.83	1.00	1.00	8.9	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprop	1	0	Avg	0.3397	0.3074	0.3191	0.3651	0.3886	0.3857	0.3697	-----	-----	0.354	6.12	0.999	1.00	9.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	Avg	0.1680	0.1614	0.1603	0.1821	0.1887	0.1814	0.1716	-----	-----	0.173	6.14	0.999	1.00	6.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2351	0.2497	0.2338	0.2378	0.2472	0.2370	0.2202	-----	-----	0.237	6.22	0.998	1.00	4.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2440	0.2437	0.2419	0.2613	0.2625	0.2558	0.2368	0.2436	-----	0.249	6.53	0.998	1.00	3.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.3909	0.3843	0.4069	0.3957	0.4054	0.3883	0.3682	-----	-----	0.391	6.32	0.999	1.00	3.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.2010	0.1985	0.2204	0.2084	0.2204	0.2207	0.2050	-----	-----	0.211	5.90	0.999	1.00	4.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	Avg	0.1522	0.1462	0.1592	0.1587	0.1633	0.1638	0.1582	-----	-----	0.157	6.33	1.00	1.00	4.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.2576	0.2737	0.2682	0.2676	0.2732	0.2444	0.3004	-----	-----	0.269	6.32	0.992	0.998	6.4	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.2585	1.2526	1.2612	1.2725	1.2751	1.2940	1.2609	1.2604	1.2820	1.27	5.98	-1	-1	1.1		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.6836	0.7113	0.7127	0.6747	0.7010	0.6496	0.7228	0.7084	-----	0.696	6.02	0.998	0.999	3.5	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2567	0.2568	0.2478	0.2721	0.2850	0.2789	0.2893	-----	-----	0.270	6.81	1.00	1.00	5.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	0.7775	0.8354	0.8129	0.7902	0.8045	0.7489	0.7869	-----	-----	0.794	6.78	0.999	1.00	3.5	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	Avg	0.6563	0.6344	0.6060	0.7069	0.5678	0.7026	0.6599	-----	-----	0.648	7.02	0.998	0.998	7.7	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	Avg	0.5490	0.5375	0.5832	0.5961	0.4779	0.5805	0.5440	-----	-----	0.553	7.14	0.998	0.998	7.2	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Avg	0.3303	0.3226	0.2795	0.3628	0.3053	0.4033	0.3779	-----	-----	0.340	7.23	0.997	0.997	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	0.6297	0.6201	0.6105	0.6219	0.4986	0.5945	0.7018	0.7027	-----	0.623	6.82	0.993	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5433	0.5599	0.5313	0.5732	0.4507	0.5499	0.5162	-----	-----	0.532	7.45	0.998	0.998	7.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.7957	0.8011	0.8081	0.7999	0.6091	0.7952	0.7867	0.7922	0.8165	0.778	7.40	-1	-1	8.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.5185	1.4610	1.4049	1.4986	1.1941	1.4484	1.5401	-----	-----	1.44	7.10	0.998	0.999	8.1	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	0.9156	0.9062	0.9385	0.9281	0.7209	0.8379	0.9536	0.8717	0.8423	0.879	6.88	0.995	0.999	8.2	0.10	40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.8989	0.8778	0.9170	0.8884	0.7005	0.8313	0.9287	0.9049	-----	0.868	7.10	0.996	0.999	8.5	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2187	0.1940	0.2470	0.2429	0.1959	0.2291	0.2638	-----	-----	0.227	7.47	0.994	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.1718	1.1952	1.1647	1.1999	1.2068	1.1064	1.1432	-----	-----	1.17	8.02	1.00	1.00	3.1	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.1923	1.2990	1.2592	1.2063	1.1983	1.1076	1.1169	-----	-----	1.20	8.07	1.00	1.00	5.8	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.1008	1.1473	1.1768	1.1161	1.0745	1.0396	1.0421	-----	-----	1.10	8.29	1.00	1.00	4.7	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	2.3224	2.3011	2.2871	2.3459	1.8777	2.0966	2.5083	2.1576	-----	2.24	7.30	0.992	1.00	8.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0176	0.0207	0.0259	0.0174	0.0140	0.0191	0.0214	-----	-----	0.0195	7.37	0.994	0.999	19		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	0.8011	0.6978	0.7194	0.8200	0.6783	0.6734	1.0027	-----	-----	0.770	7.47	0.973	0.998	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.6598	0.6774	0.6353	0.6971	0.5574	0.7057	0.6805	-----	-----	0.659	7.49	0.998	0.998	7.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	1.3825	1.3747	1.4402	1.3740	1.2044	1.2626	1.3588	-----	-----	1.34	7.59	0.998	1.00	6.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Avg Rsd: 7.244

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note:
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0030402 0040

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M125081.D	CAL @ 20 PPB	02/23/20 22:07	2	6M125080.D	CAL @ 5 PPB	02/23/20 21:44
3	6M125079.D	CAL @ 2 PPB	02/23/20 21:20	4	6M125082.D	CAL @ 50 PPB	02/23/20 22:31
5	6M125083.D	CAL @ 100 PPB	02/23/20 22:55	6	6M125086.D	CAL @ 250 PPB	02/24/20 01:15
7	6M125087.D	CAL @ 500 PPB	02/24/20 01:41	8	6M125078.D	CAL @ 1 PPB	02/23/20 20:56
9	6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.5959	2.4705	2.4429	2.5604	2.1542	2.3068	2.6088	-----	-----	2.45	7.58	0.996	1.00	6.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	1.3365	1.3349	1.3304	1.3499	1.3011	1.3056	1.3735	-----	-----	1.33	7.65	0.999	1.00	1.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	2.6646	2.6324	2.6282	2.7384	2.2323	2.3996	2.8292	2.6186	-----	2.59	7.53	0.994	0.999	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.3153	1.3418	1.2902	1.3317	1.0911	1.2349	1.3614	-----	-----	1.28	7.50	0.997	1.00	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzen	1	0	Avg	1.6381	1.6443	1.6311	1.7261	1.5245	1.6005	1.8960	1.5549	-----	1.65	7.61	0.994	1.00	7.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.4803	0.4719	0.4325	0.5071	0.4805	0.5001	0.5016	-----	-----	0.482	7.61	1.00	1.00	5.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	1.9832	1.9285	1.9373	2.0091	1.8901	1.7654	2.1713	1.7665	-----	1.93	7.81	0.992	0.999	6.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.9370	1.9873	1.9147	1.9773	1.9734	1.8133	2.0159	1.7418	-----	1.92	7.83	0.998	0.999	5.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	2.5197	2.4355	2.3499	2.5745	2.6210	2.2400	2.8070	2.1794	-----	2.47	7.93	0.991	0.998	8.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	2.1679	2.0796	2.0221	2.2332	2.2834	1.9895	2.3985	1.9010	-----	2.13	8.00	0.993	0.998	7.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.2914	2.1521	2.1739	2.3856	2.2855	2.1205	2.5629	1.9682	-----	2.24	8.24	0.993	0.999	8.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.2214	1.1689	1.1787	1.2597	1.3082	1.1544	1.3798	-----	-----	1.24	8.23	0.994	0.998	6.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylbe	1	0	Avg	1.8454	1.7991	1.6881	1.9144	1.9585	1.8199	1.9919	-----	-----	1.86	8.68	0.998	0.999	5.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1422	0.1403	0.1364	0.1504	0.1500	0.1639	0.1639	-----	-----	0.150	8.74	1.00	1.00	7.3	0.05	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	Qua	0.0694	0.0833	0.1317	0.0685	0.0602	0.0733	0.0813	-----	-----	0.0811	9.18	0.996	1.00	29		200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.4621	0.3885	0.3852	0.4587	0.3795	0.4011	0.5232	-----	-----	0.428	9.32	0.986	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzen	1	0	Avg	0.7792	0.7835	0.7999	0.7915	0.6594	0.7622	0.7287	-----	-----	0.758	9.24	0.999	0.999	6.5	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzen	1	0	Avg	0.7412	0.7545	0.7773	0.7522	0.6112	0.7044	0.6834	-----	-----	0.718	9.54	0.999	0.999	7.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	1.8455	1.9156	2.0917	1.9063	1.6187	1.8346	1.7757	2.0985	-----	1.89	9.40	0.999	0.999	8.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.244
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M125518.D **Instrument:** GCMS 6

Cont Calibration Date/Time 3/5/2020 9:58:00 AM **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.12	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.65	48.23	50	20	0.1	0.266	0.256	3.53	
Dichlorodifluoromethane	1	0		1.64	42.65	50	20	0.1	0.161	0.138	14.70	
Chloromethane	1	0		1.81	48.94	50	20	0.1	0.171	0.167	2.12	
Bromomethane	1	0		2.23	47.53	50	20	0.1	0.151	0.144	4.94	
Vinyl Chloride	1	0		1.92	52.57	50	20	0.1	0.228	0.240	5.14	
Chloroethane	1	0		2.32	53.01	50	20	0.1	0.142	0.151	6.03	
Trichlorofluoromethane	1	0		2.56	54.14	50	20	0.1	0.359	0.388	8.28	
Ethyl ether	1	0		2.80	48.40	50	20	0.5	0.134	0.130	3.21	
Furan	1	0		2.84	49.62	50	20	0.5	0.247	0.245	0.77	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	53.29	50	20	0.1	0.159	0.169	6.57	
Methylene Chloride	1	0		3.43	52.23	50	20	0.1	0.217	0.226	4.47	
Acrolein	1	0		2.92	244.02	250	20		0.025	0.025	2.39	
Acrylonitrile	1	0		3.64	50.44	50	20		0.064	0.064	0.88	
Iodomethane	1	0		3.16	45.32	50	20		0.177	0.191	9.36	
Acetone	1	0		3.05	269.08	250	20	0.1	0.051	0.055	7.63	
Carbon Disulfide	1	0		3.23	44.85	50	20	0.1	0.558	0.500	10.30	
t-Butyl Alcohol	1	0		3.50	231.38	250	20		0.024	0.022	7.45	
n-Hexane	1	0		3.91	56.94	50	20		0.206	0.235	13.88	
Di-isopropyl-ether	1	0		4.06	52.57	50	20		0.430	0.452	5.14	
1,1-Dichloroethene	1	0		3.02	53.02	50	20	0.1	0.268	0.284	6.03	
Methyl Acetate	1	0		3.34	49.09	50	20	0.1	0.148	0.145	1.82	
Methyl-t-butyl ether	1	0		3.67	49.26	50	20	0.1	0.490	0.483	1.47	
1,1-Dichloroethane	1	0		4.03	51.82	50	20	0.2	0.348	0.361	3.65	
trans-1,2-Dichloroethene	1	0		3.68	50.31	50	20	0.1	0.229	0.231	0.63	
Ethyl-t-butyl ether	1	0		4.32	50.88	50	20	0.5	0.483	0.491	1.77	
cis-1,2-Dichloroethene	1	0		4.44	52.28	50	20	0.1	0.337	0.352	4.56	
Bromochloromethane	1	0		4.59	52.72	50	20		0.137	0.144	5.44	
2,2-Dichloropropane	1	0		4.45	54.47	50	20		0.296	0.323	8.95	
Ethyl acetate	1	0		4.46	50.81	50	20		0.174	0.176	1.63	
1,4-Dioxane	1	0		5.52	2441.07	2500	20		0.003	0.003	2.36	
1,1-Dichloropropene	1	0		4.85	54.00	50	20		0.287	0.310	8.01	
Chloroform	1	0		4.63	48.47	50	20	0.2	0.423	0.410	3.06	
Dibromofluoromethane	1	0	S	4.73	29.92	75	**		0.270	0.269	0.28	
Cyclohexane	1	0		4.80	55.45	50	20	0.1	0.267	0.296	10.91	
1,2-Dichloroethane-d4	1	0	S	4.93	30.59	75	**		0.133	0.135	1.96	
1,2-Dichloroethane	1	0		4.98	53.09	50	20	0.1	0.277	0.294	6.18	
2-Butanone	1	0		4.43	49.40	50	20	0.1	0.082	0.081	1.19	
1,1,1-Trichloroethane	1	0		4.76	52.17	50	20	0.1	0.349	0.364	4.33	
Carbon Tetrachloride	1	0		4.86	52.38	50	20	0.1	0.308	0.323	4.77	
Vinyl Acetate	1	0		4.06	52.15	50	20		0.403	0.420	4.30	
Bromodichloromethane	1	0		5.59	51.86	50	20	0.2	0.277	0.287	3.72	
Methylcyclohexane	1	0		5.45	58.41	50	20	0.1	0.294	0.343	16.82	
Dibromomethane	1	0		5.53	49.99	50	20		0.161	0.161	0.02	
1,2-Dichloropropane	1	0		5.46	52.57	50	20	0.1	0.189	0.199	5.14	
Trichloroethene	1	0		5.33	51.03	50	20	0.2	0.261	0.266	2.07	
Benzene	1	0		4.98	51.87	50	20	0.5	0.819	0.849	3.75	
tert-Amyl methyl ether	1	0		5.02	50.86	50	20		0.483	0.492	1.72	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	49.42	50	20	0.5	0.351	0.347	1.16	
Methyl methacrylate	1	0		5.48	50.01	50	20	0.5	0.167	0.167	0.03	
Dibromochloromethane	1	0		6.45	48.42	50	20	0.1	0.285	0.276	3.16	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M125518.D **Instrument:** GCMS 6

Cont Calibration Date/Time 3/5/2020 9:58:00 AM **Method:** EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	51.31	50	20		0.134	0.138	2.63	
cis-1,3-Dichloropropene	1	0		5.83	50.97	50	20	0.2	0.385	0.393	1.94	
trans-1,3-Dichloropropene	1	0		6.12	50.52	50	20	0.1	0.354	0.357	1.04	
Ethyl methacrylate	1	0		6.14	52.09	50	20	0.5	0.173	0.181	4.18	
1,1,2-Trichloroethane	1	0		6.22	49.63	50	20	0.1	0.237	0.236	0.73	
1,2-Dibromoethane	1	0		6.53	50.62	50	20	0.1	0.249	0.252	1.23	
1,3-Dichloropropane	1	0		6.32	50.10	50	20		0.391	0.392	0.21	
4-Methyl-2-Pentanone	1	0		5.90	49.18	50	20	0.1	0.211	0.207	1.63	
2-Hexanone	1	0		6.33	49.05	50	20	0.1	0.157	0.154	1.90	
Tetrachloroethene	1	0		6.32	49.40	50	20	0.2	0.269	0.266	1.19	
Toluene-d8	1	0	S	5.98	29.09	75	**		1.269	1.230	3.02	
Toluene	1	0		6.02	49.41	50	20	0.4	0.696	0.687	1.18	
1,1,1,2-Tetrachloroethane	1	0		6.81	49.02	50	20		0.270	0.264	1.97	
Chlorobenzene	1	0		6.78	49.59	50	20	0.5	0.794	0.787	0.82	
1,4-Dichlorobenzene-d4	1	0	I	8.06	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	51.02	50	20	0.5	0.648	0.661	2.04	
n-Amyl acetate	1	0		7.14	51.41	50	20	0.5	0.553	0.568	2.83	
Bromoform	1	0		7.23	46.42	50	20	0.1	0.340	0.316	7.17	
Ethylbenzene	1	0		6.82	46.86	50	20	0.1	0.623	0.583	6.28	
1,1,2,2-Tetrachloroethane	1	0		7.45	51.62	50	20	0.1	0.532	0.549	3.25	
Bromofluorobenzene	1	0	S	7.40	29.28	75	**		0.778	0.760	2.39	
Styrene	1	0		7.10	51.23	50	20	0.3	1.438	1.473	2.46	
m&p-Xylenes	1	0		6.88	99.75	100	20	0.1	0.879	0.877	0.25	
o-Xylene	1	0		7.10	49.68	50	20	0.3	0.868	0.863	0.63	
trans-1,4-Dichloro-2-butene	1	0		7.47	52.80	50	20		0.227	0.240	5.61	
1,3-Dichlorobenzene	1	0		8.02	51.93	50	20	0.6	1.170	1.215	3.86	
1,4-Dichlorobenzene	1	0		8.07	50.38	50	20	0.5	1.197	1.206	0.76	
1,2-Dichlorobenzene	1	0		8.29	51.13	50	20	0.4	1.100	1.125	2.26	
Isopropylbenzene	1	0		7.29	52.25	50	20	0.1	2.237	2.338	4.49	
Cyclohexanone	1	0		7.37	237.15	250	20		0.019	0.018	5.14	
Camphene	1	0		7.47	55.33	50	20		0.770	0.853	10.67	
1,2,3-Trichloropropane	1	0		7.49	51.29	50	20		0.659	0.676	2.57	
2-Chlorotoluene	1	0		7.59	52.41	50	20		1.342	1.407	4.83	
p-Ethyltoluene	1	0		7.58	55.80	50	20		2.449	2.732	11.59	
4-Chlorotoluene	1	0		7.65	52.39	50	20		1.333	1.397	4.78	
n-Propylbenzene	1	0		7.53	53.89	50	20		2.593	2.794	7.77	
Bromobenzene	1	0		7.49	52.04	50	20		1.281	1.333	4.08	
1,3,5-Trimethylbenzene	1	0		7.61	52.39	50	20		1.652	1.731	4.77	
Butyl methacrylate	1	0		7.61	52.18	50	20	0.5	0.482	0.503	4.36	
t-Butylbenzene	1	0		7.81	52.97	50	20		1.931	2.046	5.94	
1,2,4-Trimethylbenzene	1	0		7.83	51.59	50	20		1.920	1.981	3.18	
sec-Butylbenzene	1	0		7.93	54.83	50	20		2.466	2.704	9.67	
4-Isopropyltoluene	1	0		8.00	54.57	50	20		2.134	2.330	9.14	
n-Butylbenzene	1	0		8.24	58.54	50	20		2.243	2.626	17.08	
p-Diethylbenzene	1	0		8.22	56.95	50	20		1.239	1.411	13.90	
1,2,4,5-Tetramethylbenzene	1	0		8.68	53.61	50	20		1.860	1.994	7.22	
1,2-Dibromo-3-Chloropropane	1	0		8.74	46.90	50	20	0.05	0.150	0.140	6.21	
Camphor	1	0		9.18	511.47	500	20		0.081	0.066	2.29	
Hexachlorobutadiene	1	0		9.32	55.52	50	20		0.428	0.476	11.04	
1,2,4-Trichlorobenzene	1	0		9.24	53.76	50	20	0.2	0.758	0.815	7.53	
1,2,3-Trichlorobenzene	1	0		9.54	52.04	50	20		0.718	0.747	4.08	
Naphthalene	1	0		9.40	49.48	50	20		1.886	1.866	1.05	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M125081.D Method: EPA 8260C

Analysis Date/Time: 02/23/20 22:07

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	159546	5.12	124450	6.76	69382	8.06								
Eval File Area Limit:	79773-319092		62225-248900		34691-138764									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									

Data File	Sample#						
6M125077.D	CAL @ 0.5 PPB	151887	5.12	120158	6.76	67309	8.06
6M125078.D	CAL @ 1 PPB	154994	5.12	123871	6.76	70478	8.06
6M125079.D	CAL @ 2 PPB	154384	5.12	123476	6.76	69697	8.06
6M125080.D	CAL @ 5 PPB	158016	5.12	126110	6.76	70537	8.06
6M125081.D	CAL @ 20 PPB	159546	5.12	124450	6.76	69382	8.06
6M125082.D	CAL @ 50 PPB	163481	5.12	127228	6.76	70870	8.06
6M125083.D	CAL @ 100 PPB	158680	5.12	124939	6.76	92711	8.06
6M125084.D	250 PPB	150843	5.12	116069	6.76	8410A	8.06
6M125085.D	BLK	159451	5.12	130457	6.76	73556	8.06
6M125086.D	CAL @ 250 PPB	147779	5.12	116069	6.76	67636	8.06
6M125087.D	CAL @ 500 PPB	125318	5.12	98866	6.76	56101	8.06
6M125088.D	BLK	164378	5.12	133920	6.76	76435	8.06
6M125089.D	BLK	163682	5.12	132847	6.76	75738	8.06
6M125090.D	BLK	161197	5.12	132409	6.76	75994	8.06
6M125091.D	BLK	164423	5.12	133817	6.76	75754	8.06
6M125092.D	ICV	157797	5.12	124699	6.76	69695	8.06
6M125093.D	BLK	164984	5.12	135452	6.76	76592	8.06
6M125094.D	BLK	166949	5.12	133384	6.76	76384	8.06
6M125095.D	BLK	157486	5.12	129179	6.76	72113	8.06
6M125096.D	BLK	154221	5.12	127350	6.76	71601	8.06
6M125097.D	DAILY BLANK	157967	5.12	130204	6.76	73009	8.06

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 6M125518.D Method: EPA 8260C

Analysis Date/Time: 03/05/20 09:58

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	158553	5.12	130371	6.76	78038	8.06								
Eval File Area Limit:	79276-317106		65186-260742		39019-156076									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									
Data File Sample#														
6M125519.D BLK	167851	5.12	143526	6.76	79375	8.06								
6M125520.D DAILY BLANK	169653	5.12	143399	6.76	80692	8.06								
6M125521.D AD15826-006	165290	5.12	137889	6.76	76751	8.06								
6M125522.D AD16020-002	168411	5.12	144635	6.76	83569	8.06								
6M125523.D AD16003-002	157514	5.12	125508	6.76	58441	8.06								
6M125524.D AD16020-003	163457	5.12	140962	6.76	79769	8.06								
6M125525.D MBS84538	163711	5.12	133806	6.76	78752	8.06								
6M125526.D AD16014-002	130358	5.12	103019	6.76	2520A	8.06								
6M125527.D AD16020-002(MS)	202800	5.12	167563	6.76	88169	8.06								
6M125528.D AD16011-007	150032	5.13	108085	6.76	47413	8.06								
6M125529.D 15969-003	161037	5.12	133539	6.76	7176A	8.06								
6M125530.D AD16020-002(MSD)	201976	5.12	170693	6.76	92275	8.06								
6M125531.D MBS84540	195636	5.12	157761	6.76	93842	8.06								
6M125532.D BLK-DI	175336	5.12	149513	6.76	81886	8.06								
6M125533.D AD16013-001	152365	5.12	121876	6.76	61446	8.06								
6M125534.D AD16013-002	146243	5.12	120727	6.76	67194	8.06								
6M125535.D AD16013-003	146438	5.12	119027	6.76	62443	8.06								
6M125536.D AD16013-004	158767	5.12	123213	6.76	55688	8.06								
6M125537.D AD16013-005	133570	5.12	95045	6.76	39672	8.06								
6M125538.D AD16013-006	140264	5.12	115178	6.76	58520	8.06								
6M125539.D AD16013-007	165686	5.12	141372	6.76	79772	8.06								
6M125540.D AD16013-008	163234	5.12	139363	6.76	78746	8.06								
6M125541.D AD16001-001	162072	5.12	139299	6.76	78706	8.06								
6M125542.D AD16001-004	154351	5.12	131522	6.76	75616	8.06								
6M125543.D AD16001-005	137953	5.12	115291	6.76	65268	8.06								
6M125544.D AD16022-002	155384	5.12	131031	6.76	75933	8.06								
6M125545.D AD16001-003	7137A	5.13	4200A	6.76	2409A	8.06								
6M125546.D AD16011-009	219774	5.12	160108	6.76	64684	8.06								
6M125547.D AD16011-008	147498	5.12	118408	6.76	57147	8.06								
6M125548.D BLK	168164	5.13	141163	6.76	78865	8.06								
6M125549.D BLK	163758	5.12	139774	6.76	79032	8.06								

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Base Neutral/Acid Extractable Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD16022-001
Client Id: TB-102-1 COMP
Data File: 7M105615.D
Analysis Date: 03/05/20 18:22
Date Rec/Extracted: 03/04/20-03/05/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 77

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.043	U	205-99-2	Benzo[b]fluoranthene	0.043	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.043	U	191-24-2	Benzo[g,h,i]perylene	0.043	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.043	U	207-08-9	Benzo[k]fluoranthene	0.043	U
95-95-4	2,4,5-Trichlorophenol	0.043	U	111-91-1	bis(2-Chloroethoxy)methan	0.043	U
88-06-2	2,4,6-Trichlorophenol	0.043	U	111-44-4	bis(2-Chloroethyl)ether	0.011	U
120-83-2	2,4-Dichlorophenol	0.011	U	108-60-1	bis(2-chloroisopropyl)ether	0.043	U
105-67-9	2,4-Dimethylphenol	0.011	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.043	U
51-28-5	2,4-Dinitrophenol	0.22	U	85-68-7	Butylbenzylphthalate	0.043	U
121-14-2	2,4-Dinitrotoluene	0.043	U	105-60-2	Caprolactam	0.043	U
606-20-2	2,6-Dinitrotoluene	0.043	U	86-74-8	Carbazole	0.043	U
91-58-7	2-Chloronaphthalene	0.043	U	218-01-9	Chrysene	0.043	U
95-57-8	2-Chlorophenol	0.043	U	53-70-3	Dibenzo[a,h]anthracene	0.043	U
91-57-6	2-Methylnaphthalene	0.043	U	132-64-9	Dibenzofuran	0.011	U
95-48-7	2-Methylphenol	0.011	U	84-66-2	Diethylphthalate	0.043	U
88-74-4	2-Nitroaniline	0.043	U	131-11-3	Dimethylphthalate	0.043	U
88-75-5	2-Nitrophenol	0.043	U	84-74-2	Di-n-butylphthalate	0.011	U
106-44-5	3&4-Methylphenol	0.011	U	117-84-0	Di-n-octylphthalate	0.043	U
91-94-1	3,3'-Dichlorobenzidine	0.043	U	206-44-0	Fluoranthene	0.043	U
99-09-2	3-Nitroaniline	0.043	U	86-73-7	Fluorene	0.043	U
534-52-1	4,6-Dinitro-2-methylphenol	0.22	U	118-74-1	Hexachlorobenzene	0.043	U
101-55-3	4-Bromophenyl-phenylether	0.043	U	87-68-3	Hexachlorobutadiene	0.043	U
59-50-7	4-Chloro-3-methylphenol	0.043	U	77-47-4	Hexachlorocyclopentadiene	0.043	U
106-47-8	4-Chloroaniline	0.011	U	67-72-1	Hexachloroethane	0.043	U
7005-72-3	4-Chlorophenyl-phenylether	0.043	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.043	U
100-01-6	4-Nitroaniline	0.043	U	78-59-1	Isophorone	0.043	U
100-02-7	4-Nitrophenol	0.043	U	91-20-3	Naphthalene	0.011	U
83-32-9	Acenaphthene	0.043	U	98-95-3	Nitrobenzene	0.043	U
208-96-8	Acenaphthylene	0.043	U	621-64-7	N-Nitroso-di-n-propylamine	0.011	U
98-86-2	Acetophenone	0.043	U	86-30-6	n-Nitrosodiphenylamine	0.043	U
120-12-7	Anthracene	0.043	U	87-86-5	Pentachlorophenol	0.22	U
1912-24-9	Atrazine	0.043	U	85-01-8	Phenanthrene	0.043	U
100-52-7	Benzaldehyde	0.043	U	108-95-2	Phenol	0.043	U
56-55-3	Benzo[a]anthracene	0.043	U	129-00-0	Pyrene	0.043	U
50-32-8	Benzo[a]pyrene	0.043	U				

Worksheet #: 547918 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD16022-001
Client Id: TB-102-1 COMP
Data File: 7M105615.D
Analysis Date: 03/05/20 18:22
Date Rec/Extracted: 03/04/20-03/05/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 77
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	5.3 JAB
2	5131-66-8	2-Propanol, 1-butoxy-	5.23	0.11 J
3	80-05-7	Phenol, 4,4'-(1-methylethylidene)bis-	11.37	0.11 J

Worksheet #: 547918 *Total Tentatively Identified Concentration* 5.5

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

0030402 0048

SampleID : AD16022-001 Operator : AB/JB Qt Meth : 7M_0305.M
Data File: 7M105615.D Sam Mult : 1 Vial# : 14 Qt On : 03/06/20 08:05
Acq On : 03/ 5/20 18:22 Misc : S,BNA Qt Upd On: 03/05/20 13:12

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-0520\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.575	96	33075	40.00 ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.813	152	61488	40.00 ng	0.00
31) Naphthalene-d8	6.818	136	232397	40.00 ng	0.00
50) Acenaphthene-d10	8.240	164	138630	40.00 ng	-0.01
77) Phenanthrene-d10	9.697	188	246264	40.00 ng	0.00
91) Chrysene-d12	12.746	240	221929	40.00 ng	0.00
103) Perylene-d12	14.362	264	217460	40.00 ng	-0.02
System Monitoring Compounds					
11) 2-Fluorophenol	4.632	112	108116	61.66 ng	0.00
Spiked Amount 100.000			Recovery = 61.66%		
16) Phenol-d5	5.507	99	151508	66.90 ng	0.00
Spiked Amount 100.000			Recovery = 66.90%		
32) Nitrobenzene-d5	6.254	128	27532	27.39 ng	0.00
Spiked Amount 50.000			Recovery = 54.78%		
55) 2-Fluorobiphenyl	7.652	172	143910	32.17 ng	-0.01
Spiked Amount 50.000			Recovery = 64.34%		
80) 2,4,6-Tribromophenol	8.980	330	52548	79.60 ng	0.00
Spiked Amount 100.000			Recovery = 79.60%		
94) Terphenyl-d14	11.500	244	162281	45.89 ng	0.00
Spiked Amount 50.000			Recovery = 91.78%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.813		418495	40.00 ng	--
2) Naphthalene-d8	6.818		531274	40.00 ng	--
3) Acenaphthene-d10	8.240		608622	40.00 ng	--
4) Phenanthrene-d10	9.697		643024	40.00 ng	--
5) Chrysene-d12	12.746		641342	40.00 ng	--
6) Perylene-d12	14.362		623490	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.290		2577745	246.38 ng	64
2) 5131-66-8	5.230		54965	5.25 ng	78
3) 80-05-7	11.370		81674	5.09 ng	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

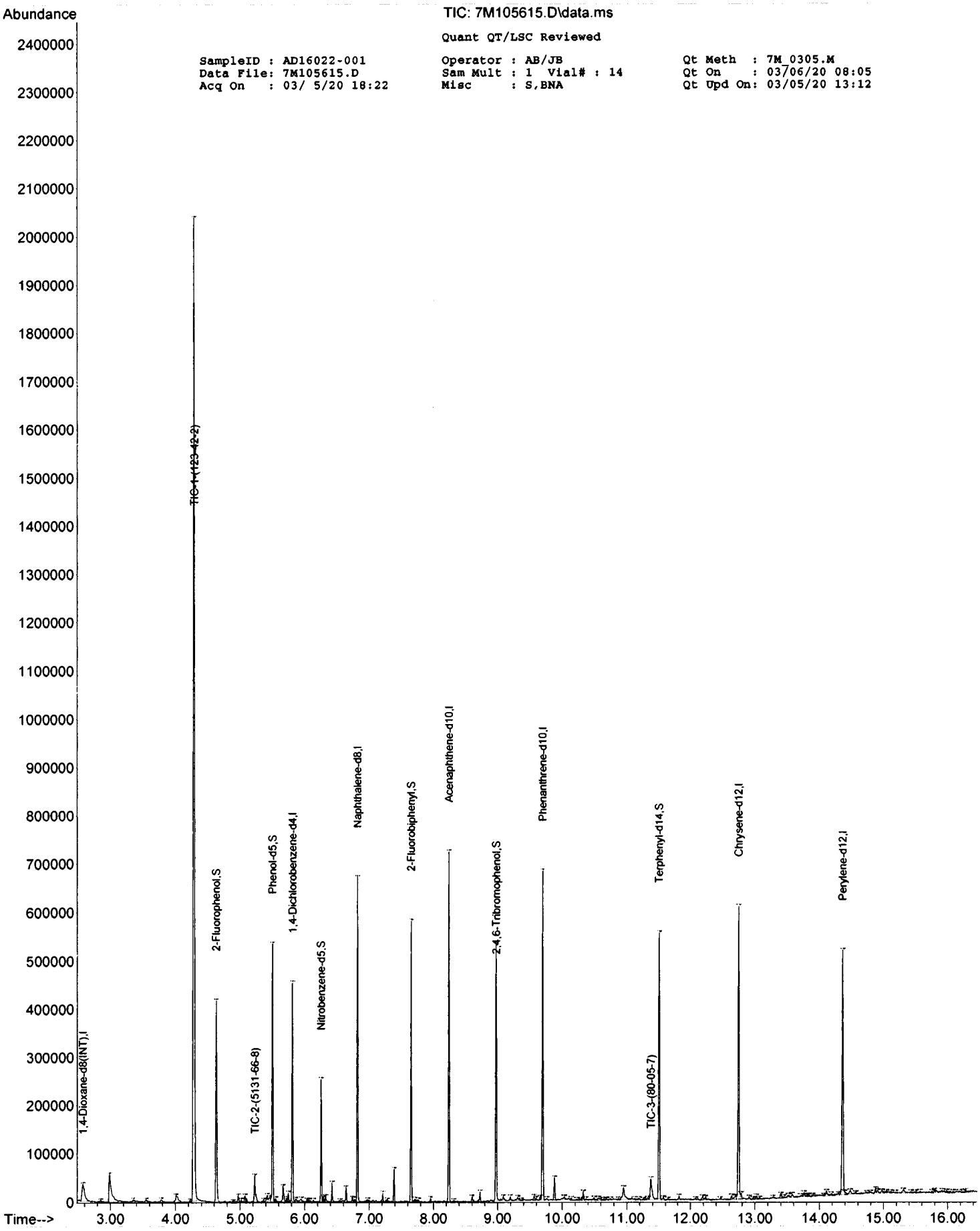
TIC: 7M105615.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD16022-001
Data File: 7M105615.D
Acq On : 03/ 5/20 18:22

Operator : AB/JB
Sam Mult : 1 Vial# : 14
Misc : S,BNA

Qt Meth : 7M_0305.M
Qt On : 03/06/20 08:05
Qt Upd On: 03/05/20 13:12



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB83709
Client Id:
Data File: 7M105607.D
Analysis Date: 03/05/20 15:17
Date Rec/Extracted: NA-03/05/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	131-11-3	Dimethylphthalate	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.0083	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.0083	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 547918 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB83709
Client Id:
Data File: 7M105607.D
Analysis Date: 03/05/20 15:17
Date Rec/Extracted: NA-03/05/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.30	6.2 JA

Worksheet #: 547918

Total Tentatively Identified Concentration 6.2

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : SMB83709 Operator : AB/JB Qt Meth : 7M_0305.M
Data File: 7M105607.D Sam Mult : 1 Vial# : 6 Qt On : 03/06/20 08:04
Acq On : 03/ 5/20 15:17 Misc : S,BNA Qt Upd On: 03/05/20 13:12

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-0520\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.569	96	56812	40.00 ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.813	152	103179	40.00 ng	0.00
31) Naphthalene-d8	6.818	136	395162	40.00 ng	0.00
50) Acenaphthene-d10	8.239	164	239928	40.00 ng	-0.01
77) Phenanthrene-d10	9.697	188	437516	40.00 ng	0.00
91) Chrysene-d12	12.746	240	396074	40.00 ng	0.00
103) Perylene-d12	14.368	264	380141	40.00 ng	-0.01
System Monitoring Compounds					
11) 2-Fluorophenol	4.638	112	256942	85.31 ng	0.00
Spiked Amount 100.000			Recovery = 85.31%		
16) Phenol-d5	5.507	99	341131	87.69 ng	0.00
Spiked Amount 100.000			Recovery = 87.69%		
32) Nitrobenzene-d5	6.259	128	66403	38.86 ng	0.00
Spiked Amount 50.000			Recovery = 77.72%		
55) 2-Fluorobiphenyl	7.652	172	305051	39.40 ng	-0.01
Spiked Amount 50.000			Recovery = 78.80%		
80) 2,4,6-Tribromophenol	8.980	330	91490	78.01 ng	0.00
Spiked Amount 100.000			Recovery = 78.01%		
94) Terphenyl-d14	11.500	244	271801	43.07 ng	0.00
Spiked Amount 50.000			Recovery = 86.14%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.813		695095	40.00 ng	--
2) Naphthalene-d8	6.818		911908	40.00 ng	--
3) Acenaphthene-d10	8.239		1065580	40.00 ng	--
4) Phenanthrene-d10	9.697		1154050	40.00 ng	--
5) Chrysene-d12	12.746		1153830	40.00 ng	--
6) Perylene-d12	14.368		1081260	40.00 ng	--
Library Search Compounds					
1) 123-42-2	4.300		6421167	369.51 ng	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

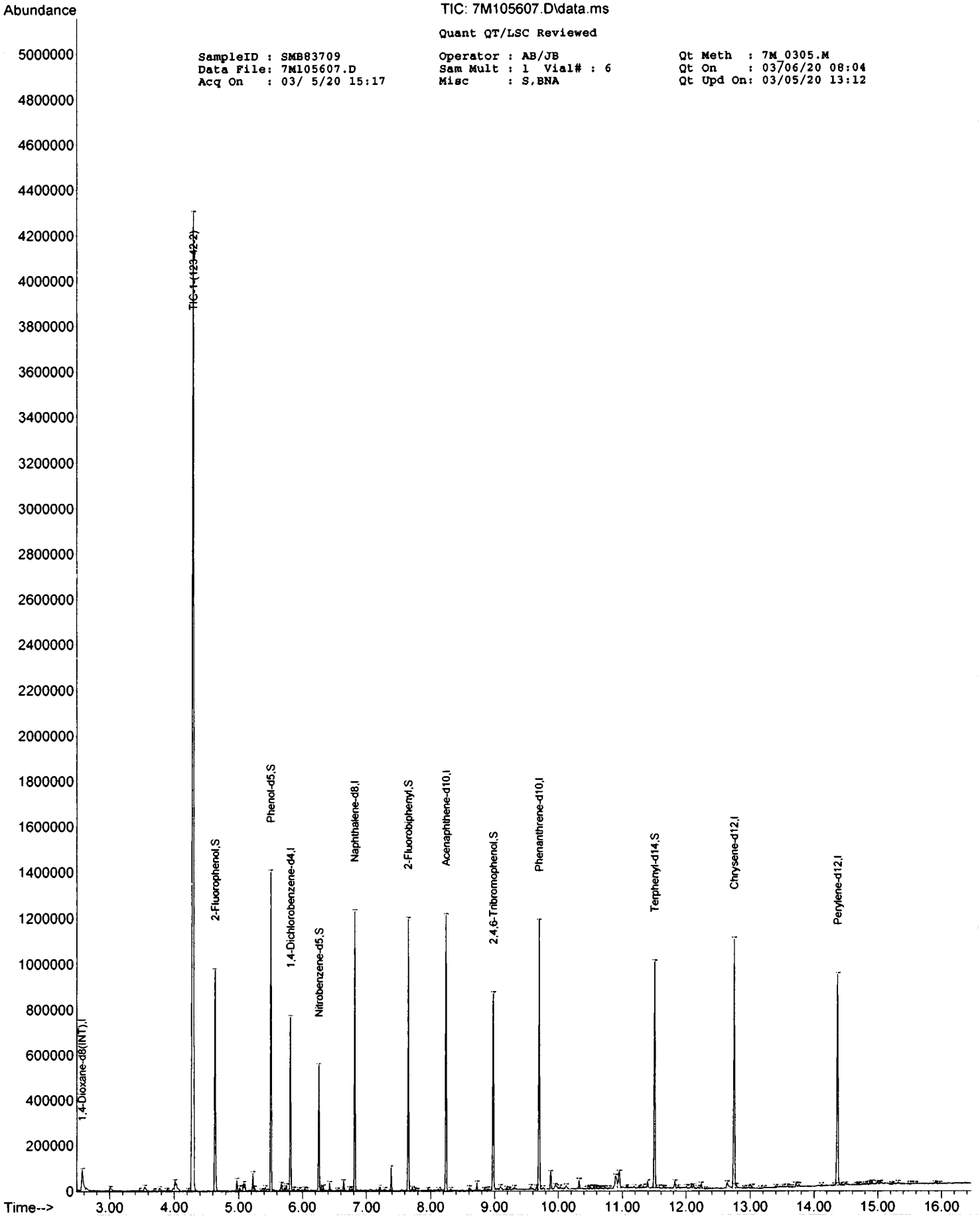
TIC: 7M105607.D\data.ms

Quant QT/LSC Reviewed

SampleID : SMB83709
Data File: 7M105607.D
Acq On : 03/ 5/20 15:17

Operator : AB/JB
Sam Mult : 1 Vial# : 6
Misc : S,BNA

Qt Meth : 7M_0305.M
Qt On : 03/06/20 08:04
Qt Upd On: 03/05/20 13:12



FORM2

Surrogate Recovery

Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
7M105607.D	SMB83709	S	03/05/20 15:17	1		85	88	78	79	78	86
7M105615.D	AD16022-001	S	03/05/20 18:22	1		62	67	55	64	80	92
7M105611.D	AD15667-007	S	03/05/20 16:50	1		80	83	74	80	85	92
7M105612.D	AD15667-007(MS)	S	03/05/20 17:13	1		86	86	78	83	87	93
7M105613.D	AD15667-007(MSD)	S	03/05/20 17:35	1		79	82	70	79	83	86
9M98637.D	SMB83709(MS)	S	03/05/20 14:34	1		70	73	82	81	93	89

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270D

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83709

	Data File	Sample ID:	Analysis Date
Spike or Dup:	9M98637.D	SMB83709(MS)	3/5/2020 2:34:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	27.6027	0	50	55	1	150
N-Nitrosodimethylamine	1	29.1651	0	50	58	50	130
Benzaldehyde	1	34.9982	0	50	70	20	220
Aniline	1	25.7069	0	50	51	20	150
Pentachloroethane	1	35.0383	0	50	70	50	130
bis(2-Chloroethyl)ether	1	31.8127	0	50	64	50	130
Phenol	1	71.1025	0	100	71	20	150
2-Chlorophenol	1	72.7254	0	100	73	50	130
N-Decane	1	24.3308	0	50	49	20	130
1,3-Dichlorobenzene	1	30.657	0	50	61	60	130
1,4-Dichlorobenzene	1	34.9929	0	50	70	60	130
1,2-Dichlorobenzene	1	34.5712	0	50	69	50	130
Benzyl alcohol	1	39.9974	0	50	80	20	130
bis(2-chloroisopropyl)ether	1	32.2075	0	50	64	40	130
2-Methylphenol	1	82.4873	0	100	82	50	130
Acetophenone	1	40.6352	0	50	81	50	130
Hexachloroethane	1	33.5304	0	50	67	50	130
N-Nitroso-di-n-propylamine	1	35.7192	0	50	71	40	130
3&4-Methylphenol	1	85.9197	0	100	86	70	130
Nitrobenzene	1	39.8915	0	50	80	70	130
Isophorone	1	37.0087	0	50	74	60	130
2-Nitrophenol	1	87.6772	0	100	88	70	130
2,4-Dimethylphenol	1	89.0598	0	100	89	40	130
Benzoic Acid	1	87.3966	0	100	87	20	130
bis(2-Chloroethoxy)methane	1	38.8665	0	50	78	60	130
2,4-Dichlorophenol	1	87.3768	0	100	87	70	130
1,2,4-Trichlorobenzene	1	38.4649	0	50	77	50	130
Naphthalene	1	37.4775	0	50	75	50	130
4-Chloroaniline	1	34.3285	0	50	69	10	150
Hexachlorobutadiene	1	38.7574	0	50	78	60	130
Caprolactam	1	46.6147	0	50	93	50	130
4-Chloro-3-methylphenol	1	90.3319	0	100	90	50	130
2-Methylnaphthalene	1	41.6958	0	50	83	70	130
1-Methylnaphthalene	1	46.0286	0	50	92	70	130
1,1'-Biphenyl	1	45.9921	0	50	92	60	130
1,2,4,5-Tetrachlorobenzene	1	42.8863	0	50	86	70	130
Hexachlorocyclopentadiene	1	40.9877	0	50	82	20	160
2,4,6-Trichlorophenol	1	99.6392	0	100	100	70	130
2,4,5-Trichlorophenol	1	81.6669	0	100	82	70	130
2-Chloronaphthalene	1	40.9947	0	50	82	70	130
1,4-Dimethylnaphthalene	1	44.3911	0	50	89	70	130
Diphenyl Ether	1	45.2789	0	50	91	70	130
2-Nitroaniline	1	44.784	0	50	90	50	130
Coumarin	1	46.9939	0	50	94	70	130
Acenaphthylene	1	42.8718	0	50	86	70	130
Dimethylphthalate	1	41.3655	0	50	83	70	130
2,6-Dinitrotoluene	1	41.4439	0	50	83	70	130
Acenaphthene	1	42.2521	0	50	85	50	130
3-Nitroaniline	1	38.4649	0	50	77	10	130
2,4-Dinitrophenol	1	92.6732	0	100	93	20	150
Dibenzofuran	1	41.9594	0	50	84	70	130
2,4-Dinitrotoluene	1	45.7141	0	50	91	40	130
4-Nitrophenol	1	99.9595	0	100	100	20	150
2,3,4,6-Tetrachlorophenol	1	88.1258	0	100	88	70	130
Fluorene	1	42.5109	0	50	85	50	130
4-Chlorophenyl-phenylether	1	42.6485	0	50	85	70	130
Diethylphthalate	1	42.0744	0	50	84	70	130
4-Nitroaniline	1	44.6724	0	50	89	50	130
Atrazine	1	44.6857	0	50	89	50	130
4,6-Dinitro-2-methylphenol	1	103.3588	0	100	103	40	130
n-Nitrosodiphenylamine	1	36.9279	0	50	74	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83709

Method: 8270D | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	41.0436	0	50	82	70	130
4-Bromophenyl-phenylether	1	44.6146	0	50	89	70	130
Hexachlorobenzene	1	42.2966	0	50	85	70	130
N-Octadecane	1	48.4711	0	50	97	70	130
Pentachlorophenol	1	92.4424	0	100	92	40	130
Phenanthrene	1	43.9247	0	50	88	70	130
Anthracene	1	42.5689	0	50	85	70	130
Carbazole	1	46.1458	0	50	92	70	130
Di-n-butylphthalate	1	47.9846	0	50	96	70	130
Fluoranthene	1	44.9095	0	50	90	70	130
Pyrene	1	44.4499	0	50	89	50	130
Benzidine	1	5.6831	0	50	11	1	130
Butylbenzylphthalate	1	46.133	0	50	92	50	130
3,3'-Dichlorobenzidine	1	37.2019	0	50	74	10	130
Benzo[a]anthracene	1	44.3031	0	50	89	70	130
Chrysene	1	38.7325	0	50	77	60	130
bis(2-Ethylhexyl)phthalate	1	47.3683	0	50	95	70	130
Di-n-octylphthalate	1	46.3117	0	50	93	70	130
Benzo[b]fluoranthene	1	45.5027	0	50	91	70	130
Benzo[k]fluoranthene	1	44.9963	0	50	90	70	130
Benzo[a]pyrene	1	45.0867	0	50	90	70	130
Indeno[1,2,3-cd]pyrene	1	42.933	0	50	86	70	130
Dibenzo[a,h]anthracene	1	43.1401	0	50	86	60	130
Benzo[g,h,i]perylene	1	43.0617	0	50	86	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83709

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M105612.D	AD15667-007(MS)	3/5/2020 5:13:00 PM
Non Spike(If applicable):	7M105611.D	AD15667-007	3/5/2020 4:50:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	39.3738	0	50	79	1	150
N-Nitrosodimethylamine	1	35.2444	0	50	70	50	130
Benzaldehyde	**1**	**41.541**	**0**	**50**	**83**	**20**	**220**
Aniline	1	36.5638	0	50	73	20	150
Pentachloroethane	1	41.8909	0	50	84	50	130
bis(2-Chloroethyl)ether	**1**	**37.008**	**0**	**50**	**74**	**50**	**130**
N-Decane	1	32.5761	0	50	65	20	130
1,3-Dichlorobenzene	1	35.4309	0	50	71	60	130
1,4-Dichlorobenzene	1	35.406	0	50	71	60	130
1,2-Dichlorobenzene	1	34.4002	0	50	69	50	130
Benzyl alcohol	1	39.9045	0	50	80	20	130
bis(2-chloroisopropyl)ether	**1**	**34.0951**	**0**	**50**	**68**	**40**	**130**
Acetophenone	**1**	**39.7865**	**0**	**50**	**80**	**50**	**130**
Hexachloroethane	**1**	**34.3326**	**0**	**50**	**69**	**50**	**130**
N-Nitroso-di-n-propylamine	**1**	**37.6448**	**7.8736**	**50**	**60**	**40**	**130**
Nitrobenzene	**1**	**39.6367**	**0**	**50**	**79**	**70**	**130**
Isophorone	**1**	**36.8825**	**20.7726**	**50**	**32***	**60**	**130**
Benzoic Acid	1	76.8607	0	100	77	20	130
bis(2-Chloroethoxy)methane	**1**	**39.1782**	**0**	**50**	**78**	**60**	**130**
1,2,4-Trichlorobenzene	1	37.9147	0	50	76	50	130
Naphthalene	**1**	**35.0831**	**0**	**50**	**70**	**50**	**130**
4-Chloroaniline	**1**	**37.2086**	**0**	**50**	**74**	**10**	**150**
Hexachlorobutadiene	**1**	**35.9703**	**0**	**50**	**72**	**60**	**130**
Caprolactam	**1**	**43.5334**	**0**	**50**	**87**	**50**	**130**
2-Methylnaphthalene	**1**	**38.1351**	**0**	**50**	**76**	**70**	**130**
1-Methylnaphthalene	1	44.6344	0	50	89	70	130
1,1'-Biphenyl	**1**	**42.4178**	**0**	**50**	**85**	**60**	**130**
1,2,4,5-Tetrachlorobenzene	**1**	**41.0039**	**0**	**50**	**82**	**70**	**130**
Hexachlorocyclopentadiene	**1**	**28.9019**	**0**	**50**	**58**	**20**	**160**
2-Chloronaphthalene	**1**	**40.3192**	**0**	**50**	**81**	**70**	**130**
1,4-Dimethylnaphthalene	1	43.8484	0	50	88	70	130
Diphenyl Ether	1	43.867	0	50	88	70	130
2-Nitroaniline	**1**	**46.6543**	**0**	**50**	**93**	**50**	**130**
Coumarin	1	43.2428	0	50	86	70	130
Acenaphthylene	**1**	**41.8427**	**0**	**50**	**84**	**70**	**130**
Dimethylphthalate	**1**	**41.0033**	**0**	**50**	**82**	**70**	**130**
2,6-Dinitrotoluene	**1**	**40.8822**	**0**	**50**	**82**	**70**	**130**
Acenaphthene	**1**	**41.2674**	**0**	**50**	**83**	**50**	**130**
3-Nitroaniline	**1**	**42.2574**	**0**	**50**	**85**	**70**	**130**
Dibenzofuran	**1**	**40.4943**	**0**	**50**	**81**	**70**	**130**
2,4-Dinitrotoluene	**1**	**41.4573**	**11.7634**	**50**	**59**	**40**	**130**
Fluorene	**1**	**42.2643**	**0**	**50**	**85**	**50**	**130**
4-Chlorophenyl-phenylether	**1**	**39.7555**	**0**	**50**	**80**	**70**	**130**
Diethylphthalate	**1**	**40.5031**	**0**	**50**	**81**	**70**	**130**
4-Nitroaniline	**1**	**42.3377**	**0**	**50**	**85**	**50**	**130**
Atrazine	**1**	**41.197**	**0**	**50**	**82**	**50**	**130**
n-Nitrosodiphenylamine	**1**	**35.3618**	**0**	**50**	**71**	**50**	**130**
1,2-Diphenylhydrazine	1	46.3627	0	50	93	70	130
4-Bromophenyl-phenylether	**1**	**42.8026**	**0**	**50**	**86**	**70**	**130**
Hexachlorobenzene	**1**	**41.2084**	**0**	**50**	**82**	**70**	**130**
N-Octadecane	1	50.2966	0	50	101	70	130
Phenanthrene	**1**	**47.0936**	**5.9781**	**50**	**82**	**70**	**130**
Anthracene	**1**	**42.1816**	**0**	**50**	**84**	**70**	**130**
Carbazole	**1**	**42.8332**	**0**	**50**	**86**	**70**	**130**
Di-n-butylphthalate	**1**	**41.0224**	**0**	**50**	**82**	**70**	**130**
Fluoranthene	**1**	**41.8594**	**0**	**50**	**84**	**70**	**130**
Pyrene	**1**	**47.706**	**2.8798**	**50**	**90**	**50**	**130**
Benzidine	1	5.1708	0	50	10	1	130
Butylbenzylphthalate	**1**	**46.9159**	**0**	**50**	**94**	**50**	**130**
3,3'-Dichlorobenzidine	**1**	**36.6284**	**0**	**50**	**73**	**10**	**130**
Benzo[a]anthracene	**1**	**42.9386**	**0**	**50**	**86**	**70**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83709

Method: 8270D | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chrysene	1	37.9564	0	50	76	60	130
bis(2-Ethylhexyl)phthalate	1	45.361	0	50	91	70	130
Di-n-octylphthalate	1	45.2669	0	50	91	70	130
Benzo[b]fluoranthene	1	42.5935	0	50	85	70	130
Benzo[k]fluoranthene	1	44.5618	0	50	89	70	130
Benzo[a]pyrene	1	44.0666	0	50	88	70	130
Indeno[1,2,3-cd]pyrene	1	39.8673	0	50	80	70	130
Dibenzo[a,h]anthracene	1	39.6605	0	50	79	60	130
Benzo[g,h,i]perylene	1	39.5793	0	50	79	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Recovery Data Laboratory Limits

QC Batch: SMB83709

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M105613.D	AD15667-007(MSD)	3/5/2020 5:35:00 PM
Non Spike(If applicable):	7M105611.D	AD15667-007	3/5/2020 4:50:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	38.7693	0	50	78	1	150
N-Nitrosodimethylamine	1	36.9597	0	50	74	50	130
Benzaldehyde	**1**	**42.4076**	**0**	**50**	**85**	**20**	**220**
Aniline	1	35.5937	0	50	71	20	150
Pentachloroethane	1	43.666	0	50	87	50	130
bis(2-Chloroethyl)ether	**1**	**40.5817**	**0**	**50**	**81**	**50**	**130**
N-Decane	1	32.2598	0	50	65	20	130
1,3-Dichlorobenzene	1	37.5344	0	50	75	60	130
1,4-Dichlorobenzene	1	34.9894	0	50	70	60	130
1,2-Dichlorobenzene	1	35.5551	0	50	71	50	130
Benzyl alcohol	1	41.5389	0	50	83	20	130
bis(2-chloroisopropyl)ether	**1**	**34.3488**	**0**	**50**	**69**	**40**	**130**
Acetophenone	**1**	**41.7911**	**0**	**50**	**84**	**50**	**130**
Hexachloroethane	**1**	**34.4474**	**0**	**50**	**69**	**50**	**130**
N-Nitroso-di-n-propylamine	**1**	**38.9717**	**7.8736**	**50**	**62**	**40**	**130**
Nitrobenzene	**1**	**41.0629**	**0**	**50**	**82**	**70**	**130**
Isophorone	**1**	**38.315**	**20.7726**	**50**	**35***	**60**	**130**
Benzoic Acid	1	80.3479	0	100	80	20	130
bis(2-Chloroethoxy)methane	**1**	**40.9813**	**0**	**50**	**82**	**60**	**130**
1,2,4-Trichlorobenzene	1	38.2463	0	50	76	50	130
Naphthalene	**1**	**39.8826**	**0**	**50**	**80**	**50**	**130**
4-Chloroaniline	**1**	**35.9713**	**0**	**50**	**72**	**10**	**150**
Hexachlorobutadiene	**1**	**36.8213**	**0**	**50**	**74**	**60**	**130**
Caprolactam	**1**	**45.0714**	**0**	**50**	**90**	**50**	**130**
2-Methylnaphthalene	**1**	**39.8484**	**0**	**50**	**80**	**70**	**130**
1-Methylnaphthalene	1	46.8363	0	50	94	70	130
1,1'-Biphenyl	**1**	**44.5554**	**0**	**50**	**89**	**60**	**130**
1,2,4,5-Tetrachlorobenzene	**1**	**43.4486**	**0**	**50**	**87**	**70**	**130**
Hexachlorocyclopentadiene	**1**	**32.9029**	**0**	**50**	**66**	**20**	**160**
2-Chloronaphthalene	**1**	**41.703**	**0**	**50**	**83**	**70**	**130**
1,4-Dimethylnaphthalene	1	46.1121	0	50	92	70	130
Diphenyl Ether	1	46.5735	0	50	93	70	130
2-Nitroaniline	**1**	**48.7218**	**0**	**50**	**97**	**50**	**130**
Coumarin	1	46.6362	0	50	93	70	130
Acenaphthylene	**1**	**44.6622**	**0**	**50**	**89**	**70**	**130**
Dimethylphthalate	**1**	**43.9207**	**0**	**50**	**88**	**70**	**130**
2,6-Dinitrotoluene	**1**	**43.9219**	**0**	**50**	**88**	**70**	**130**
Acenaphthene	**1**	**44.3491**	**0**	**50**	**89**	**50**	**130**
3-Nitroaniline	**1**	**41.3452**	**0**	**50**	**83**	**70**	**130**
Dibenzofuran	**1**	**43.1037**	**0**	**50**	**86**	**70**	**130**
2,4-Dinitrotoluene	**1**	**43.4311**	**11.7634**	**50**	**63**	**40**	**130**
Fluorene	**1**	**44.9768**	**0**	**50**	**90**	**50**	**130**
4-Chlorophenyl-phenylether	**1**	**41.8724**	**0**	**50**	**84**	**70**	**130**
Diethylphthalate	**1**	**43.281**	**0**	**50**	**87**	**70**	**130**
4-Nitroaniline	**1**	**44.7284**	**0**	**50**	**89**	**50**	**130**
Atrazine	**1**	**44.1707**	**0**	**50**	**88**	**50**	**130**
n-Nitrosodiphenylamine	**1**	**37.3915**	**0**	**50**	**75**	**50**	**130**
1,2-Diphenylhydrazine	1	44.2904	0	50	89	70	130
4-Bromophenyl-phenylether	**1**	**45.5996**	**0**	**50**	**91**	**70**	**130**
Hexachlorobenzene	**1**	**43.3656**	**0**	**50**	**87**	**70**	**130**
N-Octadecane	1	51.0483	0	50	102	70	130
Phenanthrene	**1**	**51.9994**	**5.9781**	**50**	**92**	**70**	**130**
Anthracene	**1**	**44.4576**	**0**	**50**	**89**	**70**	**130**
Carbazole	**1**	**46.3399**	**0**	**50**	**93**	**70**	**130**
Di-n-butylphthalate	**1**	**44.5928**	**0**	**50**	**89**	**70**	**130**
Fluoranthene	**1**	**44.381**	**0**	**50**	**89**	**70**	**130**
Pyrene	**1**	**48.9188**	**2.8798**	**50**	**92**	**50**	**130**
Benzidine	1	5.2822	0	50	11	1	130
Butylbenzylphthalate	**1**	**48.3605**	**0**	**50**	**97**	**50**	**130**
3,3'-Dichlorobenzidine	**1**	**35.0953**	**0**	**50**	**70**	**10**	**130**
Benzo[a]anthracene	**1**	**45.1222**	**0**	**50**	**90**	**70**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83709

Method: 8270D | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chrysene	1	39.1696	0	50	78	60	130
bis(2-Ethylhexyl)phthalate	1	47.5134	0	50	95	70	130
Di-n-octylphthalate	1	47.3429	0	50	95	70	130
Benzo[b]fluoranthene	1	44.6959	0	50	89	70	130
Benzo[k]fluoranthene	1	46.4094	0	50	93	70	130
Benzo[a]pyrene	1	45.4075	0	50	91	70	130
Indeno[1,2,3-cd]pyrene	1	42.1479	0	50	84	70	130
Dibenzo[a,h]anthracene	1	40.9293	0	50	82	60	130
Benzo[g,h,i]perylene	1	41.2901	0	50	83	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB83709

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M105613.D	AD15667-007(MSD)	3/5/2020 5:35:00 PM
Duplicate(If applicable):	7M105612.D	AD15667-007(MS)	3/5/2020 5:13:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	38.7693	39.3738	1.5	30
N-Nitrosodimethylamine	1	36.9597	35.2444	4.8	30
Benzaldehyde	**1**	**42.4076**	**41.541**	**2.1**	**30**
Aniline	1	35.5937	36.5638	2.7	30
Pentachloroethane	1	43.666	41.8909	4.1	30
bis(2-Chloroethyl)ether	**1**	**40.5817**	**37.008**	**9.2**	**30**
N-Decane	1	32.2598	32.5761	0.98	30
1,3-Dichlorobenzene	1	37.5344	35.4309	5.8	30
1,4-Dichlorobenzene	1	34.9894	35.406	1.2	40
1,2-Dichlorobenzene	1	35.5551	34.4002	3.3	30
Benzyl alcohol	1	41.5389	39.9045	4	30
bis(2-chloroisopropyl)ether	**1**	**34.3488**	**34.0951**	**0.74**	**30**
Acetophenone	**1**	**41.7911**	**39.7865**	**4.9**	**30**
Hexachloroethane	**1**	**34.4474**	**34.3326**	**0.33**	**30**
N-Nitroso-di-n-propylamine	**1**	**38.9717**	**37.6448**	**3.5**	**40**
Nitrobenzene	**1**	**41.0629**	**39.6367**	**3.5**	**30**
Isophorone	**1**	**38.315**	**36.8825**	**3.8**	**30**
Benzoic Acid	1	80.3479	76.8607	4.4	30
bis(2-Chloroethoxy)methane	**1**	**40.9813**	**39.1782**	**4.5**	**30**
1,2,4-Trichlorobenzene	1	38.2463	37.9147	0.87	40
Naphthalene	**1**	**39.8826**	**35.0831**	**13**	**40**
4-Chloroaniline	**1**	**35.9713**	**37.2086**	**3.4**	**30**
Hexachlorobutadiene	**1**	**36.8213**	**35.9703**	**2.3**	**30**
Caprolactam	**1**	**45.0714**	**43.5334**	**3.5**	**30**
2-Methylnaphthalene	**1**	**39.8484**	**38.1351**	**4.4**	**30**
1-Methylnaphthalene	1	46.8363	44.6344	4.8	30
1,1'-Biphenyl	**1**	**44.5554**	**42.4178**	**4.9**	**30**
1,2,4,5-Tetrachlorobenzene	**1**	**43.4486**	**41.0039**	**5.8**	**30**
Hexachlorocyclopentadiene	**1**	**32.9029**	**28.9019**	**13**	**30**
2-Chloronaphthalene	**1**	**41.703**	**40.3192**	**3.4**	**30**
1,4-Dimethylnaphthalene	1	46.1121	43.8484	5	30
Diphenyl Ether	1	46.5735	43.867	6	30
2-Nitroaniline	**1**	**48.7218**	**46.6543**	**4.3**	**30**
Coumarin	1	46.6362	43.2428	7.6	30
Acenaphthylene	**1**	**44.6622**	**41.8427**	**6.5**	**30**
Dimethylphthalate	**1**	**43.9207**	**41.0033**	**6.9**	**30**
2,6-Dinitrotoluene	**1**	**43.9219**	**40.8822**	**7.2**	**30**
Acenaphthene	**1**	**44.3491**	**41.2674**	**7.2**	**40**
3-Nitroaniline	**1**	**41.3452**	**42.2574**	**2.2**	**30**
Dibenzofuran	**1**	**43.1037**	**40.4943**	**6.2**	**30**
2,4-Dinitrotoluene	**1**	**43.4311**	**41.4573**	**4.7**	**40**
Fluorene	**1**	**44.9768**	**42.2643**	**6.2**	**40**
4-Chlorophenyl-phenylether	**1**	**41.8724**	**39.7555**	**5.2**	**30**
Diethylphthalate	**1**	**43.281**	**40.5031**	**6.6**	**30**
4-Nitroaniline	**1**	**44.7284**	**42.3377**	**5.5**	**30**
Atrazine	**1**	**44.1707**	**41.197**	**7**	**30**
n-Nitrosodiphenylamine	**1**	**37.3915**	**35.3618**	**5.6**	**30**
1,2-Diphenylhydrazine	1	44.2904	46.3627	4.6	30
4-Bromophenyl-phenylether	**1**	**45.5996**	**42.8026**	**6.3**	**30**
Hexachlorobenzene	**1**	**43.3656**	**41.2084**	**5.1**	**30**
N-Octadecane	1	51.0483	50.2966	1.5	30
Phenanthrene	**1**	**51.9994**	**47.0936**	**9.9**	**30**
Anthracene	**1**	**44.4576**	**42.1816**	**5.3**	**30**
Carbazole	**1**	**46.3399**	**42.8332**	**7.9**	**30**
Di-n-butylphthalate	**1**	**44.5928**	**41.0224**	**8.3**	**30**
Fluoranthene	**1**	**44.381**	**41.8594**	**5.8**	**30**
Pyrene	**1**	**48.9188**	**47.706**	**2.5**	**40**
Benzidine	1	5.2822	5.1708	2.1	30
Butylbenzylphthalate	**1**	**48.3605**	**46.9159**	**3**	**40**
3,3'-Dichlorobenzidine	**1**	**35.0953**	**36.6284**	**4.3**	**30**
Benzo[a]anthracene	**1**	**45.1222**	**42.9386**	**5**	**30**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB83709

Method: 8270D | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chrysene	1	39.1696	37.9564	3.1	30
bis(2-Ethylhexyl)phthalate	1	47.5134	45.361	4.6	30
Di-n-octylphthalate	1	47.3429	45.2669	4.5	30
Benzo[b]fluoranthene	1	44.6959	42.5935	4.8	30
Benzo[k]fluoranthene	1	46.4094	44.5618	4.1	30
Benzo[a]pyrene	1	45.4075	44.0666	3	30
Indeno[1,2,3-cd]pyrene	1	42.1479	39.8673	5.6	30
Dibenzo[a,h]anthracene	1	40.9293	39.6605	3.1	30
Benzo[g,h,i]perylene	1	41.2901	39.5793	4.2	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB83709
Blank Data File: 7M105607.D
Matrix: Soil

Blank Analysis Date: 03/05/20 15:17
Blank Extraction Date: 03/05/20
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD16022-001	7M105615.D	03/05/20 18:22
SMB83709(MS)	9M98637.D	03/05/20 14:34
AD15667-007(MSD	7M105613.D	03/05/20 17:35
AD15667-007(MS)	7M105612.D	03/05/20 17:13
AD15667-007	7M105611.D	03/05/20 16:50

Form 5

Tune Name: CAL DFTPP **Data File:** 9M98623.D
Instrument: GCMS 9 **Analysis Date:** 03/05/20 08:26
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.048 to 10.054 min

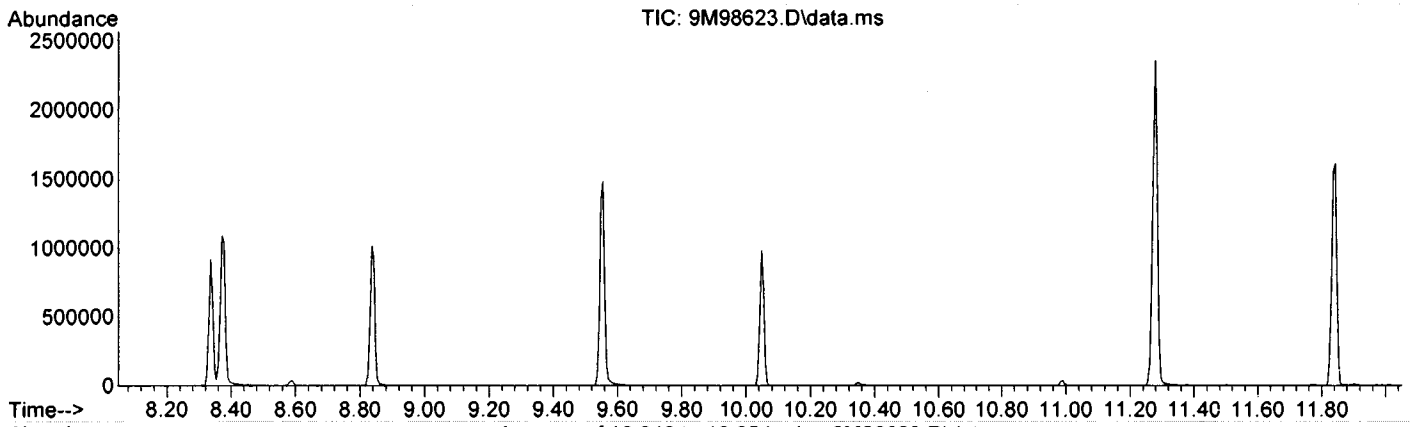
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	36.1	33816	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.1	34708	PASS
70	69	0.00	2	0.3	104	PASS
127	198	40	60	43.6	40784	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93616	PASS
199	198	5	9	6.4	5993	PASS
275	198	10	30	26.3	24612	PASS
365	198	1	100	3.5	3274	PASS
441	443	0.01	100	51.6	8161	PASS
442	198	40	100	88.9	83256	PASS
443	442	17	23	19.0	15809	PASS

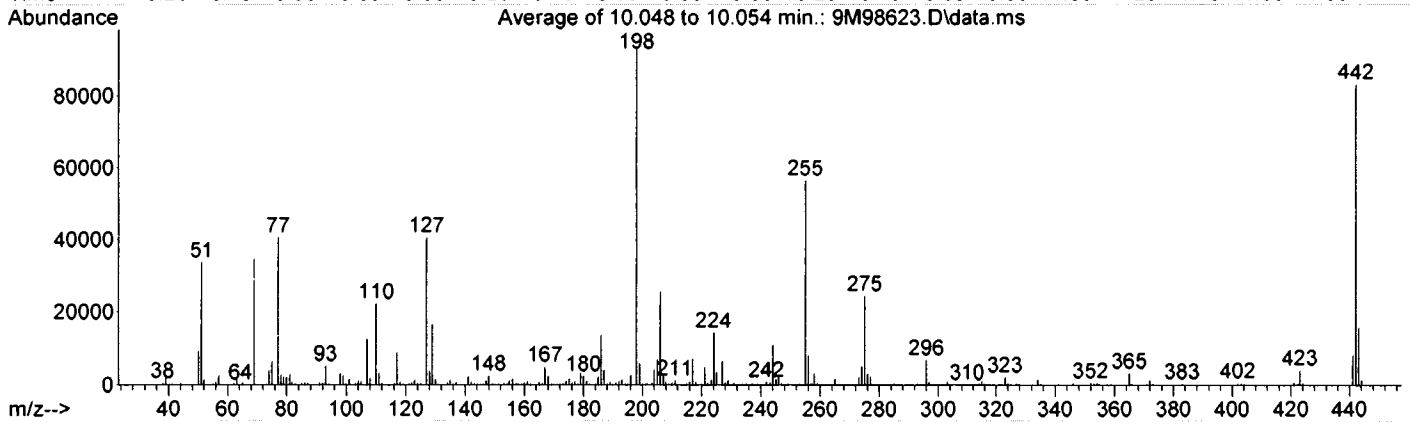
Data File	Sample Number	Analysis Date:
9M98624.D	CAL BNA@10PPM	03/05/20 08:55
9M98625.D	CAL BNA@2PPM	03/05/20 09:19
9M98626.D	CAL BNA@196PP	03/05/20 09:52
9M98627.D	CAL BNA@160PP	03/05/20 10:15
9M98628.D	CAL BNA@120PP	03/05/20 10:43
9M98629.D	CAL BNA@80PPM	03/05/20 11:07
9M98630.D	CAL BNA@20PPM	03/05/20 11:31
9M98631.D	CAL BNA@0.5PP	03/05/20 11:55
9M98632.D	CAL BNA@50PPM	03/05/20 12:20
9M98633.D	ICV BNA@50PPM	03/05/20 12:44
9M98634.D	SMB83708	03/05/20 13:08
9M98635.D	MBS DUP	03/05/20 13:44
9M98636.D	SMB83709	03/05/20 14:10
9M98637.D	SMB83709(MS)	03/05/20 14:34

Data Path : G:\GcMsData\2020\GCMS_9\Data\03-05-20\
Data File : 9M98623.D
Acq On : 5 Mar 2020 8:26
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_9\METHODQT\9M_0213.M
Title : @GCMS_9,mg,625,8270
Last Update : Thu Feb 13 13:01:38 2020





Spectrum Information: Average of 10.048 to 10.054 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	33816	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.1	34708	PASS
70	69	0.00	2	0.3	104	PASS
127	198	40	60	43.6	40784	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93616	PASS
199	198	5	9	6.4	5993	PASS
275	198	10	30	26.3	24612	PASS
365	198	1	100	3.5	3274	PASS
441	443	0.01	100	51.6	8161	PASS
442	198	40	100	88.9	83256	PASS
443	442	17	23	19.0	15809	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M105591.D
Instrument: GCMS 7 **Analysis Date:** 03/05/20 08:54
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.008 to 10.008 min

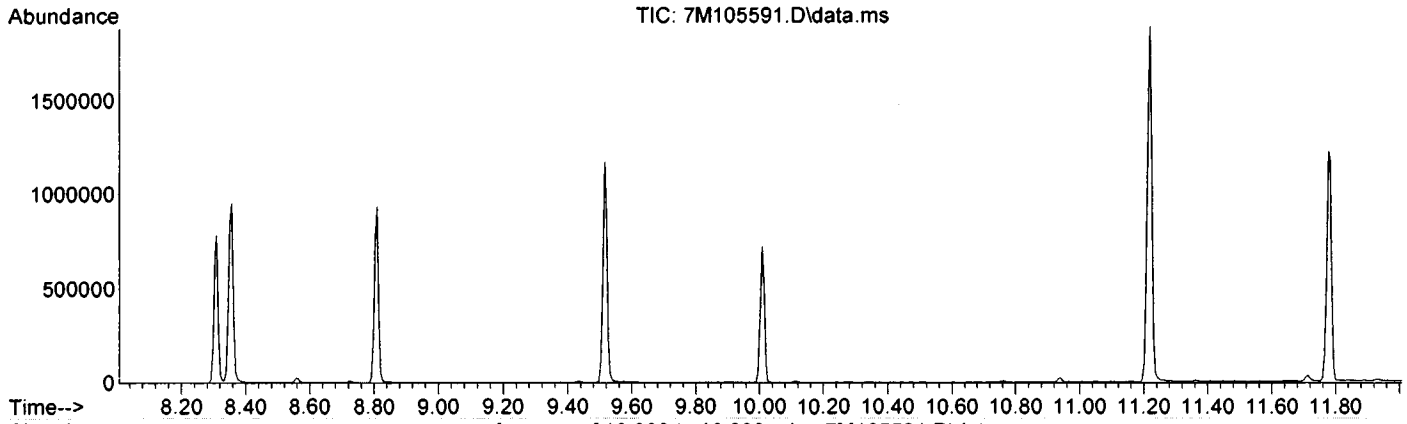
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	43.1	35096	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.3	39328	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.3	40912	PASS
197	198	0.00	1	0.9	695	PASS
198	198	100	100	100.0	81368	PASS
199	198	5	9	6.7	5489	PASS
275	198	10	30	26.3	21384	PASS
365	198	1	100	2.8	2258	PASS
441	443	0.01	100	81.1	6888	PASS
442	198	40	100	53.6	43584	PASS
443	442	17	23	19.5	8498	PASS

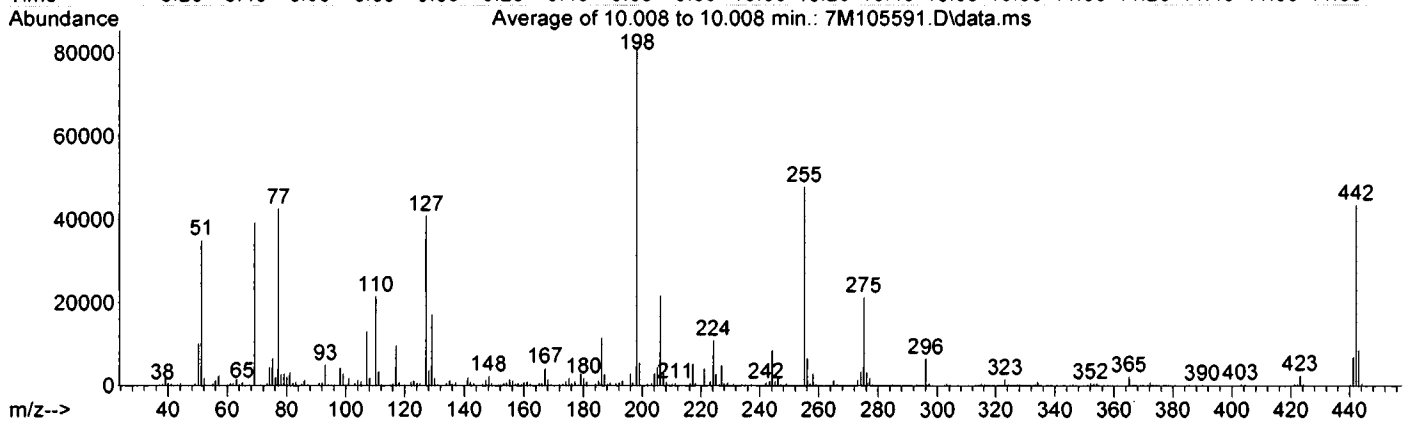
Data File	Sample Number	Analysis Date:
7M105592.D	CAL BNA@2PPM	03/05/20 09:29
7M105593.D	CAL BNA@10PPM	03/05/20 09:52
7M105594.D	CAL BNA@196PP	03/05/20 10:15
7M105595.D	CAL BNA@160PP	03/05/20 10:38
7M105596.D	CAL BNA@120PP	03/05/20 11:01
7M105597.D	CAL BNA@80PPM	03/05/20 11:25
7M105598.D	CAL BNA@20PPM	03/05/20 11:48
7M105599.D	CAL BNA@50PPM	03/05/20 12:11
7M105600.D	CAL BNA@0.5PP	03/05/20 12:34
7M105601.D	ICV BNA@50PPM	03/05/20 12:57

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-05-20\
Data File : 7M105591.D
Acq On : 5 Mar 2020 8:54
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0210.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon Feb 10 14:56:43 2020





Spectrum Information: Average of 10.008 to 10.008 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.1	35096	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.3	39328	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.3	40912	PASS
197	198	0.00	1	0.9	695	PASS
198	198	100	100	100.0	81368	PASS
199	198	5	9	6.7	5489	PASS
275	198	10	30	26.3	21384	PASS
365	198	1	100	2.8	2258	PASS
441	443	0.01	100	81.1	6888	PASS
442	198	40	100	53.6	43584	PASS
443	442	17	23	19.5	8498	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M105602.D
Instrument: GCMS 7 **Analysis Date:** 03/05/20 13:21
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.990 to 9.990 min

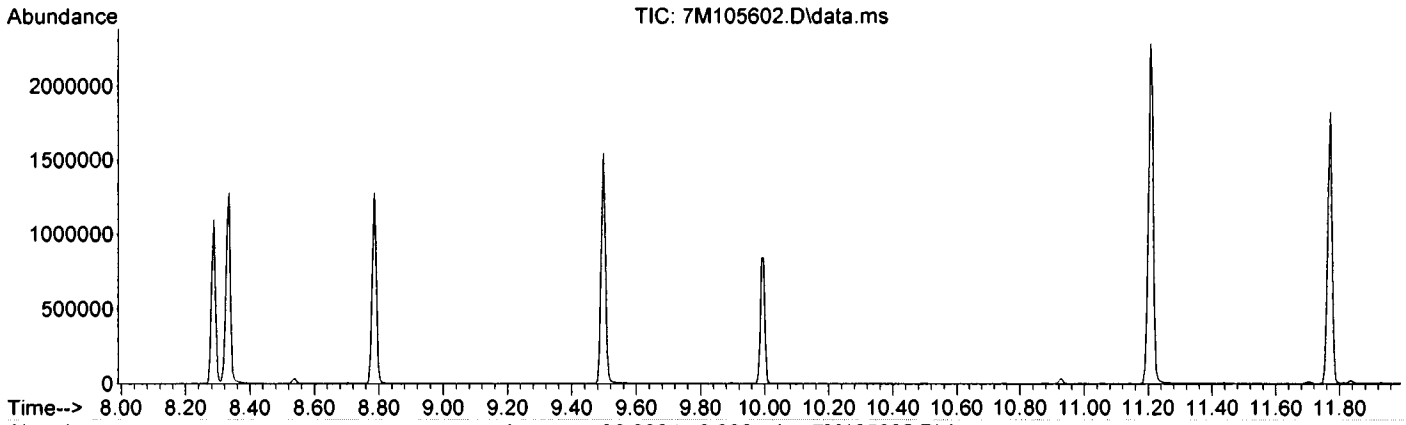
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	56.0	49184	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.9	51752	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	57.1	50096	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	87808	PASS
199	198	5	9	7.0	6117	PASS
275	198	10	30	25.0	21944	PASS
365	198	1	100	2.7	2408	PASS
441	443	0.01	100	75.7	6377	PASS
442	198	40	100	48.4	42488	PASS
443	442	17	23	19.8	8419	PASS

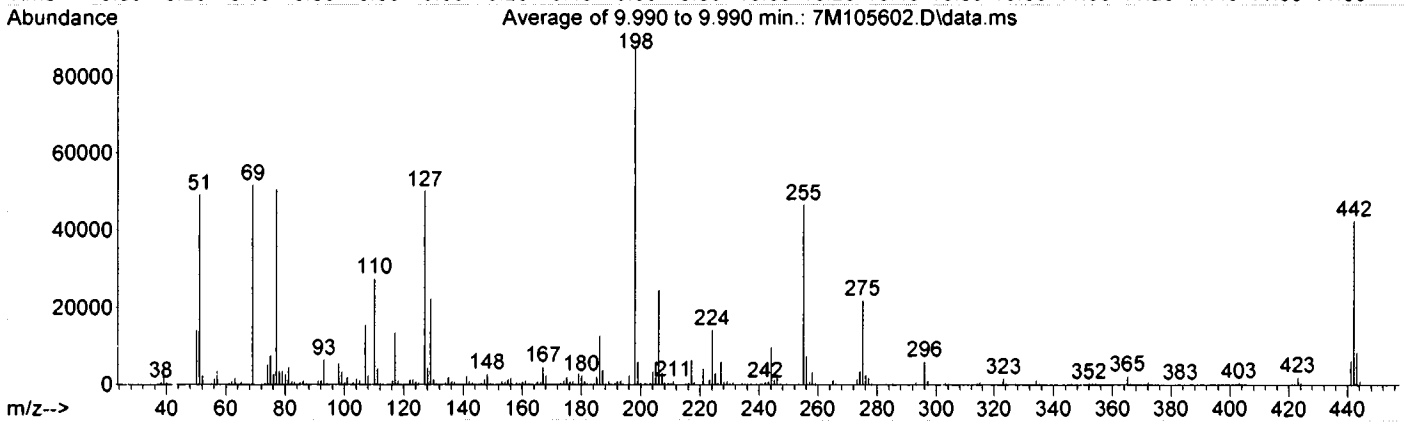
Data File	Sample Number	Analysis Date:
7M105603.D	CAL BNA@50PPM	03/05/20 13:44
7M105604.D	AD16036-001	03/05/20 14:08
7M105605.D	AD16036-005	03/05/20 14:31
7M105606.D	AD16036-003	03/05/20 14:54
7M105607.D	SMB83709	03/05/20 15:17
7M105608.D	AD15815-003(5X)(	03/05/20 15:40
7M105609.D	AD15815-003(5X)(	03/05/20 16:03
7M105610.D	AD15917-005(20X)	03/05/20 16:26
7M105611.D	AD15667-007	03/05/20 16:50
7M105612.D	AD15667-007(MS)	03/05/20 17:13
7M105613.D	AD15667-007(MSD	03/05/20 17:35
7M105614.D	AD15703-006	03/05/20 17:59
7M105615.D	AD16022-001	03/05/20 18:22
7M105616.D	AD16013-002	03/05/20 18:45
7M105617.D	AD16013-003	03/05/20 19:08
7M105618.D	AD16013-004	03/05/20 19:31
7M105619.D	AD16013-007	03/05/20 19:54
7M105620.D	AD16013-008	03/05/20 20:17
7M105621.D	AD15988-005(R)	03/05/20 20:40
7M105622.D	AD15925-003(5X)	03/05/20 21:03
7M105623.D	AD16013-006(5X)	03/05/20 21:26
7M105624.D	AD16013-001(5X)	03/05/20 21:49
7M105625.D	AD16013-005(3X)	03/05/20 22:12
7M105626.D	AD16026-001(3X)	03/05/20 22:35

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-0520\
Data File : 7M105602.D
Acq On : 5 Mar 2020 13:21
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0305.M
Title : @GCMS_7,mg,625,8270
Last Update : Thu Mar 05 13:10:30 2020





Spectrum Information: Average of 9.990 to 9.990 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	56.0	49184	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	58.9	51752	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	57.1	50096	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	87808	PASS
199	198	5	9	7.0	6117	PASS
275	198	10	30	25.0	21944	PASS
365	198	1	100	2.7	2408	PASS
441	443	0.01	100	75.7	6377	PASS
442	198	40	100	48.4	42488	PASS
443	442	17	23	19.8	8419	PASS

0030402 0070

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105599.D	CAL BNA@50PPM	03/05/20 12:11	2	7M105592.D	CAL BNA@2PPM	03/05/20 09:29
3	7M105593.D	CAL BNA@10PPM	03/05/20 09:52	4	7M105598.D	CAL BNA@20PPM	03/05/20 11:48
5	7M105597.D	CAL BNA@80PPM	03/05/20 11:25	6	7M105596.D	CAL BNA@120PPM	03/05/20 11:01
7	7M105595.D	CAL BNA@160PPM	03/05/20 10:38	8	7M105594.D	CAL BNA@196PPM	03/05/20 10:15
9	7M105600.D	CAL BNA@0.5PPM	03/05/20 12:34				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	1.0236	1.3431	1.0579	1.1143	0.9886	0.9987	1.0488	1.0194	1.5600	1.13	2.62	0.999	0.999	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	1.9310	1.9681	1.6404	1.8635	1.8261	1.8963	1.7687	1.8283	----	1.84	3.08	0.999	0.999	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.5352	1.4233	1.3794	1.6462	1.4892	1.5779	1.5155	1.5210	----	1.51	3.01	0.999	0.999	5.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.1255	2.1274	2.0363	2.1978	2.0574	2.0928	2.1307	2.1958	----	2.12	4.63	0.999	0.999	2.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	2.2086	2.4498	2.2186	2.3500	2.0945	2.1568	2.0981	2.2407	----	2.23	5.44	0.999	0.999	5.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	3.6268	3.4996	3.6606	3.9247	3.5556	3.6262	3.4850	3.7777	4.0374	3.69	5.53	0.998	0.998	5.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.8302	0.8981	0.8303	0.8548	0.7795	0.7809	0.8004	0.8431	----	0.827	5.58	0.998	0.999	4.8	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	2.3991	2.4797	2.4428	2.5368	2.2832	2.3166	2.2885	2.4299	3.1140	2.48	5.59	0.998	0.999	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.7110	2.6216	2.7093	2.8622	2.6992	2.7435	2.6715	2.8922	----	2.74	5.51	0.997	0.998	3.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.4090	3.5546	3.4725	3.5439	3.3317	3.4125	3.3250	3.6570	----	3.46	5.52	0.996	0.998	3.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.4427	2.3060	2.5809	2.6346	2.3965	2.4418	2.4106	2.5805	----	2.47	5.64	0.999	0.999	4.6	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.5927	2.5478	2.7187	2.7934	2.5012	2.5134	2.5159	2.6167	----	2.60	5.68	0.999	0.999	4.1	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.6207	2.7491	2.7533	2.8028	2.5949	2.6627	2.6156	2.8195	----	2.70	5.77	0.997	0.999	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4912	1.6408	1.5609	1.5632	1.5599	1.5406	1.6777	1.6902	----	1.59	5.83	0.997	0.999	4.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4391	1.7259	1.4806	1.5207	1.4616	1.4261	1.5580	1.5748	----	1.52	5.95	0.997	0.999	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9412	0.9505	0.9509	0.9750	0.9576	0.9435	1.0117	1.0395	----	0.971	5.92	0.998	1.00	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.7704	1.9117	1.8104	1.8769	1.7341	1.6913	1.7634	1.8104	----	1.80	6.04	0.999	0.999	4.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.3059	1.5449	1.3282	1.3674	1.3198	1.3012	1.3821	1.4221	1.6886	1.41	6.02	0.998	1.00	9.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.1291	2.5917	2.2295	2.2139	2.2374	2.1689	2.2971	2.4192	----	2.29	6.14	0.996	0.999	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6021	0.7029	0.6295	0.6426	0.6286	0.6205	0.6652	0.6667	----	0.645	6.23	0.998	0.999	5.0	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	1.0965	1.2325	1.1667	1.1872	1.1496	1.1103	1.1555	1.2047	1.2170	1.17	6.14	0.999	0.999	4.0	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3653	1.4445	1.4344	1.4186	1.4639	1.4054	1.4869	1.5667	1.6955	1.48	6.14	0.998	0.999	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1682	0.1841	0.1742	0.1689	0.1678	0.1683	0.1781	0.1741	----	0.173	6.26	0.999	0.999	3.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.4401	0.4879	0.4463	0.4387	0.4377	0.4292	0.4486	0.4383	----	0.446	6.28	0.999	1.00	4.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.7680	0.8423	0.7708	0.7816	0.7766	0.7733	0.8035	0.7939	----	0.789	6.46	1.00	1.00	3.1	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.2045	0.2017	0.2014	0.2030	0.2089	0.2125	0.2202	0.2199	----	0.209	6.52	0.999	1.00	3.7	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3999	0.4499	0.3953	0.4108	0.3980	0.4004	0.4227	0.4165	0.4661	0.418	6.55	0.999	1.00	6.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1883	----	0.1157	0.1413	0.2261	0.2463	0.2595	0.2757	----	0.208	6.62	0.993	0.999	29		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4303	0.4483	0.4414	0.4320	0.4349	0.4335	0.4514	0.4479	----	0.440	6.62	0.999	1.00	1.9	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3066	0.3338	0.3033	0.3134	0.3156	0.3138	0.3285	0.3308	0.3500	0.322	6.71	0.999	1.00	4.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3402	0.3557	0.3449	0.3414	0.3461	0.3498	0.3680	0.3603	----	0.351	6.78	0.999	0.999	2.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.1020	1.2135	1.1174	1.1374	1.1096	1.1212	1.1677	1.1690	1.4666	1.18	6.84	0.999	1.00	9.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Avg	0.4182	0.4630	0.4623	0.4412	0.4265	0.4060	0.3924	0.3681	0.5546	0.437	6.88	0.996	1.00	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1934	0.2231	0.2056	0.1999	0.2022	0.2032	0.2144	0.2134	----	0.207	6.93	0.999	1.00	4.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1199	0.1382	0.1222	0.1198	0.1223	0.1229	0.1236	0.1255	----	0.124	7.14	1.00	1.00	4.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3499	0.3872	0.3518	0.3490	0.3484	0.3522	0.3627	0.3672	----	0.359	7.24	0.999	1.00	3.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7484	0.8162	0.7889	0.7509	0.7717	0.7768	0.8214	0.8271	----	0.788	7.38	0.999	1.00	4.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.7016	0.7499	0.7081	0.7128	0.7269	0.7293	0.7726	0.7730	----	0.734	7.45	0.999	1.00	3.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7250	0.7831	0.7486	0.7319	0.7496	0.7528	0.7966	0.8002	----	0.761	7.38	0.999	1.00	3.8		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8444	0.9457	0.8640	0.8685	0.8868	0.8871	0.9232	0.9449	----	0.896	7.75	0.999	1.00	4.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.6138	0.6401	0.6096	0.6049	0.6100	0.5993	0.6292	0.6400	----	0.618	7.50	0.999	1.00	2.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 5.650
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0030402 0071

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105599.D	CAL BNA@50PPM	03/05/20 12:11	2	7M105592.D	CAL BNA@2PPM	03/05/20 09:29
3	7M105593.D	CAL BNA@10PPM	03/05/20 09:52	4	7M105598.D	CAL BNA@20PPM	03/05/20 11:48
5	7M105597.D	CAL BNA@80PPM	03/05/20 11:25	6	7M105596.D	CAL BNA@120PPM	03/05/20 11:01
7	7M105595.D	CAL BNA@160PPM	03/05/20 10:38	8	7M105594.D	CAL BNA@196PPM	03/05/20 10:15
9	7M105600.D	CAL BNA@0.5PPM	03/05/20 12:34				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.2622	0.1057	0.1696	0.2253	0.2824	0.2980	0.3202	0.3419	-----	0.251	7.50	0.991	1.00	32	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3984	0.4297	0.3835	0.4001	0.3873	0.3963	0.3980	0.4250	-----	0.402	7.59	0.999	0.999	4.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3955	0.4254	0.4232	0.4061	0.4039	0.4145	0.4193	0.4385	-----	0.416	7.63	0.999	1.00	3.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2546	1.3369	1.2974	1.2911	1.2566	1.2621	1.2877	1.3407	-----	1.29	7.66	0.999	1.00	2.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1566	1.3083	1.1714	1.2002	1.1596	1.1552	1.2006	1.2282	-----	1.20	7.77	0.999	1.00	4.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.9291	0.9963	0.8869	0.9466	0.9198	0.9309	0.9628	0.9926	-----	0.946	8.05	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9291	0.9963	0.8869	0.9466	0.9198	0.9309	0.9628	0.9926	-----	0.946	8.05	0.999	1.00	3.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8004	0.9511	0.8318	0.8517	0.8389	0.8314	0.8676	0.8922	-----	0.858	7.83	0.998	1.00	5.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.5182	0.5356	0.5142	0.5296	0.5085	0.4967	0.5030	0.5134	-----	0.515	7.85	1.00	1.00	2.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4545	0.5468	0.4396	0.4738	0.4553	0.4553	0.4689	0.4861	-----	0.473	8.03	0.999	1.00	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7585	1.9865	1.7317	1.8200	1.7513	1.7440	1.7971	1.8473	-----	1.80	8.13	0.999	1.00	4.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3679	1.5979	1.3381	1.3862	1.3748	1.3681	1.4002	1.4561	-----	1.41	7.99	0.999	1.00	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.3321	0.3679	0.3159	0.3272	0.3338	0.3386	0.3432	0.3559	-----	0.339	8.05	0.999	1.00	4.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1860	1.3416	1.2277	1.2020	1.1989	1.1959	1.2574	1.2928	-----	1.24	8.28	0.998	1.00	4.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3327	0.3428	0.3344	0.3498	0.3288	0.3154	0.3185	0.3112	-----	0.329	8.19	0.999	1.00	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1518	-----	0.1226	0.1306	0.1668	0.1742	0.1830	0.1891	-----	0.160	8.29	0.997	1.00	16	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6677	1.8981	1.7272	1.7196	1.6851	1.6967	1.7388	1.7993	2.1472	1.79	8.43	0.999	1.00	8.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4334	0.4935	0.4352	0.4403	0.4462	0.4503	0.4641	0.4739	-----	0.455	8.40	0.999	1.00	4.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.3032	0.3116	0.3005	0.3278	0.2989	0.3085	0.3085	0.3398	-----	0.312	8.33	0.997	0.999	4.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3470	0.3627	0.3367	0.3386	0.3585	0.3602	0.3653	0.3909	-----	0.358	8.54	0.997	0.999	4.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3698	1.5165	1.3883	1.3966	1.4086	1.4217	1.4550	1.5201	-----	1.43	8.76	0.998	1.00	4.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6616	0.6769	0.7081	0.6770	0.6838	0.7023	0.7174	0.7498	-----	0.697	8.74	0.998	1.00	4.1	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.4145	1.5938	1.3955	1.4262	1.4081	1.4231	1.4647	1.5087	-----	1.45	8.62	0.999	1.00	4.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3671	0.3900	0.3667	0.3809	0.3808	0.3785	0.3893	0.3933	-----	0.381	8.76	0.999	1.00	2.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.4327	0.4608	0.4464	0.4506	0.4469	0.4510	0.4613	0.4845	-----	0.454	9.38	0.998	1.00	3.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Avg	0.1251	-----	0.1182	0.1192	0.1316	0.1355	0.1425	0.1429	-----	0.131	8.79	0.999	1.00	7.9	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6239	0.7337	0.6584	0.6420	0.6437	0.6388	0.6816	0.6635	-----	0.661	8.85	0.999	1.00	5.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1027	0.1099	0.1013	0.1035	0.1081	0.1062	0.1131	0.1127	-----	0.107	8.99	0.999	1.00	4.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.8150	0.8785	0.9023	0.9248	0.7980	0.8579	0.9111	0.8729	-----	0.870	8.90	0.998	0.998	5.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2102	0.2252	0.2151	0.2154	0.2217	0.2199	0.2386	0.2330	-----	0.222	9.23	0.998	0.999	4.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2247	0.2292	0.2240	0.2319	0.2313	0.2291	0.2454	0.2435	-----	0.232	9.30	0.999	1.00	3.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4603	0.5356	0.4592	0.4715	0.4588	0.4519	0.4703	0.4697	-----	0.472	9.57	0.999	1.00	5.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Avg	0.1088	-----	0.0855	0.0960	0.1114	0.1147	0.1288	0.1371	-----	0.112	9.50	0.992	0.999	16	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0593	1.2146	1.0899	1.0837	1.0908	1.0836	1.1404	1.1732	-----	1.12	9.73	0.998	1.00	4.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1137	1.2402	1.1388	1.1445	1.1238	1.1343	1.1965	1.2387	-----	1.17	9.78	0.997	1.00	4.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0019	1.1094	1.0066	1.0053	1.0120	1.0175	1.0580	1.1473	-----	1.04	9.95	0.995	0.999	5.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.2880	1.4336	1.3005	1.2896	1.3166	1.3972	1.3874	1.5048	1.6792	1.40	10.33	0.997	1.00	9.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1798	1.2897	1.1965	1.2000	1.2379	1.3311	1.3014	1.3912	-----	1.27	11.06	0.997	0.999	5.9	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.2093	1.3686	1.2805	1.2826	1.2461	1.2857	1.2909	1.3299	-----	1.29	11.32	0.999	1.00	3.7	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.6443	0.6736	0.6806	0.6933	0.6333	0.6194	0.5949	0.5856	-----	0.641	11.21	0.998	1.00	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6050	0.6633	0.6159	0.6380	0.6152	0.6414	0.6441	0.6755	-----	0.637	11.50	0.998	1.00	3.8		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 5.650
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105599.D	CAL BNA@50PPM	03/05/20 12:11	2	7M105592.D	CAL BNA@2PPM	03/05/20 09:29
3	7M105593.D	CAL BNA@10PPM	03/05/20 09:52	4	7M105598.D	CAL BNA@20PPM	03/05/20 11:48
5	7M105597.D	CAL BNA@80PPM	03/05/20 11:25	6	7M105596.D	CAL BNA@120PPM	03/05/20 11:01
7	7M105595.D	CAL BNA@160PPM	03/05/20 10:38	8	7M105594.D	CAL BNA@196PPM	03/05/20 10:15
9	7M105600.D	CAL BNA@0.5PPM	03/05/20 12:34				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2955	0.3590	0.3188	0.3055	0.3126	0.3246	0.3299	0.3415	-----	0.323	11.44	0.998	1.00	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4215	0.4558	0.4258	0.4348	0.4363	0.4448	0.4523	0.4689	-----	0.443	11.84	0.999	1.00	3.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.5674	0.6337	0.5418	0.5933	0.5859	0.6003	0.6060	0.6225	-----	0.594	12.09	0.999	1.00	5.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.5378	0.5718	0.5422	0.5450	0.5569	0.5694	0.5749	0.5913	-----	0.561	12.19	0.999	1.00	3.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.4318	0.4965	0.4687	0.4492	0.4305	0.4145	0.3990	0.3925	-----	0.435	12.71	0.998	1.00	8.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1632	1.4552	1.2167	1.1965	1.1964	1.1829	1.2253	1.2734	-----	1.24	12.74	0.998	1.00	7.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1296	1.2183	1.1681	1.1737	1.1326	1.1925	1.2293	1.2018	-----	1.18	12.78	0.999	0.999	3.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.8279	1.0056	0.8553	0.8507	0.8622	0.8760	0.9073	0.8965	-----	0.885	12.79	0.999	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.4007	1.7690	1.3722	1.4245	1.4382	1.5052	1.4174	1.4551	-----	1.47	13.54	0.999	0.999	8.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1365	1.3877	1.1616	1.1940	1.2170	1.2070	1.1439	1.1696	-----	1.20	13.96	0.999	0.999	6.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0541	1.2810	1.0672	1.0875	1.0733	1.1882	1.0966	1.1950	-----	1.13	13.99	0.996	0.997	7.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0038	1.1730	1.0254	1.0302	1.0592	1.0371	1.0560	1.1399	-----	1.07	14.32	0.996	0.999	5.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1854	1.5388	1.2532	1.2263	1.2677	1.3344	1.3401	1.1811	-----	1.29	15.68	0.996	0.996	9.0	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9803	1.2390	1.0269	1.0150	1.0461	1.1126	1.1062	0.9920	-----	1.06	15.70	0.993	0.995	8.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9939	1.3356	1.0952	1.0265	1.0719	0.9912	1.1505	1.1021	-----	1.10	16.05	0.995	0.996	10	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 5.650
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0030402 0073

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M98632.D	CAL BNA@50PPM	03/05/20 12:20	2	9M98625.D	CAL BNA@2PPM	03/05/20 09:19
3	9M98624.D	CAL BNA@10PPM	03/05/20 08:55	4	9M98630.D	CAL BNA@20PPM	03/05/20 11:31
5	9M98629.D	CAL BNA@80PPM	03/05/20 11:07	6	9M98628.D	CAL BNA@120PPM	03/05/20 10:43
7	9M98627.D	CAL BNA@160PPM	03/05/20 10:15	8	9M98626.D	CAL BNA@196PPM	03/05/20 09:52
9	9M98631.D	CAL BNA@0.5PPM	03/05/20 11:55				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Avg	1.0452	1.1534	1.0689	1.0994	1.0198	1.0268	1.0578	1.0873	0.7922	1.04	2.68	0.999	0.999	9.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	1.8239	1.6568	1.6335	1.8165	1.8803	1.8841	1.9374	1.9403	----	1.82	3.15	1.00	1.00	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.5071	1.3359	1.5784	1.5625	1.5612	1.5395	1.5960	1.5929	----	1.53	3.08	1.00	1.00	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.0923	2.2160	2.1066	2.1087	2.0921	2.1469	2.1767	2.2002	----	2.14	4.66	1.00	1.00	2.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	2.0922	2.5254	2.0986	2.2007	2.1694	2.1132	2.1510	2.1838	----	2.19	5.48	1.00	1.00	6.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	3.5579	3.8252	3.7278	3.7560	3.6138	3.5359	3.6460	3.5780	4.2959	3.73	5.57	1.00	1.00	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7889	0.9563	0.8505	0.8339	0.8200	0.7942	0.8127	0.8222	----	0.835	5.62	1.00	1.00	6.3	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	2.3225	2.7842	2.4715	2.5131	2.3878	2.3559	2.3878	2.3972	3.0956	2.52	5.63	1.00	1.00	10	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.6623	2.7987	2.7063	2.7266	2.7229	2.6918	2.7548	2.7481	----	2.73	5.54	1.00	1.00	1.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.3194	3.5815	3.4589	3.4943	3.4592	3.3333	3.4384	3.4076	----	3.44	5.55	1.00	1.00	2.5	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.3290	2.4843	2.4025	2.4544	2.4385	2.3771	2.4287	2.4429	----	2.42	5.67	1.00	1.00	2.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.6992	3.2571	2.8159	2.8392	2.7538	2.6729	2.6988	2.7029	----	2.81	5.72	1.00	1.00	6.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.6590	3.4215	2.8315	2.7924	2.7447	2.6952	2.7574	2.7783	----	2.84	5.81	1.00	1.00	8.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.5231	1.8434	1.5428	1.5874	1.4738	1.4637	1.5113	1.5908	----	1.57	5.87	0.998	0.999	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4413	1.6090	1.4950	1.5357	1.3857	1.3630	1.4317	1.5050	----	1.47	6.00	0.997	0.999	5.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9281	0.8795	0.8932	0.9374	0.9240	0.8843	0.9341	0.9810	----	0.920	5.97	0.998	0.999	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.7355	1.8905	1.8100	1.7747	1.6363	1.6113	1.6516	1.7024	----	1.73	6.08	0.999	0.999	5.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2869	1.3200	1.2872	1.2960	1.2544	1.2203	1.2737	1.3565	1.1672	1.27	6.05	0.997	0.999	4.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.9949	2.1473	1.9265	2.1186	1.9029	1.8713	1.9015	2.0095	----	1.98	6.18	0.998	0.999	5.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6068	0.6432	0.5815	0.6164	0.5916	0.5693	0.5991	0.6410	----	0.606	6.27	0.998	0.999	4.4	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	0.9998	1.1218	1.0364	1.0901	0.9743	0.9571	0.9720	1.0237	1.2271	1.04	6.18	0.998	0.999	8.4	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3156	1.5006	1.3196	1.3539	1.2523	1.2191	1.2532	1.3065	1.5132	1.34	6.18	0.998	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1539	0.1631	0.1724	0.1534	0.1644	0.1657	0.1702	0.1697	----	0.164	6.30	0.999	1.00	4.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.4149	0.4231	0.4241	0.4396	0.4308	0.4255	0.4352	0.4345	----	0.429	6.32	1.00	1.00	1.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.7673	0.8655	0.7718	0.7898	0.7865	0.7759	0.7873	0.8002	----	0.793	6.51	1.00	1.00	3.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1889	0.1896	0.1906	0.1915	0.1996	0.1951	0.2035	0.2010	----	0.195	6.57	0.999	1.00	2.9	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3971	0.4332	0.3910	0.4019	0.4076	0.3934	0.3999	0.4031	0.4251	0.406	6.60	1.00	1.00	3.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2148	----	0.1504	0.2041	0.2583	0.2722	0.2868	0.2966	----	0.241	6.65	0.997	0.999	22		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4152	0.5132	0.4459	0.4220	0.4196	0.4067	0.4180	0.4202	----	0.433	6.67	1.00	1.00	8.0	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.3105	0.3325	0.3254	0.3130	0.3200	0.3124	0.3155	0.3197	0.3253	0.319	6.75	1.00	1.00	2.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3558	0.3978	0.3701	0.3664	0.3642	0.3500	0.3553	0.3554	----	0.364	6.82	1.00	1.00	4.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0929	1.2743	1.1480	1.1364	1.0978	1.0507	1.0841	1.0842	1.2794	1.14	6.88	1.00	1.00	7.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Avg	0.3980	0.4455	0.4157	0.4164	0.4034	0.3809	0.3708	0.3491	0.4830	0.407	6.91	0.996	1.00	9.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.2126	0.2394	0.2198	0.2266	0.2214	0.2106	0.2166	0.2173	----	0.221	6.97	1.00	1.00	4.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1167	0.1015	0.1101	0.1173	0.1203	0.1185	0.1232	0.1240	----	0.116	7.18	1.00	1.00	6.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3343	0.3524	0.3393	0.3503	0.3489	0.3388	0.3469	0.3525	----	0.345	7.28	0.999	1.00	2.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7551	0.7636	0.8066	0.7844	0.7556	0.7330	0.7417	0.7568	----	0.762	7.42	1.00	1.00	3.1	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.7039	0.7914	0.7381	0.7338	0.7083	0.6954	0.7073	0.7094	----	0.724	7.50	1.00	1.00	4.3	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7289	0.7774	0.7718	0.7578	0.7306	0.7141	0.7253	0.7328	----	0.742	7.50	1.00	1.00	3.2		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8657	1.0137	0.8975	0.8887	0.8809	0.8499	0.8596	0.8676	----	0.891	7.79	1.00	1.00	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.6071	0.7256	0.6418	0.6437	0.6019	0.5897	0.5983	0.6007	----	0.626	7.55	1.00	1.00	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Avg Rsd: 5.672

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note:
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0030402 0074

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M98632.D	CAL BNA@50PPM	03/05/20 12:20	2	9M98625.D	CAL BNA@2PPM	03/05/20 09:19
3	9M98624.D	CAL BNA@10PPM	03/05/20 08:55	4	9M98630.D	CAL BNA@20PPM	03/05/20 11:31
5	9M98629.D	CAL BNA@80PPM	03/05/20 11:07	6	9M98628.D	CAL BNA@120PPM	03/05/20 10:43
7	9M98627.D	CAL BNA@160PPM	03/05/20 10:15	8	9M98626.D	CAL BNA@196PPM	03/05/20 09:52
9	9M98631.D	CAL BNA@0.5PPM	03/05/20 11:55				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.2758	0.1246	0.1997	0.2348	0.2997	0.3046	0.3234	0.3345	-----	0.262	7.54	0.997	1.00	27	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4241	0.3949	0.3727	0.3726	0.3856	0.3773	0.3854	0.3978	-----	0.389	7.64	0.999	0.999	4.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3563	0.3908	0.3734	0.4209	0.4087	0.4025	0.4164	0.4224	-----	0.399	7.67	0.998	0.999	6.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.3515	1.4046	1.3603	1.3657	1.3671	1.3423	1.3629	1.4021	-----	1.37	7.70	1.00	1.00	1.6		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1481	1.3365	1.1490	1.1749	1.1354	1.1264	1.1355	1.1641	-----	1.17	7.81	1.00	1.00	5.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8858	1.0764	0.9363	0.9440	0.8647	0.8346	0.8460	0.8532	-----	0.905	8.10	1.00	1.00	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8858	1.0764	0.9363	0.9440	0.8647	0.8346	0.8460	0.8532	-----	0.905	8.10	1.00	1.00	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8467	0.9621	0.8630	0.8933	0.8335	0.8145	0.8212	0.8350	-----	0.859	7.88	1.00	1.00	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4441	0.4357	0.4136	0.4340	0.4603	0.4545	0.4701	0.4802	-----	0.449	7.89	0.999	1.00	4.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4287	0.4948	0.4547	0.4446	0.4248	0.4090	0.4196	0.4201	-----	0.437	8.08	1.00	1.00	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7270	1.9364	1.7835	1.7793	1.7407	1.7060	1.7415	1.7523	-----	1.77	8.17	1.00	1.00	4.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3455	1.5169	1.3765	1.3881	1.3382	1.3371	1.3630	1.3806	-----	1.38	8.04	1.00	1.00	4.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2986	0.2874	0.3020	0.3123	0.2957	0.2837	0.2902	0.2900	-----	0.295	8.09	1.00	1.00	3.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1781	1.3301	1.2265	1.2362	1.1777	1.1330	1.1557	1.1766	-----	1.20	8.32	0.999	1.00	5.2	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3020	0.2960	0.2793	0.3119	0.3136	0.2993	0.2993	0.2896	-----	0.299	8.24	0.999	1.00	3.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1122	-----	0.0715	0.0843	0.1348	0.1399	0.1478	0.1507	-----	0.120	8.34	0.998	0.999	26	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6615	1.9875	1.7387	1.7495	1.6609	1.6180	1.6578	1.6808	2.1995	1.77	8.48	1.00	1.00	11	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4016	0.3339	0.3644	0.3912	0.4022	0.4025	0.4193	0.4173	-----	0.392	8.45	1.00	1.00	7.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2668	0.2088	0.2489	0.2619	0.2978	0.2964	0.3077	0.3116	-----	0.275	8.37	0.999	1.00	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3457	0.3131	0.3228	0.3520	0.3467	0.3469	0.3546	0.3596	-----	0.343	8.59	1.00	1.00	4.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3168	1.6014	1.3774	1.3717	1.3064	1.2850	1.3154	1.3389	-----	1.36	8.81	0.999	1.00	7.4	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6857	0.7575	0.7087	0.7059	0.6733	0.6686	0.6781	0.6863	-----	0.696	8.80	1.00	1.00	4.1	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.3299	1.4473	1.3453	1.3258	1.3183	1.3101	1.3554	1.3617	-----	1.35	8.67	1.00	1.00	3.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3457	0.2649	0.3283	0.3410	0.3437	0.3423	0.3502	0.3528	-----	0.334	8.81	1.00	1.00	8.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.4303	0.4009	0.4199	0.4423	0.4361	0.4237	0.4443	0.4423	-----	0.430	9.44	0.999	1.00	3.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Avg	0.1083	-----	0.0851	0.1033	0.1209	0.1216	0.1245	0.1298	-----	0.113	8.84	0.999	1.00	14	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6168	0.6884	0.6454	0.6591	0.6177	0.6066	0.6261	0.6378	-----	0.637	8.90	1.00	1.00	4.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.0932	0.0754	0.0887	0.0947	0.0964	0.0933	0.0972	0.0990	-----	0.0923	9.04	0.999	1.00	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7274	0.8863	0.7473	0.7487	0.7266	0.7163	0.8166	0.8311	-----	0.775	8.95	0.995	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2119	0.2328	0.2123	0.2222	0.2140	0.2111	0.2151	0.2189	-----	0.217	9.28	1.00	1.00	3.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2080	0.2413	0.2169	0.2292	0.2093	0.2054	0.2098	0.2171	-----	0.217	9.35	0.999	1.00	5.7	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4213	0.4155	0.4190	0.4323	0.4230	0.4127	0.4134	0.4188	-----	0.420	9.62	1.00	1.00	1.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Avg	0.1194	-----	0.0974	0.1066	0.1265	0.1306	0.1379	0.1435	-----	0.123	9.55	0.997	1.00	13	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0377	1.2349	1.0924	1.1004	1.0498	1.0213	1.0526	1.0737	-----	1.08	9.79	0.999	1.00	6.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0823	1.1694	1.1293	1.1355	1.0821	1.0586	1.0977	1.1160	-----	1.11	9.84	0.999	1.00	3.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.9618	1.0397	0.9977	1.0369	0.9705	0.9629	0.9827	1.0051	-----	0.995	10.01	0.999	1.00	3.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.1495	1.1350	1.1200	1.1852	1.1677	1.1565	1.2030	1.2184	1.0552	1.15	10.39	0.999	1.00	4.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1990	1.2371	1.2197	1.2207	1.2066	1.2050	1.2170	1.2507	-----	1.22	11.12	0.999	1.00	1.4	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.2051	1.2986	1.2386	1.2964	1.2229	1.2064	1.2486	1.2983	-----	1.25	11.38	0.998	1.00	3.3	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.6383	0.5556	0.6429	0.6577	0.6442	0.6138	0.6155	0.6189	-----	0.623	11.27	1.00	1.00	5.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6206	0.6660	0.6252	0.6341	0.6249	0.6222	0.6458	0.6856	-----	0.641	11.57	0.997	0.999	3.7		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 5.672
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0030402 0075

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_9

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	9M98632.D	CAL BNA@50PPM	03/05/20 12:20	2	9M98625.D	CAL BNA@2PPM	03/05/20 09:19
3	9M98624.D	CAL BNA@10PPM	03/05/20 08:55	4	9M98630.D	CAL BNA@20PPM	03/05/20 11:31
5	9M98629.D	CAL BNA@80PPM	03/05/20 11:07	6	9M98628.D	CAL BNA@120PPM	03/05/20 10:43
7	9M98627.D	CAL BNA@160PPM	03/05/20 10:15	8	9M98626.D	CAL BNA@196PPM	03/05/20 09:52
9	9M98631.D	CAL BNA@0.5PPM	03/05/20 11:55				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2933	0.3086	0.3038	0.3037	0.2941	0.2928	0.3086	0.3206	----	0.303	11.50	0.997	1.00	3.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4053	0.3971	0.3875	0.4030	0.4150	0.4137	0.4263	0.4439	----	0.412	11.90	0.999	1.00	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.5062	0.4430	0.4685	0.5017	0.5236	0.5260	0.5413	0.5664	----	0.510	12.15	0.998	1.00	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4707	0.4070	0.4437	0.4857	0.4794	0.4699	0.4785	0.4878	----	0.465	12.26	1.00	1.00	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.3834	0.3716	0.3776	0.4076	0.3869	0.3667	0.3633	0.3632	----	0.378	12.78	0.999	1.00	4.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1367	1.2779	1.1635	1.2147	1.1470	1.1504	1.1928	1.2324	----	1.19	12.81	0.998	1.00	4.2	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0675	1.2806	1.1402	1.1792	1.0554	1.0373	1.0652	1.1028	----	1.12	12.85	0.999	1.00	7.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.6881	0.6319	0.6866	0.7098	0.7107	0.7023	0.7311	0.7651	----	0.703	12.85	0.998	1.00	5.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.2062	1.0659	1.1527	1.1830	1.2705	1.2809	1.3328	1.3765	----	1.23	13.60	0.998	1.00	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0486	1.2077	1.0661	1.1192	1.1227	1.0698	1.1625	1.1303	----	1.12	14.02	0.998	0.999	4.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0912	1.1766	1.1185	1.1118	1.0491	1.0939	1.0437	1.1561	----	1.11	14.05	0.995	0.997	4.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	0.9893	1.1086	0.9694	1.0418	1.0056	1.0058	1.0411	1.0711	----	1.03	14.38	0.999	1.00	4.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.2253	1.3335	1.2298	1.2612	1.2525	1.2576	1.3173	1.3435	----	1.28	15.78	0.999	1.00	3.7	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	1.0278	1.0633	1.0371	1.0611	1.0386	1.0490	1.0860	1.1034	----	1.06	15.80	0.999	1.00	2.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0377	1.1638	1.0756	1.0670	1.0611	1.0565	1.0982	1.1157	----	1.08	16.17	0.999	1.00	3.7	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 5.672
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105603.D **Instrument:** GCMS 7

Cont Calibration Date/Time 3/5/2020 1:44:00 PM Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.59	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.62	50.86	50	**		1.128	1.026	1.73	
Pyridine	1	0		3.08	49.63	50	**		1.840	1.827	0.75	
N-Nitrosodimethylamine	1	0		3.01	54.19	50	**		1.511	1.638	8.38	
2-Fluorophenol	1	0	S	4.63	51.17	50	**		2.121	2.170	2.34	
Benzaldehyde	1	0		5.44	52.80	50	20	0.01	2.227	2.352	5.61	
Aniline	1	0		5.53	51.20	50	**		3.688	3.777	2.41	
Pentachloroethane	1	0		5.57	50.01	50	**	0.05	0.827	0.827	0.02	
bis(2-Chloroethyl)ether	1	0		5.59	49.90	50	20	0.7	2.477	2.472	0.21	
Phenol-d5	1	0	S	5.51	50.67	50	**		2.739	2.775	1.34	
Phenol	1	0		5.52	51.65	50	20	0.8	3.463	3.578	3.30	
2-Chlorophenol	1	0		5.64	51.65	50	20	0.8	2.474	2.556	3.29	
N-Decane	1	0		5.68	53.77	50	**	0.05	2.600	2.796	7.53	
1,3-Dichlorobenzene	1	0		5.77	50.63	50	**		2.702	2.736	1.26	
1,4-Dichlorobenzene-d4	1	0	I	5.81	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.82	49.07	50	20		1.591	1.561	1.86	
1,2-Dichlorobenzene	1	0		5.95	47.91	50	**		1.523	1.460	4.18	
Benzyl alcohol	1	0		5.92	49.32	50	**		0.971	0.958	1.37	
bis(2-chloroisopropyl)ether	1	0		6.04	54.11	50	20	0.01	1.796	1.944	8.23	
2-Methylphenol	1	0		6.02	48.04	50	20	0.7	1.407	1.351	3.93	
Acetophenone	1	0		6.14	49.78	50	20	0.01	2.286	2.276	0.43	
Hexachloroethane	1	0		6.22	48.03	50	20	0.3	0.645	0.619	3.94	
N-Nitroso-di-n-propylamine	1	0		6.14	50.75	50	20	0.5	1.169	1.187	1.51	
3&4-Methylphenol	1	0		6.14	48.02	50	20		1.476	1.417	3.96	
Naphthalene-d8	1	0	I	6.82	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.26	22.51	25	**		0.173	0.156	9.98	
Nitrobenzene	1	0		6.27	50.04	50	20	0.2	0.446	0.446	0.07	
Isophorone	1	0		6.46	50.17	50	20	0.4	0.789	0.791	0.34	
2-Nitrophenol	1	0		6.52	47.84	50	20	0.1	0.209	0.200	4.31	
2,4-Dimethylphenol	1	0		6.55	48.26	50	20	0.2	0.418	0.403	3.49	
Benzoic Acid	1	0		6.61	22.31	50	**		0.208	0.078	55.38	
bis(2-Chloroethoxy)methane	1	0		6.62	49.12	50	20	0.3	0.440	0.432	1.76	
2,4-Dichlorophenol	1	0		6.71	46.45	50	20	0.2	0.322	0.299	7.10	
1,2,4-Trichlorobenzene	1	0		6.78	48.03	50	**		0.351	0.337	3.95	
Naphthalene	1	0		6.84	46.17	50	20	0.7	1.178	1.088	7.67	
4-Chloroaniline	1	0		6.88	63.48	50	20	0.01	0.437	0.555	26.96	C1
Hexachlorobutadiene	1	0		6.94	46.52	50	20	0.01	0.207	0.193	6.96	
Caprolactam	1	0		7.15	47.40	50	20	0.01	0.124	0.118	5.19	
4-Chloro-3-methylphenol	1	0		7.24	47.42	50	20	0.2	0.359	0.340	5.16	
2-Methylnaphthalene	1	0		7.38	47.06	50	**	0.4	0.788	0.741	5.89	
1-Methylnaphthalene	1	0		7.45	47.37	50	**	0.4	0.734	0.696	5.25	
Methylnaphthalenes	1	0		7.38	94.43	50	**			1.437	88.85	
1,1'-Biphenyl	1	0		7.75	46.93	50	20	0.01	0.896	0.841	6.14	
Acenaphthene-d10	1	0	I	8.25	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	48.17	50	20	0.01	0.618	0.596	3.65	
Hexachlorocyclopentadiene	1	0		7.50	51.61	50	20	0.05	0.251	0.262	3.21	
2,4,6-Trichlorophenol	1	0		7.60	47.54	50	20	0.2	0.402	0.383	4.91	
2,4,5-Trichlorophenol	1	0		7.63	47.25	50	20	0.2	0.416	0.393	5.50	
2-Fluorobiphenyl	1	0	S	7.66	24.25	25	**		1.291	1.252	2.99	
2-Chloronaphthalene	1	0		7.77	47.05	50	20	0.8	1.198	1.127	5.89	
1,4-Dimethylnaphthalene	1	0		8.05	47.97	50	**		0.946	0.907	4.06	
Dimethylnaphthalenes	1	0		8.05	47.97	50	20			0.907	4.06	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105603.D **Instrument:** GCMS 7

Cont Calibration Date/Time 3/5/2020 1:44:00 PM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	48.09	50	**		0.858	0.825	3.82	
2-Nitroaniline	1	0		7.85	51.77	50	20	0.01	0.515	0.533	3.55	
Coumarin	1	0		8.03	47.87		**		0.473			
Acenaphthylene	1	0		8.13	47.94	50	20	0.9	1.805	1.730	4.12	
Dimethylphthalate	1	0		7.99	48.39	50	20	0.01	1.411	1.366	3.22	
2,6-Dinitrotoluene	1	0		8.05	46.98	50	20	0.2	0.339	0.319	6.05	
Acenaphthene	1	0		8.28	47.66	50	20	0.9	1.238	1.180	4.68	
3-Nitroaniline	1	0		8.20	48.89	50	20	0.01	0.329	0.322	2.21	
2,4-Dinitrophenol	1	0		8.29	34.78	50	20	0.2	0.160	0.103	30.43	C1
Dibenzofuran	1	0		8.43	46.50	50	20	0.8	1.787	1.661	7.01	
2,4-Dinitrotoluene	1	0		8.40	48.05	50	20	0.2	0.455	0.437	3.90	
4-Nitrophenol	1	0		8.33	53.20	50	20	0.01	0.312	0.332	6.41	
2,3,4,6-Tetrachlorophenol	1	0		8.54	48.32	50	20	0.01	0.358	0.346	3.35	
Fluorene	1	0		8.76	47.41	50	20	0.9	1.435	1.360	5.18	
4-Chlorophenyl-phenylether	1	0		8.74	47.20	50	20	0.4	0.697	0.658	5.59	
Diethylphthalate	1	0		8.62	48.41	50	20	0.01	1.454	1.408	3.18	
4-Nitroaniline	1	0		8.76	47.53	50	20	0.01	0.381	0.362	4.95	
Atrazine	1	0		9.39	47.29	50	20	0.01	0.454	0.430	5.42	
Phenanthrene-d10	1	0	I	9.70	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	41.43	50	20	0.01	0.131	0.108	17.14	
n-Nitrosodiphenylamine	1	0		8.86	48.07	50	20	0.01	0.661	0.635	3.85	
2,4,6-Tribromophenol	1	0	S	8.99	47.91	50	**		0.107	0.103	4.19	
1,2-Diphenylhydrazine	1	0		8.90	48.24	50	**		0.870	0.840	3.51	
4-Bromophenyl-phenylether	1	0		9.23	47.65	50	20	0.1	0.222	0.212	4.71	
Hexachlorobenzene	1	0		9.30	47.51	50	20	0.1	0.232	0.221	4.98	
N-Octadecane	1	0		9.57	50.78	50	**	0.05	0.472	0.480	1.56	
Pentachlorophenol	1	0		9.50	48.30	50	20	0.05	0.112	0.108	3.39	
Phenanthrene	1	0		9.73	46.86	50	20	0.7	1.117	1.047	6.29	
Anthracene	1	0		9.78	47.25	50	20	0.7	1.166	1.102	5.50	
Carbazole	1	0		9.95	47.30	50	20	0.01	1.045	0.988	5.39	
Di-n-butylphthalate	1	0		10.33	46.48	50	20	0.01	1.400	1.301	7.04	
Fluoranthene	1	0		11.05	46.03	50	20	0.6	1.266	1.166	7.93	
Chrysene-d12	1	0	I	12.75	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.32	48.65	50	20	0.6	1.287	1.252	2.69	
Benzidine	1	0		11.20	46.34	50	**		0.641	0.594	7.33	
Terphenyl-d14	1	0	S	11.50	24.62	25	**		0.637	0.628	1.54	
4,4'-DDE	1	0		11.44	49.04		**		0.323			
4,4'-DDD	1	0		11.84	49.83		**		0.443			
Butylbenzylphthalate	1	0		12.09	50.81	50	20	0.01	0.594	0.603	1.61	
4,4'-DDT	1	0		12.19	48.93		**		0.561			
3,3'-Dichlorobenzidine	1	0		12.70	45.70	50	20	0.01	0.435	0.398	8.61	
Benzo[a]anthracene	1	0		12.74	47.31	50	20	0.8	1.239	1.172	5.37	
Chrysene	1	0		12.78	47.84	50	20	0.7	1.181	1.130	4.31	
bis(2-Ethylhexyl)phthalate	1	0		12.79	49.71	50	20	0.01	0.885	0.880	0.59	
Perylene-d12	1	0	I	14.37	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.53	50.43	50	20	0.01	1.473	1.485	0.86	
Benzo[b]fluoranthene	1	0		13.96	47.06	50	20	0.7	1.202	1.131	5.88	
Benzo[k]fluoranthene	1	0		13.99	49.40	50	20	0.7	1.130	1.117	1.21	
Benzo[a]pyrene	1	0		14.31	48.19	50	20	0.7	1.066	1.027	3.63	
Indeno[1,2,3-cd]pyrene	1	0		15.68	46.22	50	20	0.5	1.291	1.193	7.57	
Dibenzo[a,h]anthracene	1	0		15.70	46.21	50	20	0.4	1.065	0.984	7.59	
Benzo[g,h,i]perylene	1	0		16.05	44.90	50	20	0.5	1.096	0.984	10.21	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105603.D **Instrument:** GCMS 7

Cont Calibration Date/Time 3/5/2020 1:44:00 PM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.761	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.946	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

0030402 0079

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105599.D Method: EPA 8270D

Analysis Date/Time: 03/05/20 12:11

Lab File ID: CAL BNA@50PPM

		I1		I2		I3		I4		I5		I6		I7	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:		38644	2.59	69032	5.81	261192	6.82	154825	8.25	292467	9.70	291625	12.75	299953	14.38
Eval File Area Limit:		19322-77288		34516-138064		130596-522384		77412-309650		146234-584934		145812-583250		149976-599906	
Eval File Rt Limit:		2.09-3.09		5.31-6.31		6.32-7.32		7.75-8.75		9.2-10.2		12.25-13.25		13.88-14.88	
Data File	Sample#														
7M105592.D	CAL BNA@2PPM	41439	2.58	67939	5.81	259597	6.83	152560	8.26	284389	9.71	278416	12.75	302789	14.37
7M105593.D	CAL BNA@10PPM	41519	2.58	75573	5.81	298916	6.82	180303	8.25	336400	9.70	330255	12.75	345689	14.37
7M105594.D	CAL BNA@196PPM	37082	2.59	62676	5.82	250039	6.82	152087	8.25	301225	9.71	318211	12.76	336546	14.37
7M105595.D	CAL BNA@160PPM	38985	2.59	62761	5.81	237015	6.82	146692	8.25	270794	9.70	274483	12.76	298591	14.38
7M105596.D	CAL BNA@120PPM	39100	2.58	68907	5.81	258485	6.82	159209	8.25	307291	9.71	327022	12.76	320754	14.37
7M105597.D	CAL BNA@80PPM	39213	2.59	66768	5.81	254597	6.82	154394	8.25	290124	9.70	293269	12.75	298821	14.37
7M105598.D	CAL BNA@20PPM	38016	2.59	68497	5.81	267214	6.82	158363	8.25	295169	9.70	289843	12.75	299316	14.37
7M105599.D	CAL BNA@50PPM	38644	2.59	69032	5.81	261192	6.82	154825	8.25	292467	9.70	291625	12.75	299953	14.38
7M105600.D	CAL BNA@0.5PPM	39332	2.58	69545	5.81	261223	6.82	154583	8.25	277411	9.70	283280	12.75	295835	14.37
7M105601.D	ICV BNA@50PPM	37984	2.59	66532	5.81	260658	6.82	151401	8.25	284953	9.70	284898	12.75	291689	14.37

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0030402 0080

FORM8

Internal Standard Areas

Evaluation Std Data File: 9M98632.D Method: EPA 8270D

Analysis Date/Time: 03/05/20 12:20

Lab File ID: CAL BNA@50PPM

		I1		I2		I3		I4		I5		I6		I7	
		Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:		41059	2.64	73555	5.85	275820	6.87	168452	8.30	320306	9.76	324412	12.82	317792	14.45
Eval File Area Limit:		20530-82118		36778-147110		137910-551640		84226-336904		160153-640612		162206-648824		158896-635584	
Eval File Rt Limit:		2.14-3.14		5.35-6.35		6.37-7.37		7.8-8.8		9.26-10.26		12.32-13.32		13.95-14.95	
Data File	Sample#														
9M98624.D	CAL BNA@10PPM	38792	2.64	72296	5.85	256714	6.87	160094	8.30	300941	9.76	310906	12.82	308985	14.45
9M98625.D	CAL BNA@2PPM	39882	2.64	73969	5.85	264770	6.86	162975	8.30	308224	9.76	317861	12.82	312214	14.44
9M98626.D	CAL BNA@196PPM	37300	2.64	66292	5.86	251108	6.87	152898	8.30	286693	9.77	279100	12.83	277943	14.45
9M98627.D	CAL BNA@160PPM	36619	2.64	67798	5.85	247660	6.87	150941	8.30	284733	9.76	282325	12.82	279186	14.45
9M98628.D	CAL BNA@120PPM	37677	2.64	71698	5.85	257625	6.87	158259	8.30	298972	9.77	298136	12.82	291107	14.45
9M98629.D	CAL BNA@80PPM	39100	2.64	74259	5.85	264959	6.87	164794	8.30	312417	9.76	312390	12.82	309651	14.45
9M98630.D	CAL BNA@20PPM	38140	2.64	69538	5.85	260424	6.86	159282	8.30	297122	9.76	299363	12.82	299348	14.44
9M98631.D	CAL BNA@0.5PPM	37058	2.65	69362	5.85	261365	6.86	157993	8.30	302268	9.76	312329	12.82	305071	14.45
9M98632.D	CAL BNA@50PPM	41059	2.64	73555	5.85	275820	6.87	168452	8.30	320306	9.76	324412	12.82	317792	14.45
9M98633.D	ICV BNA@50PPM	38091	2.64	70971	5.85	260205	6.87	158786	8.30	301133	9.76	306437	12.82	294642	14.45
9M98634.D	SMB83708	32365	2.63	61613	5.85	224651	6.86	135243	8.30	261118	9.76	258752	12.82	249351	14.44
9M98635.D	MBS DUP	36941	2.64	67693	5.85	241091	6.87	147599	8.30	277032	9.77	272567	12.82	267526	14.45
9M98636.D	SMB83709	39002	2.62	63630	5.85	233147	6.86	143605	8.30	264969	9.76	260036	12.82	262817	14.45
9M98637.D	SMB83709(MS)	41162	2.63	68604	5.85	243519	6.86	151160	8.30	279017	9.76	280736	12.82	271977	14.45

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105603.D Method: EPA 8270D

Analysis Date/Time: 03/05/20 13:44

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	39685	2.59	71188	5.81	278783	6.82	163870	8.25	305604	9.70	289058	12.75	280104	14.37
Eval File Area Limit:	19842-79370		35594-142376		139392-557566		81935-327740		152802-611208		144529-578116		140052-560208	
Eval File Rt Limit:	2.09-3.09		5.31-6.31		6.32-7.32		7.75-8.75		9.2-10.2		12.25-13.25		13.87-14.87	

Data File	Sample#														
7M105604.D	AD16036-001	39315	2.57	64729	5.81	255549	6.82	149778	8.25	274687	9.70	251429	12.75	241080	14.37
7M105605.D	AD16036-005	37079	2.57	62316	5.81	242109	6.82	139709	8.24	256107	9.70	225705	12.75	219306	14.36
7M105606.D	AD16036-003	33398	2.57	60020	5.81	231337	6.82	134766	8.24	247597	9.70	221818	12.75	219069	14.36
7M105607.D	SMB83709	56812	2.57	103179	5.81	395162	6.82	239928	8.24	437516	9.70	396074	12.75	380141	14.37
7M105608.D	AD15815-003(5X)(MS)	37169	2.59	69384	5.81	261004	6.82	164781	8.25	297644	9.70	275791	12.75	265921	14.36
7M105609.D	AD15815-003(5X)(MS	36419	2.59	67100	5.81	254632	6.82	151710	8.24	273571	9.70	259903	12.75	249613	14.37
7M105610.D	AD15917-005(20X)	39006	2.59	68547	5.81	263336	6.82	162301	8.24	292453	9.70	267341	12.75	263665	14.36
7M105611.D	AD15667-007	34938	2.58	60796	5.81	228298	6.82	132432	8.24	240325	9.70	216845	12.75	210066	14.36
7M105612.D	AD15667-007(MS)	31770	2.58	58307	5.81	221616	6.82	130766	8.24	236172	9.70	216587	12.75	210400	14.36
7M105613.D	AD15667-007(MSD)	30865	2.58	58192	5.81	219927	6.82	128656	8.24	234282	9.70	217716	12.75	212728	14.36
7M105614.D	AD15703-006	28528	2.57	53705	5.81	206780	6.82	118518	8.24	216747	9.70	200025	12.75	191723	14.36
7M105615.D	AD16022-001	33075	2.58	61488	5.81	232397	6.82	138630	8.24	246264	9.70	221929	12.75	217460	14.36
7M105616.D	AD16013-002	29612	2.58	53189	5.81	204005	6.82	119473	8.24	211517	9.70	195269	12.75	196333	14.36
7M105617.D	AD16013-003	29162	2.57	51624	5.81	198583	6.82	116728	8.24	206198	9.70	196330	12.75	188906	14.36
7M105618.D	AD16013-004	28013	2.58	52380	5.81	196341	6.82	115151	8.24	204688	9.70	187575	12.75	183537	14.36
7M105619.D	AD16013-007	28098	2.58	53471	5.81	202034	6.82	119116	8.24	213242	9.70	197324	12.75	195864	14.36
7M105620.D	AD16013-008	24745	2.57	45019	5.81	172940	6.82	100284	8.24	182737	9.70	168312	12.74	164572	14.36
7M105621.D	AD15988-005(R)	26427	2.58	54692	5.81	290957	6.82	157867	8.26	220163	9.70	200244	12.75	193813	14.36
7M105622.D	AD15925-003(5X)	29760	2.59	56606	5.81	215763	6.82	138360	8.24	238136	9.70	221754	12.75	214658	14.36
7M105623.D	AD16013-006(5X)	30540	2.59	59078	5.81	213851	6.82	120727	8.24	217535	9.70	203810	12.75	205313	14.36
7M105624.D	AD16013-001(5X)	30789	2.59	57535	5.81	216292	6.82	126098	8.24	226346	9.70	217528	12.76	227746	14.37
7M105625.D	AD16013-005(3X)	32503	2.59	57791	5.81	216041	6.82	123487	8.24	220975	9.70	199586	12.75	208041	14.36
7M105626.D	AD16026-001(3X)	32127	2.59	58428	5.81	220162	6.82	125189	8.24	224596	9.70	209533	12.75	209432	14.36

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

PCB Data

Form1

ORGANICS PCB REPORT

Sample Number: AD16022-001
Client Id: TB-102-1 COMP
Data File: 3G121777.D
Analysis Date: 03/06/20 11:22
Date Rec/Extracted: 03/04/20-03/05/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 77

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.032	U	11097-69-1	Aroclor-1254	0.032	U
11104-28-2	Aroclor-1221	0.032	U	11096-82-5	Aroclor-1260	0.032	U
11141-16-5	Aroclor-1232	0.032	U	37324-23-5	Aroclor-1262	0.032	U
53469-21-9	Aroclor-1242	0.032	U	11100-14-4	Aroclor-1268	0.032	U
12672-29-6	Aroclor-1248	0.032	U	1336-36-3	Aroclor (Total)	0.032	U

Worksheet #: 548050

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_3\Data\03-06-20\
Data File : 3G121777.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 6 Mar 2020 11:22
Operator : MS/MLC
Sample : AD16022-001
Misc : S,PCB
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 06 12:57:20 2020
Quant Method : G:\GCDATA\2020\GC_3\METHODQT\3G_C0226.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Wed Feb 26 15:19:32 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

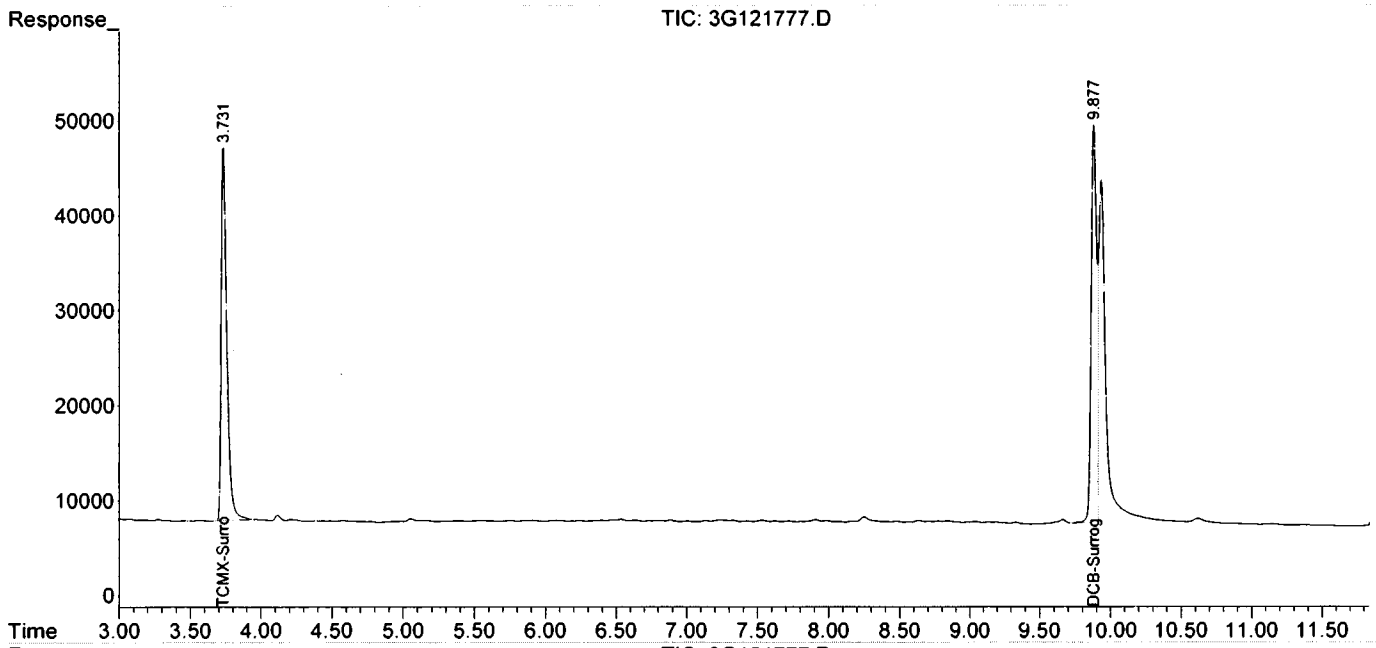
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.731	3.890	1092750	852383	102.664	105.837
45)DCB-Surrogate	9.878	10.778	1108508	931204	97.408	96.822

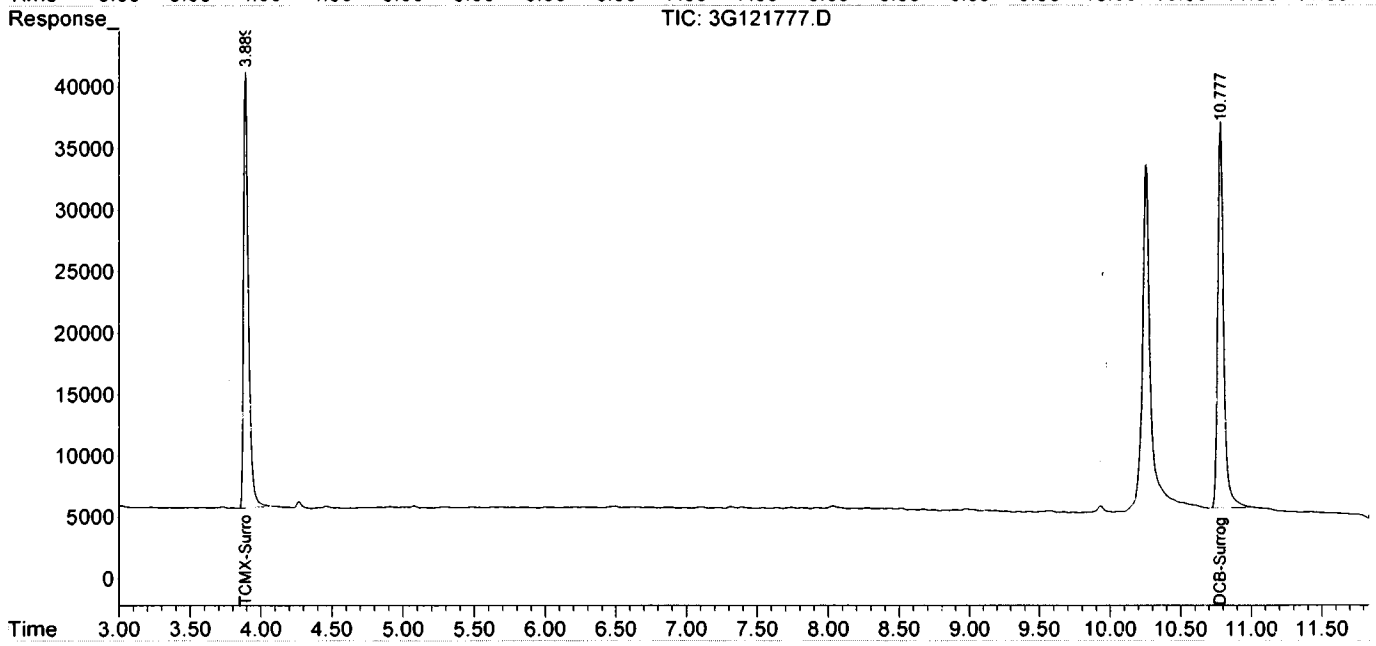
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_3\Data\03-06-20\
Data File : 3G121777.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 6 Mar 2020 11:22
Operator : MS/MLC
Sample : AD16022-001
Misc : S,PCB
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 06 12:57:20 2020
Quant Method : G:\GCDATA\2020\GC_3\METHODQT\3G_C0226.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Wed Feb 26 15:19:32 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: SMB83742
Client Id:
Data File: 3G121768.D
Analysis Date: 03/06/20 09:06
Date Rec/Extracted: NA-03/05/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 548050 ***Total Target Concentration*** 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_3\Data\03-06-20\
Data File : 3G121768.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 6 Mar 2020 9:06
Operator : MS/MLC
Sample : SMB83742
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 06 12:53:38 2020
Quant Method : G:\GCDATA\2020\GC_3\METHODQT\3G_C0226.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Wed Feb 26 15:19:32 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.732	3.890	1015656	820903	95.421	101.928
45)DCB-Surrogate	9.878	10.778	1154390	866827	101.440	90.128

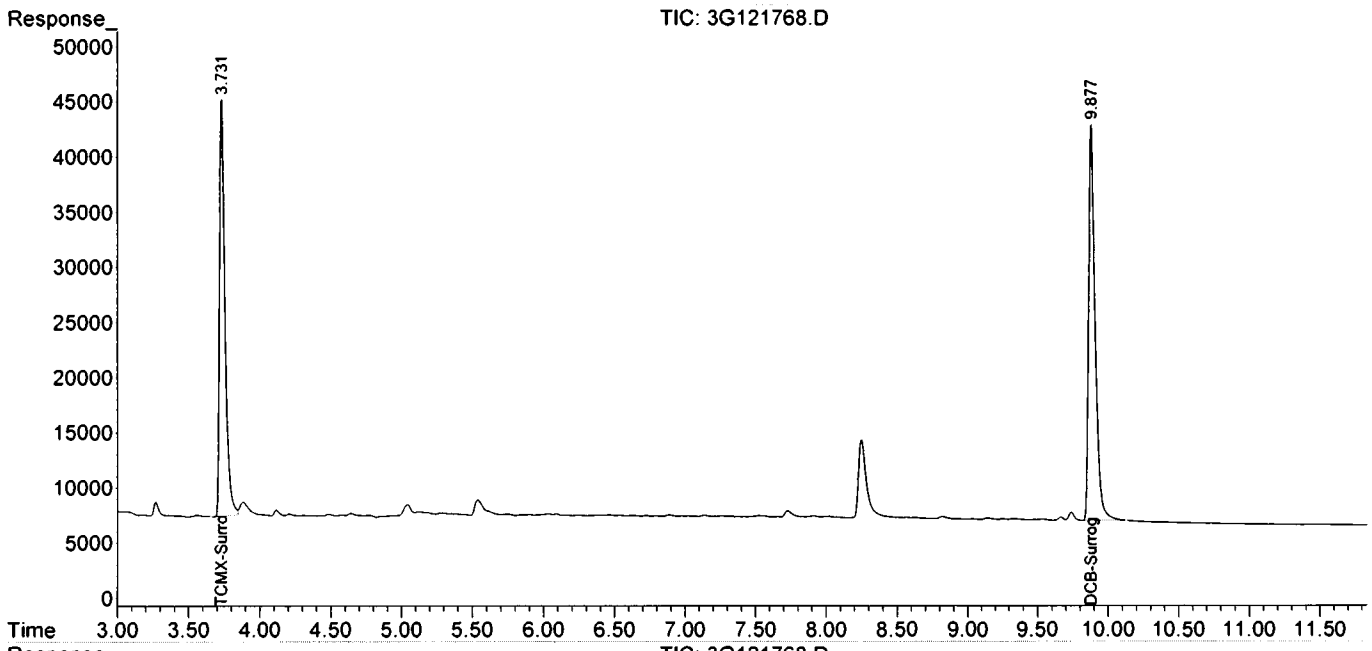
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

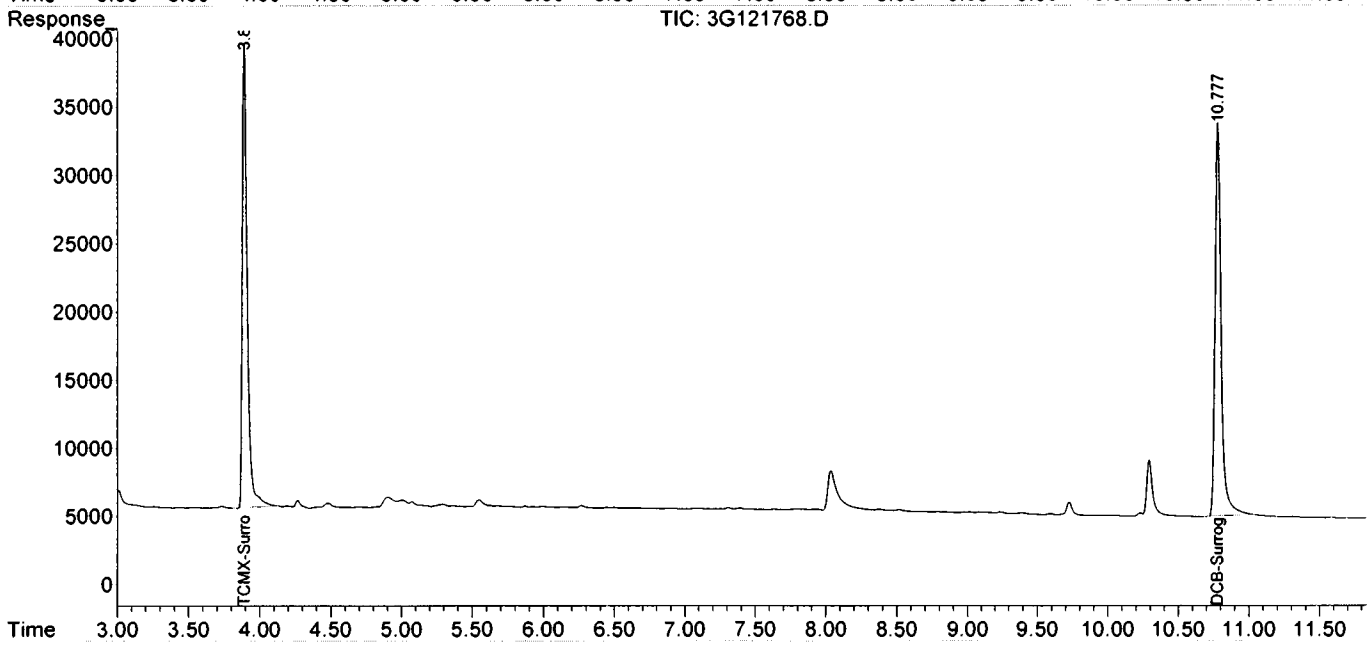
3

Data Path : G:\Gcdata\2020\GC_3\Data\03-06-20\
Data File : 3G121768.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 6 Mar 2020 9:06
Operator : MS/MLC
Sample : SMB83742
Misc : S,PCB
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 06 12:53:38 2020
Quant Method : G:\GCDATA\2020\GC_3\METHODQT\3G_C0226.M
Quant Title : @GC_3,ug,608,8082
QLast Update : Wed Feb 26 15:19:32 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8082A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
3G121768.D	SMB83742	S	03/06/20 09:06	1		95	102	101	90		
3G121777.D	AD16022-001	S	03/06/20 11:22	1		103	106	97	97		
3G121769.D	SMB83742(MS)	S	03/06/20 09:21	1		88	89	97	82		
3G121773.D	AD16055-002(MS)	S	03/06/20 10:21	1		93	97	90	86		
3G121774.D	AD16055-002(MSD)	S	03/06/20 10:36	1		93	96	89	86		
3G121775.D	AD16055-002	S	03/06/20 10:52	1		110	113	106	102		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8082A

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83742

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3G121769.D	SMB83742(MS)	3/6/2020 9:21:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	761.416	0	1000	76	30	163
Aroclor-1260 -Total	1	748.148	0	1000	75	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83742

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3G121773.D	AD16055-002(MS)	3/6/2020 10:21:00 AM
Non Spike(If applicable):	3G121775.D	AD16055-002	3/6/2020 10:52:00 AM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	936.682	0	1000	94	30	163
Aroclor-1260 -Total	1	911.906	0	1000	91	25	166

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3G121774.D	AD16055-002(MSD)	3/6/2020 10:36:00 AM
Non Spike(If applicable):	3G121775.D	AD16055-002	3/6/2020 10:52:00 AM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	926.774	0	1000	93	30	163
Aroclor-1260 -Total	1	918.26	0	1000	92	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form

Form3
RPD Data Laboratory Limits
QC Batch: SMB83742

	Data File	Sample ID:	Analysis Date
Spike or Dup:	3G121774.D	AD16055-002(MSD)	3/6/2020 10:36:00 AM
Duplicate(If applicable):	3G121773.D	AD16055-002(MS)	3/6/2020 10:21:00 AM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	926.774	936.682	1.1	40
Aroclor-1260 -Total	1	918.26	911.906	0.69	37

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB83742
Blank Data File: 3G121768.D
Matrix: Soil

Blank Analysis Date: 03/06/20 09:06
Blank Extraction Date: 03/05/20
(If Applicable)
Method: EPA 8082A

Sample Number	Data File	Analysis Date
AD16022-001	3G121777.D	03/06/20 11:22
AD16055-002	3G121775.D	03/06/20 10:52
AD16055-002(MSD	3G121774.D	03/06/20 10:36
AD16055-002(MS)	3G121773.D	03/06/20 10:21
SMB83742(MS)	3G121769.D	03/06/20 09:21

Form 5

Method: EPA 8082A

Instrument: GC_3 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G121617.D	2000PPB	02/26/20 07:12	Soil					
3G121618.D	1000PPB	02/26/20 08:30	Soil					
3G121619.D	CAL 3268@500PPB	02/26/20 10:34	Soil	3G12162	9.8825	0.082	10.7748	0.0074
3G121620.D	CAL 1242@500PPB	02/26/20 10:48	Soil	3G12162	9.8747	0.003	10.7724	0.0149
3G121621.D	CAL 1248@500PPB	02/26/20 11:04	Soil	3G12162	9.8752	0.0081	10.7735	0.0046
3G121622.D	CAL 2154@500PPB	02/26/20 11:19	Soil	3G12162	9.8738	0.0061	10.7724	0.0149
3G121623.D	CAL 1262@500PPB	02/26/20 11:34	Soil	3G12162	9.8745	0.001	10.7733	0.0065
3G121624.D	CAL 1660@50PPB	02/26/20 11:49	Soil	3G12162	9.8744	0	10.7740	0
3G121625.D	CAL 1660@200PPB	02/26/20 12:04	Soil	3G12162	9.8753	0.0091	10.7744	0.0037
3G121626.D	CAL 1660@500PPB	02/26/20 12:19	Soil	3G12162	9.8744	0	10.7734	0.0056
3G121627.D	CAL 1660@1000PPB	02/26/20 12:34	Soil	3G12162	9.8746	0.002	10.7739	0.0009
3G121628.D	CAL 1660@2000PPB	02/26/20 12:49	Soil	3G12162	9.8735	0.0091	10.7726	0.013
3G121629.D	CAL 1660@4000PPB	02/26/20 13:04	Soil	3G12162	9.8735	0.0091	10.7739	0.0009
3G121630.D	ICV	02/26/20 13:19	Soil	3G12162	9.8740	0.0041	10.7720	0.0186
3G121631.D	PEST WS	02/26/20 13:34	Soil	3G12162	0.0000	200 *	0.0000	200 *
3G121632.D	AD15895-003	02/26/20 13:49	Aqueous	3G12162	9.8730	0.0142	10.7716	0.0223
3G121633.D	AD15895-004	02/26/20 14:04	Aqueous	3G12162	9.8740	0.0041	10.7723	0.0158
3G121634.D	AD15895-005	02/26/20 14:19	Aqueous	3G12162	9.8734	0.0101	10.7725	0.0139
3G121635.D	AD15895-006	02/26/20 14:34	Aqueous	3G12162	9.8752	0.0081	10.7733	0.0065
3G121636.D	AD15895-001	02/26/20 14:50	Aqueous	3G12162	9.8735	0.0091	10.7719	0.0195
3G121637.D	AD15884-001	02/26/20 15:04	Aqueous	3G12162	9.8718	0.0263	10.7717	0.0214
3G121638.D	AD15897-007(MS)	02/26/20 15:19	Soil	3G12162	9.8720	0.0243	10.7722	0.0167
3G121639.D	AD15897-007(MSD)	02/26/20 15:34	Soil	3G12162	9.8727	0.0172	10.7725	0.0139
3G121640.D	AD15897-007	02/26/20 15:49	Soil	3G12162	9.8729	0.0152	10.7725	0.0139
3G121641.D	AD15897-001	02/26/20 16:05	Soil	3G12162	9.8732	0.0122	10.7711	0.0269
3G121642.D	AD15897-003	02/26/20 16:20	Soil	3G12162	9.8730	0.0142	10.7719	0.0195
3G121643.D	AD15897-005	02/26/20 16:35	Soil	3G12162	9.8728	0.0162	10.7714	0.0241
3G121644.D	AD15897-009	02/26/20 16:51	Soil	3G12162	9.8737	0.0071	10.7730	0.0093
3G121645.D	CAL 1660@1000PPB	02/26/20 17:06	Soil	3G12162	9.8759	0.0152	10.7742	0.0019
3G121646.D	2000PPB	02/26/20 17:21	Soil	3G12164	9.8756	0.003	10.7737	0.0046

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082A

Instrument: GC_3 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
3G121765.D	CAL 1660@1000PPB	03/06/20 07:56	Soil	3G12176	9.8859	0	10.7785	0
3G121766.D	SMB83740	03/06/20 08:36	Soil	3G12176	9.8866	0.0071	10.7796	0.0102
3G121767.D	SMB83740(MS)	03/06/20 08:51	Soil	3G12176	9.8785	0.0749	10.7774	0.0102
3G121768.D	SMB83742	03/06/20 09:06	Soil	3G12176	9.8783	0.0769	10.7776	0.0083
3G121769.D	SMB83742(MS)	03/06/20 09:21	Soil	3G12176	9.8784	0.0759	10.7772	0.0121
3G121770.D	AD16013-002(MS)	03/06/20 09:36	Soil	3G12176	9.8770	0.0901	10.7783	0.0018
3G121771.D	AD16013-002(MSD)	03/06/20 09:51	Soil	3G12176	9.8773	0.087	10.7770	0.0139
3G121772.D	AD16013-002	03/06/20 10:07	Soil	3G12176	9.8769	0.0911	10.7767	0.0167
3G121773.D	AD16055-002(MS)	03/06/20 10:21	Soil	3G12176	9.8776	0.084	10.7777	0.0074
3G121774.D	AD16055-002(MSD)	03/06/20 10:36	Soil	3G12176	9.8759	0.1012	10.7768	0.0158
3G121775.D	AD16055-002	03/06/20 10:52	Soil	3G12176	9.8766	0.0941	10.7778	0.0065
3G121776.D	AD16055-001	03/06/20 11:07	Soil	3G12176	9.8779	0.081	10.7765	0.0186
3G121777.D	AD16022-001	03/06/20 11:22	Soil	3G12176	9.8783	0.0769	10.7776	0.0083
3G121778.D	AD16026-001	03/06/20 11:37	Soil	3G12176	9.8758	0.1022	10.7761	0.0223
3G121779.D	AD16045-001	03/06/20 11:52	Soil	3G12176	9.8769	0.0911	10.7766	0.0176
3G121780.D	CAL 1660@2000PPB	03/06/20 12:07	Soil	3G12176	9.8771	0.0891	10.7776	0.0083
3G121781.D	AD16013-003	03/06/20 12:22	Soil	3G12178	9.8772	0.001	10.7772	0.0037
3G121782.D	AD16013-004	03/06/20 12:37	Soil	3G12178	9.8789	0.0182	10.7783	0.0065
3G121783.D	AD16013-005	03/06/20 12:52	Soil	3G12178	9.8762	0.0091	10.7766	0.0093
3G121784.D	AD16013-006	03/06/20 13:07	Soil	3G12178	9.8778	0.0071	10.7787	0.0102
3G121785.D	AD16013-007	03/06/20 13:22	Soil	3G12178	9.8780	0.0091	10.7777	0.0009
3G121786.D	AD16013-008	03/06/20 13:37	Soil	3G12178	9.8772	0.001	10.7779	0.0028
3G121787.D	AD16041-002	03/06/20 13:52	Soil	3G12178	9.8787	0.0162	10.7780	0.0037
3G121788.D	AD16041-003	03/06/20 14:07	Soil	3G12178	9.8764	0.0071	10.7779	0.0028
3G121789.D	AD16041-004	03/06/20 14:22	Soil	3G12178	9.8798	0.0273	10.7790	0.013
3G121790.D	AD16041-005	03/06/20 14:37	Soil	3G12178	9.8780	0.0091	10.7776	0
3G121791.D	AD16041-007	03/06/20 14:52	Soil	3G12178	9.8790	0.0192	10.7788	0.0111
3G121792.D	AD16041-009	03/06/20 15:07	Soil	3G12178	9.8790	0.0192	10.7786	0.0093
3G121793.D	AD16041-010	03/06/20 15:22	Soil	3G12178	9.8788	0.0172	10.7800	0.0223
3G121794.D	AD16041-011	03/06/20 15:37	Soil	3G12178	9.8784	0.0132	10.7781	0.0046
3G121795.D	AD16046-001	03/06/20 15:52	Soil	3G12178	9.8796	0.0253	10.7801	0.0232
3G121796.D	CAL 1660@1000PPB	03/06/20 16:07	Soil	3G12178	9.8791	0.0202	10.7791	0.0139
3G121797.D	2000PPB	03/06/20 16:22	Soil	3G12179	9.8793	0.002	10.7790	0.0009

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G121624.D	CAL 1660@50PPB	02/26/20 11:49	2	3G121625.D	CAL 1660@200PPB	02/26/20 12:04
3	3G121626.D	CAL 1660@500PPB	02/26/20 12:19	4	3G121627.D	CAL 1660@1000PPB	02/26/20 12:34
5	3G121628.D	CAL 1660@2000PPB	02/26/20 12:49	6	3G121629.D	CAL 1660@4000PPB	02/26/20 13:04
7	3G121619.D	CAL 3268@500PPB	02/26/20 10:34	8	3G121620.D	CAL 1242@500PPB	02/26/20 10:48
9	3G121621.D	CAL 1248@500PPB	02/26/20 11:04	10	3G121622.D	CAL 2154@500PPB	02/26/20 11:19
11	3G121623.D	CAL 1262@500PPB	02/26/20 11:34				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	1.2339	1.0726	1.0544	1.0365	1.0202	0.9685	----	----	1.06	3.73	0.999	1.00	8.5	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Avg	0.0298	0.0283	0.0292	0.0283	0.0259	0.0233	----	----	0.0275	4.22	0.996	1.00	8.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Avg	0.0697	0.0532	0.0561	0.0511	0.0461	0.0404	----	----	0.0528	4.57	0.993	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Avg	0.1355	0.1086	0.1033	0.0961	0.0882	0.0831	----	----	0.103	5.04	0.999	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Avg	0.0418	0.0354	0.0346	0.0333	0.0309	0.0284	----	----	0.0341	5.27	0.997	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	0.0975	0.0811	0.0774	0.0751	0.0659	0.0602	----	----	0.0763	5.39	0.996	0.999	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Avg	0.0851	0.0710	0.0680	0.0624	0.0565	0.0508	----	----	0.0657	6.88	0.996	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Avg	0.0962	0.0798	0.0777	0.0722	0.0650	0.0581	----	----	0.0749	7.13	0.995	1.00	18	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0435	0.0396	0.0420	0.0406	0.0382	0.0362	----	----	0.0400	7.33	0.999	1.00	6.5	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	0.0590	0.0495	0.0493	0.0465	0.0430	0.0394	----	----	0.0478	7.91	0.997	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.0860	0.0732	0.0726	0.0728	0.0702	0.0668	----	----	0.0737	8.63	0.999	1.00	8.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.0132	4.02	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.00845	4.16	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0376	4.22	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0272	4.22	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0242	4.58	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0428	5.04	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.0183	5.17	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0193	5.63	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0438	4.22	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0737	4.57	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.138	5.04	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.102	5.39	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0649	5.62	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0223	4.58	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0506	5.04	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.0896	5.39	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0460	5.73	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0564	6.32	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0244	6.51	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.0829	6.72	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0496	6.88	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.0691	7.00	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0294	7.38	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.0732	7.56	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0422	8.56	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 13.68 Avg Rsd Col 2: 14.54

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0030402 0096

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G121624.D	CAL 1660@50PPB	02/26/20 11:49	2	3G121625.D	CAL 1660@200PPB	02/26/20 12:04
3	3G121626.D	CAL 1660@500PPB	02/26/20 12:19	4	3G121627.D	CAL 1660@1000PPB	02/26/20 12:34
5	3G121628.D	CAL 1660@2000PPB	02/26/20 12:49	6	3G121629.D	CAL 1660@4000PPB	02/26/20 13:04
7	3G121619.D	CAL 3268@500PPB	02/26/20 10:34	8	3G121620.D	CAL 1242@500PPB	02/26/20 10:48
9	3G121621.D	CAL 1248@500PPB	02/26/20 11:04	10	3G121622.D	CAL 2154@500PPB	02/26/20 11:19
11	3G121623.D	CAL 1262@500PPB	02/26/20 11:34				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.0836	8.62	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0401	9.32	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.0148	9.66	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.0145	7.92	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.0127	8.23	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.0953	8.81	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0279	8.91	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.289	9.67	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	1.4077	1.1822	1.1508	1.0998	1.0324	0.9549	----	----	1.14	9.87	0.998	1.00	14	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	0.8542	0.7272	0.7874	0.8049	0.8317	0.8266	----	----	0.805	3.89	1.00	1.00	5.5	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Avg	0.0258	0.0234	0.0220	0.0197	0.0185	0.0169	----	----	0.0211	4.49	0.997	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	Avg	0.0575	0.0506	0.0460	0.0418	0.0381	0.0340	----	----	0.0447	4.91	0.996	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Avg	0.1031	0.0885	0.0830	0.0770	0.0722	0.0665	----	----	0.0818	5.29	0.998	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Avg	0.0479	0.0400	0.0371	0.0338	0.0311	0.0283	----	----	0.0364	5.62	0.997	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Avg	0.0326	0.0285	0.0268	0.0244	0.0226	0.0207	----	----	0.0260	5.99	0.997	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	Avg	0.0735	0.0594	0.0551	0.0507	0.0462	0.0432	----	----	0.0547	7.30	0.998	1.00	20	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	Avg	0.0752	0.0634	0.0602	0.0563	0.0528	0.0502	----	----	0.0597	7.38	0.999	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	Avg	0.0306	0.0274	0.0265	0.0256	0.0247	0.0237	----	----	0.0265	8.01	1.00	1.00	9.1	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.0636	0.0520	0.0500	0.0465	0.0443	0.0419	----	----	0.0498	8.37	0.999	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	0.0505	0.0421	0.0420	0.0395	0.0387	0.0387	----	----	0.0420	9.08	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.0122	4.27	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.00715	4.42	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0229	4.49	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0165	4.49	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0192	4.91	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.0309	5.29	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0126	5.99	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.00815	6.14	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0320	4.49	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.0613	4.91	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.113	5.29	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0533	5.62	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0479	5.99	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.0177	4.91	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.0410	5.29	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0331	5.62	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 13.68 Avg Rsd Col 2: 14.54

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0030402 0097

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_3

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	3G121624.D	CAL 1660@50PPB	02/26/20 11:49	2	3G121625.D	CAL 1660@200PPB	02/26/20 12:04
3	3G121626.D	CAL 1660@500PPB	02/26/20 12:19	4	3G121627.D	CAL 1660@1000PPB	02/26/20 12:34
5	3G121628.D	CAL 1660@2000PPB	02/26/20 12:49	6	3G121629.D	CAL 1660@4000PPB	02/26/20 13:04
7	3G121619.D	CAL 3268@500PPB	02/26/20 10:34	8	3G121620.D	CAL 1242@500PPB	02/26/20 10:48
9	3G121621.D	CAL 1248@500PPB	02/26/20 11:04	10	3G121622.D	CAL 2154@500PPB	02/26/20 11:19
11	3G121623.D	CAL 1262@500PPB	02/26/20 11:34				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.0297	6.14	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.0363	6.27	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.0563	6.49	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.0177	6.84	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.0458	7.23	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0218	7.74	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0218	8.43	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.0454	7.81	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.0368	8.96	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.0434	9.07	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.0438	9.67	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.0128	10.22	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.00806	8.47	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.0131	8.51	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.0790	9.41	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.0217	9.57	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.247	10.22	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	1.1854	0.9752	0.9485	0.9058	0.8856	0.8699	----	----	0.962	10.77	1.00	1.00	12	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 13.68 Avg Rsd Col 2: 14.54

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 · Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0030402 0098

Form7
Continuing Calibration

Method: EPA 8082A

Data File:				3G121765.D			3G121780.D												
Method:				8082			8082												
Calibration Name:				CAL 1660@1000PP			CAL 1660@2000PP												
Calibration Date/Time				03/06/20 07:56			03/06/20 12:07												
Compound	Limit	Col	Mr	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff	Conc	Exp	%Diff
TCMX-Surrogate	20	1	0	110.3	100	10.3	236.7	200	18.3									
Aroclor-1016	20	1	1	1153	1000	15.3	2236	2000	11.8									
Aroclor-1016	20	1	2	1069	1000	6.9	2080	2000	4.0									
Aroclor-1016	20	1	3	1028	1000	2.8	2049	2000	2.5									
Aroclor-1016	20	1	4	1067	1000	6.7	2166	2000	8.3									
Aroclor-1016	20	1	5	1014	1000	1.4	2077	2000	3.9									
Aroclor-1260	20	1	1	1017	1000	1.7	2080	2000	4.0									
Aroclor-1260	20	1	2	1021	1000	2.1	2109	2000	5.4									
Aroclor-1260	20	1	3	1078	1000	7.8	2338	2000	16.9									
Aroclor-1260	20	1	4	1066	1000	6.6	2195	2000	9.8									
Aroclor-1260	20	1	5	1026	1000	2.6	2341	2000	17.0									
DCB-Surrogate	20	1	0	91.34	100	8.7	254.9	200	27.5*									
Average Difference	20	1	0			6.1			10.8									
TCMX-Surrogate	20	2	0	106	100	6.0	257.3	200	28.6*									
Aroclor-1016	20	2	1	1002	1000	0.2	2203	2000	10.1									
Aroclor-1016	20	2	2	983.6	1000	1.6	2099	2000	5.0									
Aroclor-1016	20	2	3	986.8	1000	1.3	2284	2000	14.2									
Aroclor-1016	20	2	4	980.5	1000	2.0	2157	2000	7.9									
Aroclor-1016	20	2	5	988.3	1000	1.2	2182	2000	9.1									
Aroclor-1260	20	2	1	966.3	1000	3.4	2138	2000	6.9									
Aroclor-1260	20	2	2	991.3	1000	0.9	2278	2000	13.9									
Aroclor-1260	20	2	3	872.7	1000	12.7	2431	2000	21.6*									
Aroclor-1260	20	2	4	985.4	1000	1.5	2196	2000	9.8									
Aroclor-1260	20	2	5	981.9	1000	1.8	2354	2000	17.7									
DCB-Surrogate	20	2	0	91.59	100	8.4	220.6	200	10.3									
Average Difference	20	2	0			3.4			12.9									

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8082A

Data File:			3G121624.D		3G121765.D							
Calibration Name:			CAL 1660@50PPB		CAL 1660@1000PPB							
Calibration Date/Time			2/26/2020 11:49:00 AM		3/6/2020 7:56:00 AM							
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	3.73	(3.67 - 3.79)	3.74	(3.68 - 3.80)						
Aroclor-1016	1	1	4.22	(4.18 - 4.26)	4.22	(4.18 - 4.26)						
Aroclor-1016	1	2	4.57	(4.53 - 4.61)	4.58	(4.54 - 4.62)						
Aroclor-1016	1	3	5.04	(5.00 - 5.08)	5.04	(5.00 - 5.08)						
Aroclor-1016	1	4	5.27	(5.23 - 5.31)	5.28	(5.24 - 5.32)						
Aroclor-1016	1	5	5.39	(5.35 - 5.43)	5.40	(5.36 - 5.44)						
Aroclor-1260	1	1	6.88	(6.84 - 6.92)	6.89	(6.85 - 6.93)						
Aroclor-1260	1	2	7.13	(7.09 - 7.17)	7.14	(7.10 - 7.18)						
Aroclor-1260	1	3	7.33	(7.29 - 7.37)	7.34	(7.30 - 7.38)						
Aroclor-1260	1	4	7.91	(7.87 - 7.95)	7.92	(7.88 - 7.96)						
Aroclor-1260	1	5	8.63	(8.59 - 8.67)	8.63	(8.59 - 8.67)						
Aroclor-1221	1	1	4.02	(3.98 - 4.06)								
Aroclor-1221	1	2	4.16	(4.12 - 4.20)								
Aroclor-1221	1	3	4.22	(4.18 - 4.26)								
Aroclor-1232	1	1	4.22	(4.18 - 4.26)								
Aroclor-1232	1	2	4.58	(4.54 - 4.62)								
Aroclor-1232	1	3	5.04	(5.00 - 5.08)								
Aroclor-1232	1	4	5.17	(5.13 - 5.21)								
Aroclor-1232	1	5	5.63	(5.59 - 5.67)								
Aroclor-1242	1	1	4.22	(4.18 - 4.26)								
Aroclor-1242	1	2	4.57	(4.53 - 4.61)								
Aroclor-1242	1	3	5.04	(5.00 - 5.08)								
Aroclor-1242	1	4	5.39	(5.35 - 5.43)								
Aroclor-1242	1	5	5.62	(5.58 - 5.66)								
Aroclor-1248	1	1	4.57	(4.53 - 4.61)								
Aroclor-1248	1	2	5.04	(5.00 - 5.08)								
Aroclor-1248	1	3	5.39	(5.35 - 5.43)								
Aroclor-1248	1	4	5.73	(5.69 - 5.77)								
Aroclor-1248	1	5	6.32	(6.28 - 6.36)								
Aroclor-1254	1	1	6.51	(6.47 - 6.55)								
Aroclor-1254	1	2	6.72	(6.68 - 6.76)								
Aroclor-1254	1	3	6.88	(6.84 - 6.92)								
Aroclor-1254	1	4	7.00	(6.96 - 7.04)								
Aroclor-1254	1	5	7.38	(7.34 - 7.42)								
Aroclor-1262	1	1	7.56	(7.52 - 7.60)								
Aroclor-1262	1	2	8.56	(8.52 - 8.60)								
Aroclor-1262	1	3	8.62	(8.58 - 8.66)								
Aroclor-1262	1	4	9.32	(9.28 - 9.36)								
Aroclor-1262	1	5	9.66	(9.62 - 9.70)								
Aroclor-1268	1	1	7.92	(7.88 - 7.96)								
Aroclor-1268	1	2	8.23	(8.19 - 8.27)								
Aroclor-1268	1	3	8.81	(8.77 - 8.85)								
Aroclor-1268	1	4	8.91	(8.87 - 8.95)								
Aroclor-1268	1	5	9.67	(9.63 - 9.71)								
DCB-Surrogate	1	0	9.88	(9.82 - 9.94)	9.89	(9.83 - 9.95)						
TCMX-Surrogate	2	0	3.89	(3.83 - 3.95)	3.89	(3.83 - 3.95)						
Aroclor-1016	2	1	4.49	(4.45 - 4.53)	4.49	(4.45 - 4.53)						
Aroclor-1016	2	2	4.91	(4.87 - 4.95)	4.91	(4.87 - 4.95)						
Aroclor-1016	2	3	5.29	(5.25 - 5.33)	5.30	(5.26 - 5.34)						
Aroclor-1016	2	4	5.62	(5.58 - 5.66)	5.62	(5.58 - 5.66)						
Aroclor-1016	2	5	5.99	(5.95 - 6.03)	6.00	(5.96 - 6.04)						
Aroclor-1260	2	1	7.30	(7.26 - 7.34)	7.30	(7.26 - 7.34)						
Aroclor-1260	2	2	7.38	(7.34 - 7.42)	7.39	(7.35 - 7.43)						
Aroclor-1260	2	3	8.01	(7.97 - 8.05)	8.02	(7.98 - 8.06)						
Aroclor-1260	2	4	8.37	(8.33 - 8.41)	8.38	(8.34 - 8.42)						
Aroclor-1260	2	5	9.08	(9.04 - 9.12)	9.08	(9.04 - 9.12)						
Aroclor-1221	2	1	4.27	(4.23 - 4.31)								
Aroclor-1221	2	2	4.42	(4.38 - 4.46)								
Aroclor-1221	2	3	4.49	(4.45 - 4.53)								
Aroclor-1232	2	1	4.49	(4.45 - 4.53)								
Aroclor-1232	2	2	4.91	(4.87 - 4.95)								
Aroclor-1232	2	3	5.29	(5.25 - 5.33)								
Aroclor-1232	2	4	5.99	(5.95 - 6.03)								
Aroclor-1232	2	5	6.14	(6.10 - 6.18)								
Aroclor-1242	2	1	4.49	(4.45 - 4.53)								
Aroclor-1242	2	2	4.91	(4.87 - 4.95)								
Aroclor-1242	2	3	5.29	(5.25 - 5.33)								
Aroclor-1242	2	4	5.62	(5.58 - 5.66)								
Aroclor-1242	2	5	5.99	(5.95 - 6.03)								
Aroclor-1248	2	1	4.91	(4.87 - 4.95)								
Aroclor-1248	2	2	5.29	(5.25 - 5.33)								
Aroclor-1248	2	3	5.62	(5.58 - 5.66)								
Aroclor-1248	2	4	6.14	(6.10 - 6.18)								
Aroclor-1248	2	5	6.27	(6.23 - 6.31)								
Aroclor-1254	2	1	6.49	(6.45 - 6.53)								
Aroclor-1254	2	2	6.84	(6.80 - 6.88)								
Aroclor-1254	2	3	7.23	(7.19 - 7.27)								
Aroclor-1254	2	4	7.74	(7.70 - 7.78)								
Aroclor-1254	2	5	8.43	(8.39 - 8.47)								
Aroclor-1262	2	1	7.81	(7.77 - 7.85)								
Aroclor-1262	2	2	8.96	(8.92 - 9.00)								
Aroclor-1262	2	3	9.07	(9.03 - 9.11)								
Aroclor-1262	2	4	9.67	(9.63 - 9.71)								
Aroclor-1262	2	5	10.22	(10.18 - 10.26)								
Aroclor-1268	2	1	8.47	(8.43 - 8.51)								
Aroclor-1268	2	2	8.51	(8.47 - 8.55)								
Aroclor-1268	2	3	9.41	(9.37 - 9.45)								
Aroclor-1268	2	4	9.57	(9.53 - 9.61)								
Aroclor-1268	2	5	10.22	(10.18 - 10.26)								
DCB-Surrogate	2	0	10.77	(10.71 - 10.83)	10.78	(10.72 - 10.84)						

Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD16022-001
Client Id: TB-102-1 COMP
Data File: 6G107153.D
Analysis Date: 03/06/20 12:33
Date Rec/Extracted: 03/04/20-03/05/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 77

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0065	U	53494-70-5	Endrin Ketone	0.0065	U
309-00-2	Aldrin	0.0065	U	58-89-9	gamma-BHC	0.0013	U
319-84-6	alpha-BHC	0.0013	U	76-44-8	Heptachlor	0.0065	U
319-85-7	beta-BHC	0.0013	U	1024-57-3	Heptachlor Epoxide	0.0065	U
319-86-8	delta-BHC	0.0065	U	72-43-5	Methoxychlor	0.0065	U
60-57-1	Dieldrin	0.0013	U	72-54-8	p,p'-DDD	0.0032	U
959-98-8	Endosulfan I	0.0065	U	72-55-9	p,p'-DDE	0.0032	U
33213-65-9	Endosulfan II	0.0065	U	50-29-3	p,p'-DDT	0.0032	U
1031-07-8	Endosulfan Sulfate	0.0065	U	8001-35-2	Toxaphene	0.032	U
72-20-8	Endrin	0.0065	U	5103-74-2	y-chlordane	0.0065	U
7421-93-4	Endrin Aldehyde	0.0065	U	57-74-9	Chlordane (Total)	0.0065	U

Worksheet #: 548048

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\03-06-20\
Data File : 6G107153.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 6 Mar 2020 12:33
Operator : MS/MLC
Sample : AD16022-001
Misc : S,PEST
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 10 12:39:48 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0227.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Feb 28 10:31:50 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.473	4.654	378935	1073947	97.382	95.229
22)DCB-Surrogate	11.641	12.457	415411	1175298	102.348	105.285

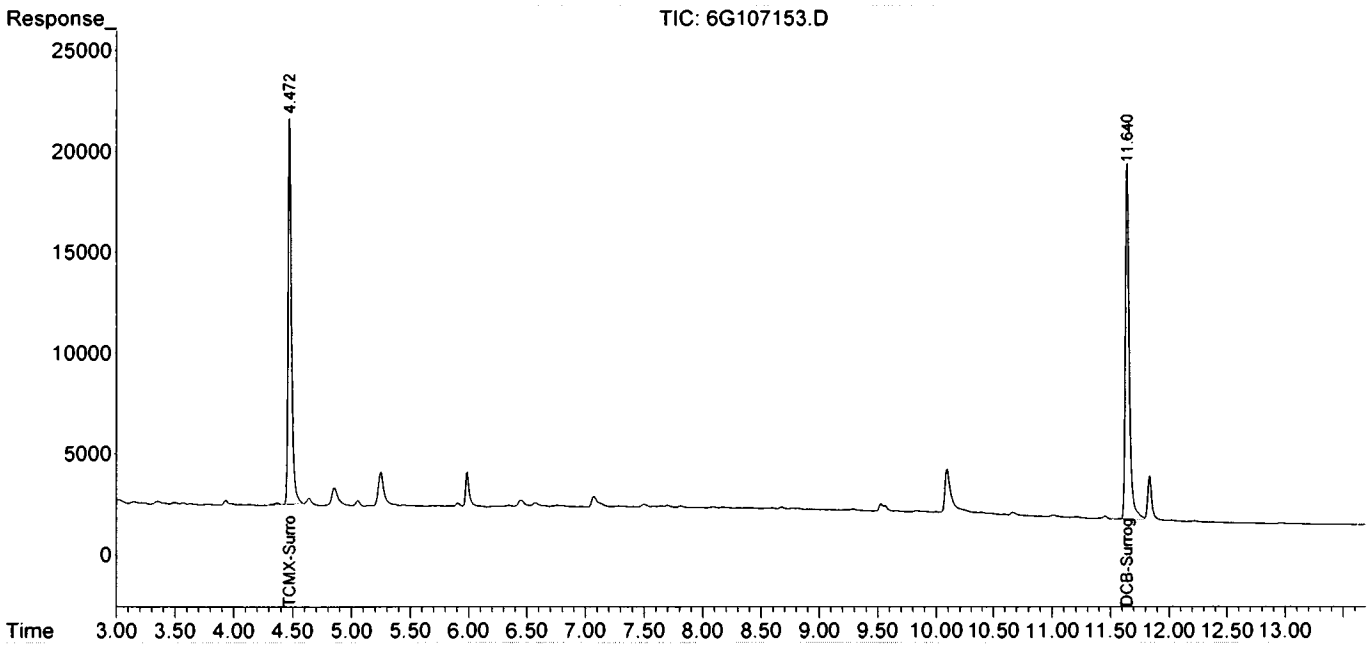
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

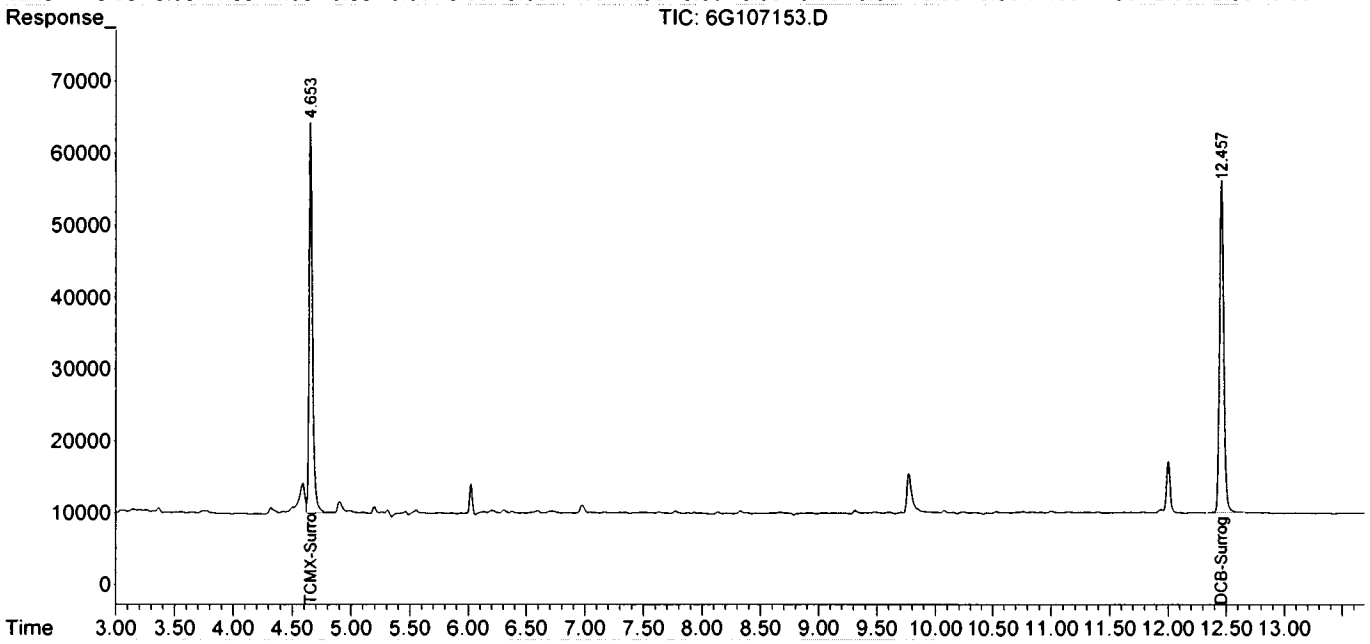
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\03-06-20\
Data File : 6G107153.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 6 Mar 2020 12:33
Operator : MS/MLC
Sample : AD16022-001
Misc : S,PEST
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 10 12:39:48 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0227.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Feb 28 10:31:50 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: SMB83741
Client Id:
Data File: 5G89203.D
Analysis Date: 03/06/20 09:44
Date Rec/Extracted: NA-03/05/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0050	U	53494-70-5	Endrin Ketone	0.0050	U
309-00-2	Aldrin	0.0050	U	58-89-9	gamma-BHC	0.0010	U
319-84-6	alpha-BHC	0.0010	U	76-44-8	Heptachlor	0.0050	U
319-85-7	beta-BHC	0.0010	U	1024-57-3	Heptachlor Epoxide	0.0050	U
319-86-8	delta-BHC	0.0050	U	72-43-5	Methoxychlor	0.0050	U
60-57-1	Dieldrin	0.0010	U	72-54-8	p,p'-DDD	0.0025	U
959-98-8	Endosulfan I	0.0050	U	72-55-9	p,p'-DDE	0.0025	U
33213-65-9	Endosulfan II	0.0050	U	50-29-3	p,p'-DDT	0.0025	U
1031-07-8	Endosulfan Sulfate	0.0050	U	8001-35-2	Toxaphene	0.025	U
72-20-8	Endrin	0.0050	U	5103-74-2	y-chlordane	0.0050	U
7421-93-4	Endrin Aldehyde	0.0050	U				

Worksheet #: 548048

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.

R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_5\Data\03-06-20\
Data File : 5G89203.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06-Mar-20, 09:44:10
Operator : MS/MLC
Sample : SMB83741
Misc : S,PEST
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Mar 06 13:00:20 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Thu Mar 05 09:02:47 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	6.129	6.076	132.1E6	65971098	97.911	99.159
22)DCB-Surrogate	13.174	13.557	109.6E6	59416666	95.457	96.850

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

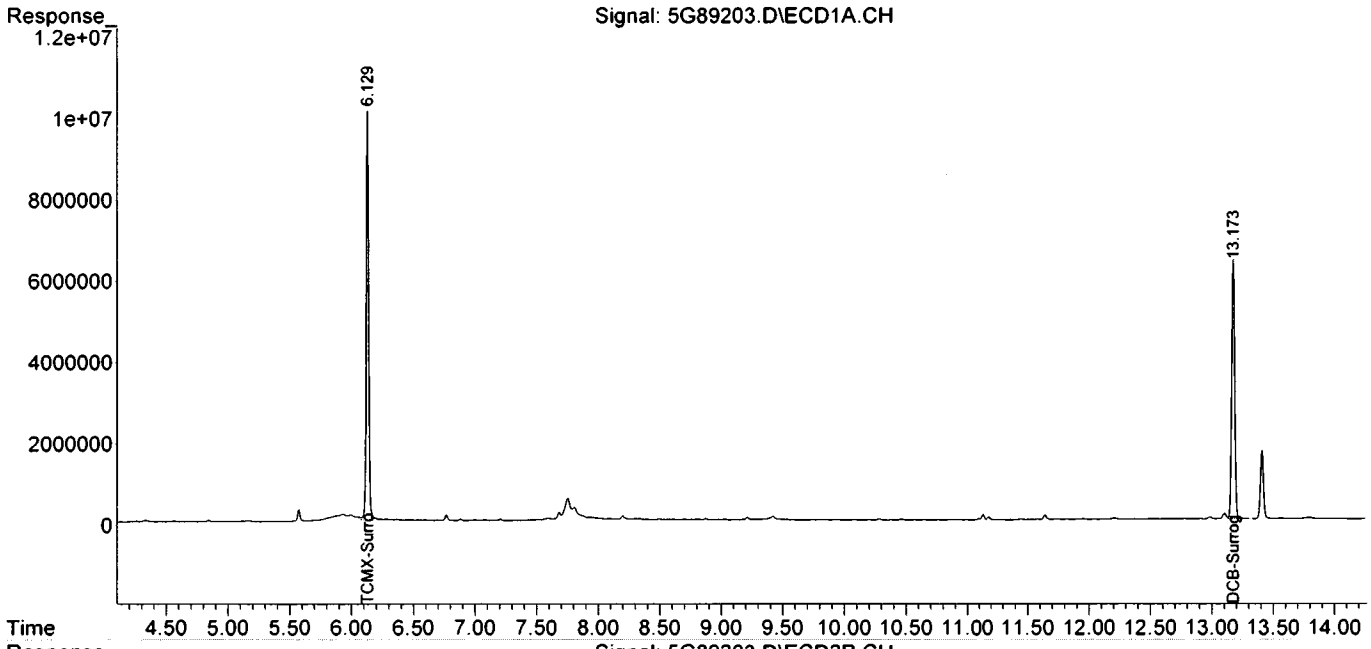
3

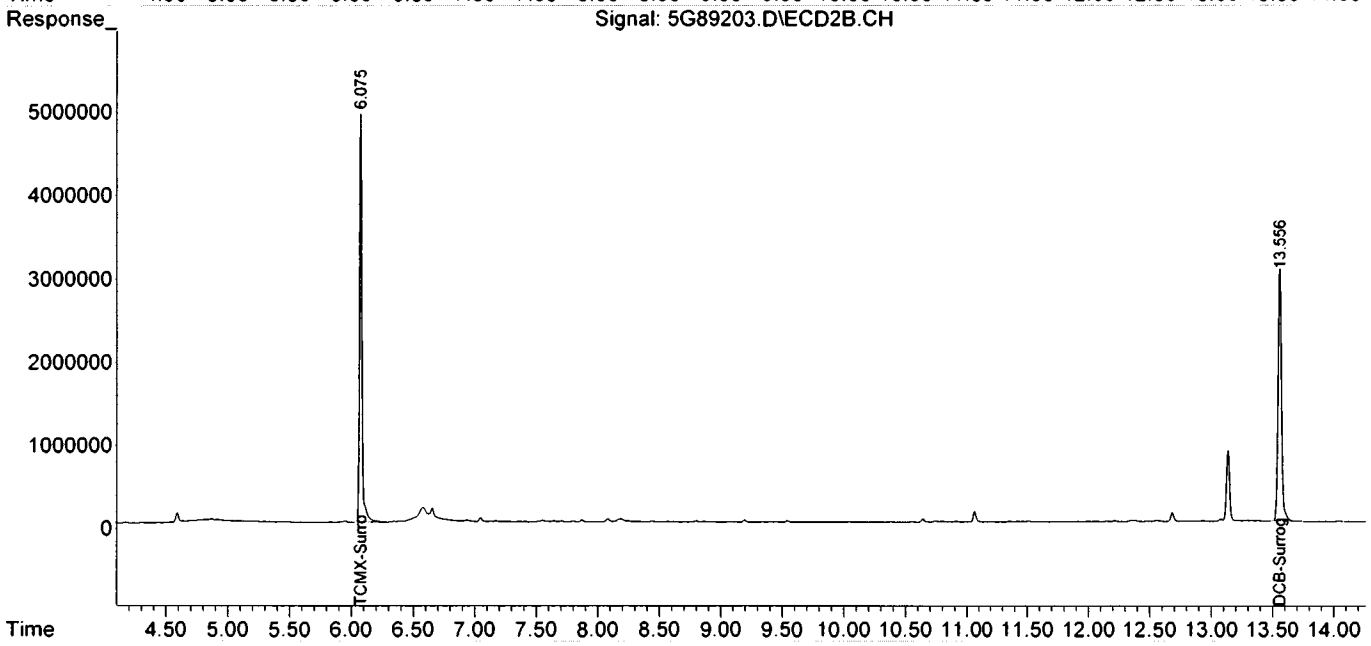
Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_5\Data\03-06-20\
Data File : 5G89203.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 06-Mar-20, 09:44:10
Operator : MS/MLC
Sample : SMB83741
Misc : S,PEST
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: PEST1.E
Integration File signal 2: Pest2.e
Quant Time: Mar 06 13:00:20 2020
Quant Method : G:\GCDATA\2020\GC_5\METHODQT\5G_PEST0116.M
Quant Title : @GC_5,ug,608,8081
QLast Update : Thu Mar 05 09:02:47 2020
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
5G89203.D	SMB83741	S	03/06/20 09:44	1		98	99	95	97		
6G107153.D	AD16022-001	S	03/06/20 12:33	1		97	95	102	105		
5G89204.D	SMB83741(MS)	S	03/06/20 10:02	1		114	114	110	113		
6G107150.D	AD16055-002(MS)	S	03/06/20 11:41	1		95	96	93	95		
6G107151.D	AD16055-002(MSD)	S	03/06/20 11:58	1		81	80	85	87		
6G107152.D	AD16055-002	S	03/06/20 12:16	1		101	101	106	108		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081B

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	33-146
S4=DCB-Surrogate	100	33-146

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83741

	Data File	Sample ID:	Analysis Date
Spike or Dup:	5G89204.D	SMB83741(MS)	3/6/2020 10:02:22 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	95.27	0	100	95	60	130
gamma-BHC	2	93.75	0	100	94	60	130
beta-BHC	2	86.76	0	100	87	60	130
Heptachlor	2	86.48	0	100	86	60	130
delta-BHC	2	88.79	0	100	89	60	130
Aldrin	2	100.72	0	100	101	70	130
Heptachlor Epoxide	2	104.25	0	100	104	70	130
γ-chlordane	2	97.71	0	100	98	70	130
a-chlordane	2	95.89	0	100	96	70	130
Endosulfan I	2	101.9	0	100	102	70	130
p,p'-DDE	2	101.14	0	100	101	70	130
Dieldrin	2	102.21	0	100	102	70	130
Endrin	2	101.32	0	100	101	70	130
p,p'-DDD	2	101.8	0	100	102	70	130
Endosulfan II	2	102.08	0	100	102	70	130
p,p'-DDT	2	97.34	0	100	97	70	130
Endrin Aldehyde	2	103.65	0	100	104	10	130
Endosulfan Sulfate	2	100.12	0	100	100	70	130
Methoxychlor	2	91.74	0	100	92	60	130
Endrin Ketone	2	88.55	0	100	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83741

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107150.D	AD16055-002(MS)	3/6/2020 11:41:00 AM
Non Spike(If applicable):	6G107152.D	AD16055-002	3/6/2020 12:16:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	91.75	0	100	92	60	130
gamma-BHC	2	91.68	0	100	92	60	130
beta-BHC	2	80.74	0	100	81	60	130
Heptachlor	2	94.61	0	100	95	60	130
delta-BHC	2	94.22	0	100	94	60	130
Aldrin	2	88.43	0	100	88	70	130
Heptachlor Epoxide	2	93.18	0	100	93	70	130
y-chlordane	2	90.03	0	100	90	70	130
a-chlordane	2	90.65	0	100	91	70	130
Endosulfan I	2	90.64	0	100	91	70	130
p,p'-DDE	2	95.23	0	100	95	70	130
Dieldrin	2	98.69	0	100	99	70	130
Endrin	2	83.74	0	100	84	70	130
p,p'-DDD	2	100.3	0	100	100	70	130
Endosulfan II	2	98.99	0	100	99	70	130
p,p'-DDT	2	84.05	0	100	84	70	130
Endrin Aldehyde	2	109.3	0	100	109	10	130
Endosulfan Sulfate	2	113.63	0	100	114	70	130
Methoxychlor	2	77.49	0	100	77	60	130
Endrin Ketone	2	106.85	0	100	107	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107151.D	AD16055-002(MSD)	3/6/2020 11:58:00 AM
Non Spike(If applicable):	6G107152.D	AD16055-002	3/6/2020 12:16:00 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	85.61	0	100	86	60	130
gamma-BHC	2	86.24	0	100	86	60	130
beta-BHC	2	77.13	0	100	77	60	130
Heptachlor	2	84.68	0	100	85	60	130
delta-BHC	2	86.22	0	100	86	60	130
Aldrin	2	82.65	0	100	83	70	130
Heptachlor Epoxide	2	90.29	0	100	90	70	130
y-chlordane	2	85.41	0	100	85	70	130
a-chlordane	2	86.36	0	100	86	70	130
Endosulfan I	2	86.37	0	100	86	70	130
p,p'-DDE	2	91.91	0	100	92	70	130
Dieldrin	2	95.97	0	100	96	70	130
Endrin	2	75.35	0	100	75	70	130
p,p'-DDD	2	93.51	0	100	94	70	130
Endosulfan II	2	93.04	0	100	93	70	130
p,p'-DDT	2	73.59	0	100	74	70	130
Endrin Aldehyde	2	99.66	0	100	100	10	130
Endosulfan Sulfate	2	110.32	0	100	110	70	130
Methoxychlor	2	67.87	0	100	68	60	130
Endrin Ketone	2	102.1	0	100	102	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form

Form3
RPD Data Laboratory Limits
QC Batch: SMB83741

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107151.D	AD16055-002(MSD)	3/6/2020 11:58:00 AM
Duplicate(If applicable):	6G107150.D	AD16055-002(MS)	3/6/2020 11:41:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	2	85.61	91.75	6.9	40
gamma-BHC	2	86.24	91.68	6.1	40
beta-BHC	2	77.13	80.74	4.6	40
Heptachlor	2	84.68	94.61	11	40
delta-BHC	2	86.22	94.22	8.9	40
Aldrin	2	82.65	88.43	6.8	40
Heptachlor Epoxide	2	90.29	93.18	3.2	40
y-chlordane	2	85.41	90.03	5.3	40
a-chlordane	2	86.36	90.65	4.8	40
Endosulfan I	2	86.37	90.64	4.8	40
p,p'-DDE	2	91.91	95.23	3.5	40
Dieldrin	2	95.97	98.69	2.8	40
Endrin	2	75.35	83.74	11	40
p,p'-DDD	2	93.51	100.3	7	40
Endosulfan II	2	93.04	98.99	6.2	40
p,p'-DDT	2	73.59	84.05	13	40
Endrin Aldehyde	2	99.66	109.3	9.2	40
Endosulfan Sulfate	2	110.32	113.63	3	40
Methoxychlor	2	67.87	77.49	13	40
Endrin Ketone	2	102.1	106.85	4.5	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB83741
Blank Data File: 5G89203.D
Matrix: Soil

Blank Analysis Date: 03/06/20 09:44
Blank Extraction Date: 03/05/20
(If Applicable)
Method: EPA 8081B

Sample Number	Data File	Analysis Date
AD16022-001	6G107153.D	03/06/20 12:33
AD16055-002	6G107152.D	03/06/20 12:16
AD16055-002(MSD	6G107151.D	03/06/20 11:58
AD16055-002(MS)	6G107150.D	03/06/20 11:41
SMB83741(MS)	5G89204.D	03/06/20 10:02

Form 5

Method: EPA 8081B

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G88265.D	CAL EVAL	01/16/20 09:32	Soil					
5G88266.D	CAL PEST@200PPB	01/16/20 09:57	Soil	5G88269.	13.2039	0.0053	13.5753	0.0022
5G88267.D	CAL PEST@400PPB	01/16/20 10:20	Soil	5G88269.	13.2041	0.0038	13.5757	0.0052
5G88268.D	CAL PEST@50PPB	01/16/20 10:49	Soil	5G88269.	13.2056	0.0076	13.5760	0.0074
5G88269.D	CAL PEST@2PPB	01/16/20 11:16	Soil	5G88269.	13.2046	0	13.5750	0
5G88270.D	CAL PEST@10PPB	01/16/20 11:34	Soil	5G88269.	13.1996	0.0379	13.5752	0.0015
5G88271.D	CAL PEST@100PPB	01/16/20 11:52	Soil	5G88269.	13.1986	0.0455	13.5742	0.0059
5G88272.D	CAL CHLOR@100PPB	01/16/20 12:11	Soil	5G88269.	13.1991	0.0417	13.5751	0.0007
5G88273.D	TOX@500PPB	01/16/20 12:29	Soil	5G88269.	13.1981	0.0492	13.5747	0.0022
5G88274.D	TOX@50PPB	01/16/20 12:47	Soil	5G88269.	0.0000		0.0000	200 *
5G88275.D	TOX@100PPB	01/16/20 13:05	Soil	5G88269.	0.0000	200 *	0.0000	200 *
5G88276.D	TOX@200PPB	01/16/20 13:24	Soil	5G88274.	0.0000		0.0000	
5G88277.D	TOX@500PPB	01/16/20 13:42	Soil	5G88274.	0.0000		0.0000	
5G88278.D	TOX@1000PPB	01/16/20 14:00	Soil	5G88274.	0.0000		0.0000	
5G88279.D	TOX@2000PPB	01/16/20 14:18	Soil	5G88274.	0.0000		0.0000	
5G88280.D	TOX@4000PPB	01/16/20 14:36	Soil	5G88274.	0.0000		0.0000	
5G88281.D	TOX V	01/16/20 14:55	Soil	5G88274.	0.0000		0.0000	
5G88282.D	ICV	01/16/20 15:13	Soil	5G88274.	13.1966	200 *	13.5734	200 *

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G106995.D	CAL EVAL	02/27/20 11:03	Soil					
6G106996.D	CAL PEST@2PPB	02/27/20 11:23	Soil	6G10699	11.6498	0	12.4652	0
6G106997.D	10PPB	02/27/20 11:40	Soil	6G10699	11.6471	0.0232	12.4643	0.0072
6G106998.D	CAL PEST@50PPB	02/27/20 11:59	Soil	6G10699	11.6475	0.0197	12.4661	0.0072
6G106999.D	CAL PEST@100PPB	02/27/20 12:16	Soil	6G10699	11.6466	0.0275	12.4641	0.0088
6G107000.D	CAL PEST@200PPB	02/27/20 12:34	Soil	6G10699	11.6464	0.0292	12.4635	0.0136
6G107001.D	CAL PEST@400PPB	02/27/20 12:51	Soil	6G10699	11.6452	0.0395	12.4630	0.0177
6G107002.D	CAL CHLOR@100PPB	02/27/20 13:09	Soil	6G10699	11.6460	0.0326	12.4637	0.012
6G107003.D	TEST	02/27/20 13:26	Soil	6G10699	11.6459	0.0335	12.4633	0.0152
6G107004.D	CAL PEST@10PPB	02/27/20 14:59	Soil	6G10699	11.6515	0.0146	12.4655	0.0024
6G107005.D	TOX@50PPB	02/27/20 15:17	Soil	6G10699	11.6477	0.018	12.4630	0.0177
6G107006.D	TOX@100PPB	02/27/20 15:34	Soil	6G10699	11.6472	0.0223	12.4630	0.0177
6G107007.D	TOX@200PPB	02/27/20 15:52	Soil	6G10699	11.6470	0.024	12.4629	0.0185
6G107008.D	TOX@500PPB	02/27/20 16:09	Soil	6G10699	11.6458	0.0343	12.4640	0.0096
6G107009.D	TOX@1000PPB	02/27/20 16:27	Soil	6G10699	11.6452	0.0395	12.4624	0.0225
6G107010.D	TOX@2000PPB	02/27/20 16:44	Soil	6G10699	11.6448	0.0429	12.4613	0.0313
6G107011.D	TOX@4000PPB	02/27/20 17:02	Soil	6G10699	11.6436	0.0532	12.4608	0.0353
6G107013.D	ICV	02/27/20 17:37	Soil	6G10699	11.6444	0.0464	12.4607	0.0361

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G89199.D	CAL EVAL	03/06/20 08:15	Aqueous					
5G89200.D	CAL PEST@200PPB	03/06/20 08:43	Aqueous	5G89200.	13.1799	0	13.5593	0
5G89201.D	SMB83739	03/06/20 09:07	Soil	5G89200.	13.1785	0.0106	13.5582	0.0081
5G89202.D	SMB83739(MS)	03/06/20 09:25	Soil	5G89200.	13.1744	0.0417	13.5565	0.0207
5G89203.D	SMB83741	03/06/20 09:44	Soil	5G89200.	13.1737	0.0471	13.5571	0.0162
5G89204.D	SMB83741(MS)	03/06/20 10:02	Soil	5G89200.	13.1739	0.0455	13.5592	0.0007
5G89205.D	CAL PEST@200PPB	03/06/20 10:20	Soil	5G89200.	13.1768	0.0235	13.5600	0.0052

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G107140.D	CAL EVAL	03/06/20 08:27	Soil					
6G107141.D	CAL PEST@200PPB	03/06/20 08:46	Soil	6G10714	11.6424	0	12.4574	0
6G107142.D	WMB83737	03/06/20 09:09	Aqueous	6G10714	11.6464	0.0344	12.4598	0.0193
6G107143.D	WMB83737(MS)	03/06/20 09:27	Aqueous	6G10714	11.6418	0.0052	12.4579	0.004
6G107144.D	AD16039-001	03/06/20 09:45	Aqueous	6G10714	11.6427	0.0026	12.4622	0.0385
6G107145.D	AD16031-001	03/06/20 10:13	Aqueous	6G10714	11.6496	0.0618	12.4618	0.0353
6G107146.D	AD16023-002(MS)	03/06/20 10:31	Aqueous	6G10714	11.6412	0.0103	12.4578	0.0032
6G107147.D	AD16023-002(MSD)	03/06/20 10:48	Aqueous	6G10714	11.6419	0.0043	12.4578	0.0032
6G107148.D	AD16023-002	03/06/20 11:06	Aqueous	6G10714	11.6410	0.012	12.4569	0.004
6G107149.D	AD16023-001	03/06/20 11:23	Aqueous	6G10714	11.6408	0.0137	12.4569	0.004
6G107150.D	AD16055-002(MS)	03/06/20 11:41	Soil	6G10714	11.6409	0.0129	12.4569	0.004
6G107151.D	AD16055-002(MSD)	03/06/20 11:58	Soil	6G10714	11.6418	0.0052	12.4562	0.0096
6G107152.D	AD16055-002	03/06/20 12:16	Soil	6G10714	11.6415	0.0077	12.4566	0.0064
6G107153.D	AD16022-001	03/06/20 12:33	Soil	6G10714	11.6408	0.0137	12.4575	0.0008
6G107154.D	AD16013-003	03/06/20 12:51	Soil	6G10714	11.6412	0.0103	12.4568	0.0048
6G107155.D	AD16013-007	03/06/20 13:08	Soil	6G10714	11.6411	0.0112	12.4575	0.0008
6G107156.D	AD16041-003	03/06/20 13:26	Soil	6G10714	11.6398	0.0223	12.4584	0.008
6G107157.D	AD16041-004	03/06/20 13:43	Soil	6G10714	11.6419	0.0043	12.4029	0.4385
6G107158.D	AD16041-005	03/06/20 14:01	Soil	6G10714	11.6318	0.0911	12.4698	0.0995
6G107159.D	CAL PEST@200PPB	03/06/20 15:07	Soil	6G10714	11.6453	0.0249	12.4580	0.0048

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G88269.D	CAL PEST@2PPB	01/16/20 11:16	2	5G88270.D	CAL PEST@10PPB	01/16/20 11:34
3	5G88268.D	CAL PEST@50PPB	01/16/20 10:49	4	5G88271.D	CAL PEST@100PPB	01/16/20 11:52
5	5G88266.D	CAL PEST@200PPB	01/16/20 09:57	6	5G88267.D	CAL PEST@400PPB	01/16/20 10:20
7	5G88272.D	CAL CHLOR@100PP	01/16/20 12:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	140.81	167.83	130.95	130.41	122.68	117.00	----	----	135	6.14	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	198.79	233.83	194.93	193.05	193.46	190.35	----	----	201	7.44	1.00	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	LinF	217.74	234.22	181.39	178.79	175.53	170.78	----	----	193	7.97	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	87.169	94.698	74.285	72.980	72.493	69.927	----	----	78.6	8.89	1.00	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	195.43	213.91	157.51	153.68	148.11	142.58	----	----	169	8.24	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	159.16	199.81	164.17	163.26	163.30	159.57	----	----	168	9.21	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	164.31	203.99	162.76	159.61	154.23	147.07	----	----	165	8.60	0.999	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	LinF	214.16	176.46	141.12	134.12	130.31	123.70	----	----	153	9.42	0.999	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	1	0	Avg	155.65	187.33	151.31	150.79	148.58	143.01	----	----	156	9.81	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Avg	159.04	183.33	146.74	145.74	142.96	138.16	----	----	153	9.87	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Avg	144.96	170.82	134.64	131.65	128.24	122.59	----	----	139	9.76	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	142.61	176.84	144.17	143.51	141.27	136.10	----	----	147	9.96	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	145.71	176.97	142.49	140.66	137.91	133.00	----	----	146	10.19	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	130.60	157.78	129.71	124.91	127.42	122.64	----	----	132	10.44	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	120.84	144.47	117.30	117.84	116.12	114.71	----	----	122	10.88	1.00	1.00	9.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	132.42	153.89	124.05	123.53	122.19	119.61	----	----	129	10.99	1.00	1.00	9.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	96.476	119.84	104.59	107.52	109.54	111.19	----	----	108	11.07	1.00	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	91.860	112.66	88.783	89.133	87.567	85.727	----	----	92.6	11.47	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	121.44	136.79	111.56	112.22	110.57	107.83	----	----	117	11.82	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	58.613	66.495	53.941	54.509	54.484	54.391	----	----	57.1	11.73	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	105.57	121.48	100.09	102.85	101.14	99.111	----	----	105	12.30	1.00	1.00	8.0	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	128.42	140.87	104.74	106.00	105.39	103.53	----	----	115	13.20	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	1	1	Avg	----	----	----	----	----	----	----	----	5.28	8.04	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	2	Avg	----	----	----	----	----	----	----	----	15.7	9.81	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	3	Avg	----	----	----	----	----	----	----	----	22.1	9.87	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	0.4774	0.4459	0.4565	0.4335	0.3951	0.3860	----	----	0.432	10.03	0.999	1.00	8.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	2	Avg	2.4849	2.3343	2.4680	2.4035	2.2828	2.2830	----	----	2.38	10.56	1.00	1.00	3.8	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	3	Avg	2.3904	2.3097	2.3839	2.3809	2.3064	2.2871	----	----	2.34	11.02	1.00	1.00	2.0	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	4	Avg	2.0595	1.9696	2.1373	2.1052	1.9855	2.0301	----	----	2.05	11.32	1.00	1.00	3.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	5	Avg	2.8142	2.5913	2.7260	2.5947	2.4869	2.4752	----	----	2.61	11.75	1.00	1.00	5.1	50.00	200.0	500.0	1000.	2000.	4000.		
TCMX-Surrogate	2	0	Avg	68.940	79.626	64.093	63.767	62.614	60.140	----	----	66.5	6.08	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	95.199	125.25	103.09	104.29	102.99	100.63	----	----	105	7.09	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	86.311	105.74	88.494	88.998	88.585	86.529	----	----	90.8	7.63	1.00	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	45.404	47.538	38.259	37.859	37.427	36.383	----	----	40.5	7.72	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Avg	97.442	89.314	72.881	72.572	71.803	70.085	----	----	79.0	8.07	1.00	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	110.91	108.92	88.874	88.629	89.385	86.664	----	----	95.6	8.21	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 10.09 Avg Rsd Col 2: 9.11

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0030402 0117

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G88269.D	CAL PEST@2PPB	01/16/20 11:16	2	5G88270.D	CAL PEST@10PPB	01/16/20 11:34
3	5G88268.D	CAL PEST@50PPB	01/16/20 10:49	4	5G88271.D	CAL PEST@100PPB	01/16/20 11:52
5	5G88266.D	CAL PEST@200PPB	01/16/20 09:57	6	5G88267.D	CAL PEST@400PPB	01/16/20 10:20
7	5G88272.D	CAL CHLOR@100PP	01/16/20 12:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	80.308	97.041	80.220	80.873	79.114	75.752	----	----	82.2	8.51	0.999	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	75.802	84.063	66.835	66.647	66.121	63.728	----	----	70.5	9.21	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	2	0	Avg	81.500	93.666	75.300	75.998	75.792	73.562	----	----	79.3	9.41	1.00	1.00	9.5	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	78.629	86.856	69.357	70.251	69.922	68.316	----	----	73.9	9.61	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	76.200	86.329	67.474	68.220	67.235	64.943	----	----	71.7	9.65	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	69.400	83.797	69.672	70.904	70.879	69.054	----	----	72.3	9.89	1.00	1.00	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	72.276	84.532	69.585	68.444	70.206	68.291	----	----	72.2	10.03	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	62.649	69.585	58.297	56.837	59.919	58.264	----	----	60.9	10.47	1.00	1.00	7.7	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	59.758	68.846	57.658	55.700	59.163	58.384	----	----	59.9	10.56	1.00	1.00	7.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	71.833	76.601	63.032	63.107	63.540	61.989	----	----	66.7	10.68	1.00	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	47.049	55.170	50.093	51.807	54.641	55.314	----	----	52.3	10.92	1.00	1.00	6.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	LinF	65.946	63.818	50.381	49.748	49.902	49.006	----	----	54.8	11.07	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	65.938	69.382	55.545	55.421	56.228	55.384	----	----	59.7	11.21	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	26.376	28.710	23.366	24.217	25.066	25.129	----	----	25.5	11.92	1.00	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	62.384	69.361	55.963	57.464	57.913	57.311	----	----	60.1	12.13	1.00	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	74.994	74.804	53.816	55.611	54.661	54.205	----	----	61.3	13.58	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	2	1	Avg	----	----	----	----	----	----	----	----	2.66	7.86	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	2	Avg	----	----	----	----	----	----	----	----	8.31	9.41	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	3	Avg	----	----	----	----	----	----	----	----	6.37	9.61	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	0.5941	0.5404	0.5372	0.5105	0.4931	0.4868	----	----	0.527	9.77	1.00	1.00	7.5	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	2	Avg	1.2763	1.3286	1.3928	1.3944	1.3430	1.4217	----	----	1.36	10.69	0.999	1.00	3.9	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	3	Avg	1.3587	1.1746	1.2131	1.1880	1.1509	1.1532	----	----	1.21	10.96	1.00	1.00	6.5	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	4	Avg	1.4487	1.3245	1.3593	1.3334	1.2932	1.3105	----	----	1.34	11.67	1.00	1.00	4.1	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	5	Avg	1.1289	1.1349	1.1656	1.1675	1.1504	1.1671	----	----	1.15	11.74	1.00	1.00	1.5	50.00	200.0	500.0	1000.	2000.	4000.		

Avg Rsd Col 1: 10.09 Avg Rsd Col 2: 9.11

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0030402 0118

0030402 0119

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G106996.D	CAL PEST@2PPB	02/27/20 11:23	2	6G107004.D	CAL PEST@10PPB	02/27/20 14:59
3	6G106998.D	CAL PEST@50PPB	02/27/20 11:59	4	6G106999.D	CAL PEST@100PPB	02/27/20 12:16
5	6G107000.D	CAL PEST@200PPB	02/27/20 12:34	6	6G107001.D	CAL PEST@400PPB	02/27/20 12:51
7	6G107002.D	CAL CHLOR@100PP	02/27/20 13:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.4505	0.3923	0.3897	0.3781	0.3718	0.3520	----	----	0.389	4.47	0.999	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	0.3815	0.3660	0.4320	0.4606	0.4923	0.4926	----	----	0.438	5.66	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	0.3878	0.3699	0.4281	0.4446	0.4633	0.4570	----	----	0.425	6.19	1.00	1.00	9.0	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	0.3728	0.2792	0.2744	0.2615	0.2575	0.2410	----	----	0.281	7.12	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	0.4794	0.3741	0.3597	0.3511	0.3537	0.3435	----	----	0.377	6.47	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	0.2733	0.3171	0.3850	0.4006	0.4221	0.4197	----	----	0.370	7.45	1.00	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	0.3735	0.3603	0.3769	0.3840	0.4005	0.3953	----	----	0.382	6.84	1.00	1.00	3.9	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Avg	0.3840	0.3642	0.3553	0.3500	0.3558	0.3446	----	----	0.359	7.69	1.00	1.00	3.9	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	1	0	Avg	0.4203	0.4033	0.3931	0.3914	0.4079	0.4046	----	----	0.403	8.10	1.00	1.00	2.6	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	1	0	Avg	0.4377	0.4147	0.4048	0.4001	0.4075	0.3958	----	----	0.410	8.16	1.00	1.00	3.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Avg	0.3349	0.3242	0.3266	0.3245	0.3282	0.3158	----	----	0.326	8.04	1.00	1.00	1.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	0.2956	0.3220	0.3371	0.3468	0.3673	0.3648	----	----	0.339	8.26	1.00	1.00	8.0	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	0.3333	0.3230	0.3285	0.3320	0.3466	0.3432	----	----	0.334	8.50	1.00	1.00	2.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	0.3597	0.3103	0.3195	0.3227	0.3347	0.3274	----	----	0.329	8.75	1.00	1.00	5.2	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	0.3709	0.3051	0.2919	0.2903	0.3009	0.2920	----	----	0.309	9.22	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	0.3490	0.3436	0.3351	0.3317	0.3385	0.3278	----	----	0.338	9.33	1.00	1.00	2.3	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	LinF	0.1222	0.1690	0.1919	0.2042	0.2206	0.2276	----	----	0.189	9.43	0.999	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	0.2649	0.2878	0.2920	0.2794	0.2816	0.2719	----	----	0.280	9.83	1.00	1.00	3.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	0.3192	0.2986	0.2968	0.2902	0.3044	0.2949	----	----	0.301	10.20	1.00	1.00	3.4	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	0.1715	0.1324	0.1385	0.1349	0.1355	0.1256	----	----	0.140	10.14	0.998	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	0.1893	0.2278	0.2492	0.2595	0.2674	0.2677	----	----	0.244	10.71	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	0.5011	0.4566	0.4020	0.3750	0.3632	0.3371	----	----	0.406	11.65	0.998	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	1	1	Avg	----	----	----	----	----	----	----	----	0.0149	6.27	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	2	Avg	----	----	----	----	----	----	----	----	0.0394	8.09	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	3	Avg	----	----	----	----	----	----	----	----	0.0611	8.16	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	0.0056	0.0054	0.0058	0.0057	0.0054	0.0054	----	----	0.00559	8.89	1.00	1.00	3.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	2	Avg	0.0030	0.0026	0.0028	0.0027	0.0027	0.0026	----	----	0.00276	9.02	1.00	1.00	5.4	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	3	Avg	0.0063	0.0063	0.0063	0.0065	0.0064	0.0067	----	----	0.00647	9.36	1.00	1.00	2.3	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	4	Avg	0.0057	0.0052	0.0053	0.0051	0.0050	0.0051	----	----	0.00531	9.69	1.00	1.00	4.9	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	5	Avg	0.0085	0.0113	0.0116	0.0115	0.0112	0.0114	----	----	0.0110	10.15	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
TCMX-Surrogate	2	0	Avg	1.3938	1.3025	1.1321	1.0457	0.9814	0.9108	----	----	1.13	4.65	0.998	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	1.4514	1.5069	1.5270	1.5216	1.5200	1.4642	----	----	1.50	5.60	1.00	1.00	2.2	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.4246	1.4648	1.4367	1.4042	1.3833	1.3115	----	----	1.40	6.15	0.999	1.00	3.8	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	0.9194	0.9542	0.8192	0.7662	0.7221	0.6629	----	----	0.807	6.23	0.997	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	LinF	2.1812	1.3831	1.2210	1.1575	1.1249	1.0568	----	----	1.35	6.59	0.999	1.00	31	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	1.3187	1.3437	1.3289	1.3304	1.3364	1.2807	----	----	1.32	6.73	1.00	1.00	1.7	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 7.95 Avg Rsd Col 2: 10.48

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G106996.D	CAL PEST@2PPB	02/27/20 11:23	2	6G107004.D	CAL PEST@10PPB	02/27/20 14:59
3	6G106998.D	CAL PEST@50PPB	02/27/20 11:59	4	6G106999.D	CAL PEST@100PPB	02/27/20 12:16
5	6G107000.D	CAL PEST@200PPB	02/27/20 12:34	6	6G107001.D	CAL PEST@400PPB	02/27/20 12:51
7	6G107002.D	CAL CHLOR@100PP	02/27/20 13:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	1.3392	1.3424	1.2577	1.2184	1.1939	1.1103	----	----	1.24	7.05	0.998	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	1.3034	1.3063	1.1203	1.0614	1.0174	0.9286	----	----	1.12	7.78	0.997	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	2	0	Avg	1.3531	1.4443	1.2422	1.1971	1.1732	1.0991	----	----	1.25	7.99	0.999	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	1.3472	1.3789	1.1760	1.1171	1.0764	0.9856	----	----	1.18	8.20	0.998	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	1.2822	1.3296	1.1649	1.1353	1.1014	1.0227	----	----	1.17	8.25	0.998	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	0.9593	1.1865	1.0852	1.0688	1.0694	1.0030	----	----	1.06	8.50	0.999	1.00	7.3	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.2644	1.2234	1.0813	1.0500	1.0341	0.9582	----	----	1.10	8.64	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	1.1224	1.1097	1.0049	0.9863	0.9490	0.8675	----	----	1.01	9.12	0.997	1.00	9.6	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	0.9498	1.0235	0.9103	0.9051	0.8866	0.8307	----	----	0.918	9.21	0.999	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	1.1256	1.2042	1.0306	1.0141	0.9672	0.8903	----	----	1.04	9.34	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	0.7040	0.8217	0.7590	0.7822	0.7833	0.7606	----	----	0.769	9.60	1.00	1.00	5.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Avg	1.1136	0.9997	0.8734	0.8201	0.7704	0.7002	----	----	0.880	9.75	0.997	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	0.7606	0.8624	0.7724	0.7625	0.7288	0.6915	----	----	0.763	9.90	0.999	1.00	7.5	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	0.3983	0.5203	0.4749	0.4476	0.4079	0.3771	----	----	0.438	10.67	0.997	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	0.8501	0.8891	0.8218	0.8077	0.7777	0.7355	----	----	0.814	10.89	0.999	1.00	6.6	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	1.2704	1.4227	1.0935	1.0369	0.9838	0.8902	----	----	1.12	12.46	0.997	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	2	1	Avg	----	----	----	----	----	----	----	----	0.0541	6.38	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	2	Avg	----	----	----	----	----	----	----	----	0.245	7.99	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	3	Avg	----	----	----	----	----	----	----	----	0.121	8.20	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	0.0106	0.0103	0.0098	0.0095	0.0086	0.0078	----	----	0.00949	8.89	0.996	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	2	Avg	0.0209	0.0180	0.0177	0.0174	0.0150	0.0152	----	----	0.0174	9.15	0.999	0.999	12	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	3	Avg	0.0213	0.0199	0.0191	0.0179	0.0165	0.0148	----	----	0.0183	9.64	0.996	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	4	Avg	0.0268	0.0258	0.0270	0.0264	0.0253	0.0234	----	----	0.0258	10.40	0.998	1.00	5.1	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	5	Avg	0.0215	0.0179	0.0203	0.0208	0.0208	0.0205	----	----	0.0203	10.47	1.00	1.00	6.1	50.00	200.0	500.0	1000.	2000.	4000.		

Avg Rsd Col 1: 7.95 Avg Rsd Col 2: 10.48

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte..>0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0030402 0120

Form7
Continuing Calibration

Method: EPA 8081B

Data File:				5G89200.D			5G89205.D			6G107141.D			6G107159.D								
Method:				8081			8081			8081			8081								
Calibration Name:				CAL PEST@200PP			CAL PEST@200PP			CAL PEST@200PP			CAL PEST@200PP								
Calibration Date/Time				03/06/20 08:43			03/06/20 10:20			03/06/20 08:46			03/06/20 15:07								
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff			
TCMX-Surrogate	20	1	0	187.2	200	6.4	193.1	200	3.4	190.4	200	4.8	194.4	200	2.8						
alpha-BHC	20	1	0	201.4	200	0.7	204.5	200	2.2	225.5	200	12.8	233.4	200	16.7						
gamma-BHC	20	1	0	208	200	4.0	211.8	200	5.9	216	200	8.0	225.3	200	12.6						
beta-BHC	20	1	0	187.9	200	6.0	189.5	200	5.2	178.5	200	10.8	184.3	200	7.8						
Heptachlor	20	1	0	180.7	200	9.7	183.5	200	8.2	170.5	200	14.8	184.3	200	7.9						
delta-BHC	20	1	0	199.4	200	0.3	201.1	200	0.6	232.1	200	16.1	243.7	200	21.9*						
Aldrin	20	1	0	192.4	200	3.8	195.1	200	2.5	206.3	200	3.2	212.7	200	6.3						
Heptachlor Epoxide	20	1	0	217.7	200	8.8	217.4	200	8.7	194.8	200	2.6	199.7	200	0.2						
y-chlordane	20	1	0	191.9	200	4.0	197.3	200	1.4	201.7	200	0.8	206.7	200	3.3						
a-chlordane	20	1	0	188.9	200	5.6	194.5	200	2.8	198.6	200	0.7	204.2	200	2.1						
Endosulfan I	20	1	0	190.1	200	4.9	192.8	200	3.6	200.0	200	0.0	205.5	200	2.7						
p,p'-DDE	20	1	0	194.4	200	2.8	199.3	200	0.3	210.2	200	5.1	219.5	200	9.7						
Dieldrin	20	1	0	192.6	200	3.7	196.3	200	1.8	204.0	200	2.0	211.0	200	5.5						
Endrin	20	1	0	193.8	200	3.1	181.5	200	9.2	192.5	200	3.7	207.4	200	3.7						
p,p'-DDD	20	1	0	204.0	200	2.0	208.1	200	4.1	185.2	200	7.4	196.5	200	1.8						
Endosulfan II	20	1	0	196.4	200	1.8	199.2	200	0.4	201.8	200	0.9	207.6	200	3.8						
p,p'-DDT	20	1	0	182.1	200	9.0	185.6	200	7.2	187.5	200	6.2	206.8	200	3.4						
Endrin Aldehyde	20	1	0	203.9	200	2.0	216.6	200	8.3	200.1	200	0.1	205.4	200	2.7						
Endosulfan Sulfate	20	1	0	189.7	200	5.2	195.9	200	2.1	193.5	200	3.2	202.9	200	1.5						
Methoxychlor	20	1	0	186.9	200	6.6	188.5	200	5.8	169.5	200	15.3	190.7	200	4.7						
Endrin Ketone	20	1	0	204.1	200	2.1	221.1	200	10.5	257.5	200	28.7*	271.2	200	35.6*						
DCB-Surrogate	20	1	0	181.8	200	9.1	189.1	200	5.4	180.4	200	9.8	191.8	200	4.1						
Average Difference	20	1	0			4.6			4.5			7.1			7.3						
TCMX-Surrogate	20	2	0	198.4	200	0.8	199.1	200	0.5	173.9	200	13.0	168.5	200	15.7						
alpha-BHC	20	2	0	205.8	200	2.9	210.3	200	5.1	202.3	200	1.2	199.5	200	0.2						
gamma-BHC	20	2	0	201.5	200	0.7	208	200	4.0	195.5	200	2.3	194.6	200	2.7						
beta-BHC	20	2	0	195.5	200	2.3	203.3	200	1.6	177.7	200	11.2	174.7	200	12.6						
Heptachlor	20	2	0	172	200	14.0	178.8	200	10.6	194.9	200	2.5	201.2	200	0.6						
delta-BHC	20	2	0	196.4	200	1.8	202.6	200	1.3	206.2	200	3.1	208.9	200	4.4						
Aldrin	20	2	0	204.4	200	2.2	210.3	200	5.2	189.5	200	5.2	187.2	200	6.4						
Heptachlor Epoxide	20	2	0	197.7	200	1.1	202.9	200	1.4	179.4	200	10.3	177.3	200	11.3						
y-chlordane	20	2	0	202.5	200	1.2	209.6	200	4.8	188.1	200	5.9	185.1	200	7.5						
a-chlordane	20	2	0	195.0	200	2.5	202.1	200	1.1	183.6	200	8.2	180.6	200	9.7						
Endosulfan I	20	2	0	208.8	200	4.4	212.7	200	6.4	185.2	200	7.4	184.4	200	7.8						
p,p'-DDE	20	2	0	202.7	200	1.3	189.2	200	5.4	199.1	200	0.5	198.6	200	0.7						
Dieldrin	20	2	0	204.9	200	2.5	173.8	200	13.1	186.2	200	6.9	185.5	200	7.2						
Endrin	20	2	0	197.3	200	1.3	191.2	200	4.4	178.8	200	10.6	187.4	200	6.3						
p,p'-DDD	20	2	0	198.6	200	0.7	217.4	200	8.7	189.9	200	5.1	193.3	200	3.3						
Endosulfan II	20	2	0	202.9	200	1.5	215.3	200	7.7	187.6	200	6.2	190.6	200	4.7						
p,p'-DDT	20	2	0	180.8	200	9.6	193.1	200	3.5	196.6	200	1.7	204.8	200	2.4						
Endrin Aldehyde	20	2	0	214	200	7.0	227.8	200	13.9	173.9	200	13.1	174.7	200	12.7						
Endosulfan Sulfate	20	2	0	195.0	200	2.5	200.3	200	0.2	210.3	200	5.1	211.6	200	5.8						
Methoxychlor	20	2	0	172.2	200	13.9	184.0	200	8.0	174.4	200	12.8	190.7	200	4.7						
Endrin Ketone	20	2	0	204.8	200	2.4	220.0	200	10.0	211.1	200	5.6	230.4	200	15.2						
DCB-Surrogate	20	2	0	189.8	200	5.1	194.9	200	2.5	178.1	200	11.0	180.0	200	10.0						
Average Difference	20	2	0			3.7			5.4			6.8			6.9						

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8081B

Data File:			5G88269.D		6G106996.D		5G89200.D		6G107141.D			
Calibration Name:			CAL PEST@2PPB		CAL PEST@2PPB		CAL PEST@200PPB		CAL PEST@200PPB			
Calibration Date/Time			1/16/2020 11:16:23 AM		2/27/2020 11:23:00 AM		3/6/2020 8:43:02 AM		3/6/2020 8:46:00 AM			
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	6.14	(6.08 - 6.20)	4.47	(4.41 - 4.53)	6.13	(6.07 - 6.19)	4.47	(4.41 - 4.53)		
alpha-BHC	1	0	7.44	(7.40 - 7.48)	5.66	(5.62 - 5.70)	7.43	(7.39 - 7.47)	5.66	(5.62 - 5.70)		
gamma-BHC	1	0	7.97	(7.93 - 8.01)	6.19	(6.15 - 6.23)	7.95	(7.91 - 7.99)	6.19	(6.15 - 6.23)		
beta-BHC	1	0	8.89	(8.81 - 8.97)	7.12	(7.04 - 7.20)	8.87	(8.79 - 8.95)	7.11	(7.03 - 7.19)		
Heptachlor	1	0	8.24	(8.20 - 8.28)	6.47	(6.43 - 6.51)	8.22	(8.18 - 8.26)	6.47	(6.43 - 6.51)		
delta-BHC	1	0	9.21	(9.13 - 9.29)	7.45	(7.37 - 7.53)	9.19	(9.11 - 9.27)	7.44	(7.36 - 7.52)		
Aldrin	1	0	8.60	(8.52 - 8.68)	6.84	(6.76 - 6.92)	8.58	(8.50 - 8.66)	6.84	(6.76 - 6.92)		
Heptachlor Epoxide	1	0	9.42	(9.38 - 9.46)	7.69	(7.65 - 7.73)	9.40	(9.36 - 9.44)	7.69	(7.65 - 7.73)		
v-chlordane	1	0	9.81	(9.77 - 9.85)	8.10	(8.06 - 8.14)	9.79	(9.75 - 9.83)	8.09	(8.05 - 8.13)		
a-chlordane	1	0	9.87	(9.83 - 9.91)	8.16	(8.12 - 8.20)	9.85	(9.81 - 9.89)	8.16	(8.12 - 8.20)		
Endosulfan I	1	0	9.76	(9.72 - 9.80)	8.05	(8.01 - 8.09)	9.74	(9.70 - 9.78)	8.04	(8.00 - 8.08)		
p,p'-DDE	1	0	9.96	(9.88 - 10.04)	8.26	(8.18 - 8.34)	9.94	(9.86 - 10.02)	8.26	(8.18 - 8.34)		
Dieldrin	1	0	10.19	(10.11 - 10.27)	8.50	(8.42 - 8.58)	10.17	(10.09 - 10.25)	8.49	(8.41 - 8.57)		
Endrin	1	0	10.44	(10.40 - 10.48)	8.75	(8.71 - 8.79)	10.42	(10.38 - 10.46)	8.75	(8.71 - 8.79)		
o,p'-DDD	1	0	10.88	(10.80 - 10.96)	9.22	(9.14 - 9.30)	10.86	(10.78 - 10.94)	9.22	(9.14 - 9.30)		
Endosulfan II	1	0	10.99	(10.91 - 11.07)	9.33	(9.25 - 9.41)	10.97	(10.89 - 11.05)	9.33	(9.25 - 9.41)		
p,p'-DDT	1	0	11.07	(10.99 - 11.15)	9.43	(9.35 - 9.51)	11.05	(10.97 - 11.13)	9.43	(9.35 - 9.51)		
Endrin Aldehyde	1	0	11.47	(11.39 - 11.55)	9.83	(9.75 - 9.91)	11.45	(11.37 - 11.53)	9.82	(9.74 - 9.90)		
Endosulfan Sulfate	1	0	11.82	(11.78 - 11.86)	10.20	(10.16 - 10.24)	11.80	(11.76 - 11.84)	10.20	(10.16 - 10.24)		
Methoxychlor	1	0	11.73	(11.69 - 11.77)	10.14	(10.10 - 10.18)	11.71	(11.67 - 11.75)	10.13	(10.09 - 10.17)		
Endrin Ketone	1	0	12.30	(12.22 - 12.38)	10.71	(10.63 - 10.79)	12.28	(12.20 - 12.36)	10.70	(10.62 - 10.78)		
DCB-Surrogate	1	0	13.20	(13.14 - 13.26)	11.65	(11.59 - 11.71)	13.18	(13.12 - 13.24)	11.64	(11.58 - 11.70)		
Chlordane (Technical	1	1										
Chlordane (Technical	1	2										
Chlordane (Technical	1	3										
Toxaphene	1	1										
Toxaphene	1	2										
Toxaphene	1	3										
Toxaphene	1	4										
Toxaphene	1	5										
TCMX-Surrogate	2	0	6.08	(6.02 - 6.14)	4.65	(4.59 - 4.71)	6.07	(6.01 - 6.13)	4.65	(4.59 - 4.71)		
alpha-BHC	2	0	7.09	(7.05 - 7.13)	5.60	(5.56 - 5.64)	7.09	(7.05 - 7.13)	5.60	(5.56 - 5.64)		
gamma-BHC	2	0	7.63	(7.59 - 7.67)	6.15	(6.11 - 6.19)	7.63	(7.59 - 7.67)	6.14	(6.10 - 6.18)		
beta-BHC	2	0	7.72	(7.64 - 7.80)	6.23	(6.15 - 6.31)	7.71	(7.63 - 7.79)	6.23	(6.15 - 6.31)		
Heptachlor	2	0	8.07	(8.03 - 8.11)	6.59	(6.55 - 6.63)	8.06	(8.02 - 8.10)	6.59	(6.55 - 6.63)		
delta-BHC	2	0	8.21	(8.13 - 8.29)	6.73	(6.65 - 6.81)	8.20	(8.12 - 8.28)	6.73	(6.65 - 6.81)		
Aldrin	2	0	8.51	(8.43 - 8.59)	7.04	(6.96 - 7.12)	8.50	(8.42 - 8.58)	7.04	(6.96 - 7.12)		
Heptachlor Epoxide	2	0	9.21	(9.17 - 9.25)	7.78	(7.74 - 7.82)	9.20	(9.16 - 9.24)	7.78	(7.74 - 7.82)		
v-chlordane	2	0	9.41	(9.37 - 9.45)	7.99	(7.95 - 8.03)	9.40	(9.36 - 9.44)	7.99	(7.95 - 8.03)		
a-chlordane	2	0	9.61	(9.57 - 9.65)	8.20	(8.16 - 8.24)	9.60	(9.56 - 9.64)	8.20	(8.16 - 8.24)		
Endosulfan I	2	0	9.65	(9.61 - 9.69)	8.25	(8.21 - 8.29)	9.64	(9.60 - 9.68)	8.25	(8.21 - 8.29)		
p,p'-DDE	2	0	9.89	(9.81 - 9.97)	8.50	(8.42 - 8.58)	9.88	(9.80 - 9.96)	8.50	(8.42 - 8.58)		
Dieldrin	2	0	10.03	(9.95 - 10.11)	8.64	(8.56 - 8.72)	10.02	(9.94 - 10.10)	8.64	(8.56 - 8.72)		
Endrin	2	0	10.47	(10.43 - 10.51)	9.12	(9.08 - 9.16)	10.46	(10.42 - 10.50)	9.12	(9.08 - 9.16)		
o,p'-DDD	2	0	10.56	(10.48 - 10.64)	9.21	(9.13 - 9.29)	10.55	(10.47 - 10.63)	9.21	(9.13 - 9.29)		
Endosulfan II	2	0	10.68	(10.60 - 10.76)	9.34	(9.26 - 9.42)	10.67	(10.59 - 10.75)	9.34	(9.26 - 9.42)		
p,p'-DDT	2	0	10.92	(10.84 - 11.00)	9.59	(9.51 - 9.67)	10.91	(10.83 - 10.99)	9.59	(9.51 - 9.67)		
Endrin Aldehyde	2	0	11.07	(10.99 - 11.15)	9.75	(9.67 - 9.83)	11.05	(10.97 - 11.13)	9.75	(9.67 - 9.83)		
Endosulfan Sulfate	2	0	11.21	(11.17 - 11.25)	9.90	(9.86 - 9.94)	11.20	(11.16 - 11.24)	9.90	(9.86 - 9.94)		
Methoxychlor	2	0	11.92	(11.88 - 11.96)	10.67	(10.63 - 10.71)	11.91	(11.87 - 11.95)	10.66	(10.62 - 10.70)		
Endrin Ketone	2	0	12.13	(12.05 - 12.21)	10.89	(10.81 - 10.97)	12.12	(12.04 - 12.20)	10.89	(10.81 - 10.97)		
DCB-Surrogate	2	0	13.58	(13.52 - 13.64)	12.46	(12.40 - 12.52)	13.56	(13.50 - 13.62)	12.46	(12.40 - 12.52)		
Chlordane (Technical	2	1										
Chlordane (Technical	2	2										
Chlordane (Technical	2	3										
Toxaphene	2	1										
Toxaphene	2	2										
Toxaphene	2	3										
Toxaphene	2	4										
Toxaphene	2	5										

Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD16022-001	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-102-1 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	3/4/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	260	3000	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-39-3	Barium	13	17	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-70-2	Calcium	1300	ND	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-47-3	Chromium	6.5	14	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-48-4	Cobalt	3.2	4.2	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-50-8	Copper	6.5	ND	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7439-89-6	Iron	260	11000	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7439-92-1	Lead	6.5	ND	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7439-95-4	Magnesium	650	1400	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7439-96-5	Manganese	13	84	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	03/05/20	82711	H25469S	30	CV	HGCV3A
7440-02-0	Nickel	6.5	9.8	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-09-7	Potassium	650	1600	1	0.5	50	03/06/20	82711	S25464A4	49	P	PEICPRAD4A
7440-23-5	Sodium	320	2700	1	0.5	50	03/06/20	82711	S25464A4	49	P	PEICPRAD4A
7440-62-2	Vanadium	13	16	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A
7440-66-6	Zinc	13	50	1	0.5	50	03/05/20	82711	S25469A3	42	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD16022-001	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-102-1 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	3/4/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.0	ND	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA
7440-38-2	Arsenic	0.26	0.32	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA
7440-41-7	Beryllium	0.26	ND	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA
7440-43-9	Cadmium	0.52	ND	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA
7440-28-0	Thallium	0.52	ND	1	0.5	100	03/06/20	827120	620ANEW	37	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82711 [167]
Client Id: MB 82711 [167]
Matrix: SOIL
Level: LOW

% Solid: 0
Units: MG/KG

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	03/05/20	82711	H25469S	11	CV	HGCV3A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82711 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 82711 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	03/05/20	82711	S25464A4	30	P	PEICPRAD4A
7440-23-5	Sodium	120	ND	1	0.5	50	03/05/20	82711	S25464A4	30	P	PEICPRAD4A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	03/05/20	82711	S25469A3	14	P	PEICP3A

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82712
Client Id: MB 82712
Matrix: SOIL
Level: LOW

% Solid: 0
Units: MG/KG

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	50	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-36-0	Antimony	0.40	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-39-3	Barium	0.50	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-70-2	Calcium	50	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-47-3	Chromium	0.20	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-48-4	Cobalt	0.20	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-50-8	Copper	1.0	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7439-89-6	Iron	50	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7439-92-1	Lead	0.20	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7439-95-4	Magnesium	50	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7439-96-5	Manganese	0.60	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7439-98-7	Molybdenum	0.20	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-02-0	Nickel	0.30	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-23-5	Sodium	50	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-62-2	Vanadium	0.10	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA
7440-66-6	Zinc	2.0	ND	1	0.5	100	03/06/20	82712	0620ANEW	17	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 03/05/20
Data File: S25464A4
Prep Batch: 82711
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-12	Rec	CCV V-321090-23	Rec	CCV V-321090-28	Rec	CCV V-321090-39	Rec	CCV V-321090-50	Rec	CCV V-321090-61	Rec	CCV V-321090-69	Rec
Potassium	50/50	49.83590	100	49.86620	100	49.68790	99	50.05830	100	50.18980	100	50.53020	101	50.97680	102	50.97700	102
Sodium	50/50	48.79430	98	49.08510	98	48.47130	97	48.44870	97	48.67910	97	48.61170	97	48.83810	98	48.97330	98

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-75	Rec		Rec		Rec		Rec		Rec		Rec		Rec
Potassium	50/50	49.83590	100	50.90270	102												
Sodium	50/50	48.79430	98	48.88000	98												

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 03/05/20
Data File: S25464A4 OB 3/19/20
Prep Batch: 82704 / 82711
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-319737	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-321254	Recovery	Low Limit	High Limit	
Barium	0.1	0.0957101	96	80	120		10	10.1011	101	90	110	
Calcium	10.00	10.0854	101	80	120		500	512.253	102	90	110	
Iron	2.00	1.86734	93	80	120		400	379.377	95	90	110	
Magnesium	5.00	5.08870	102	80	120		500	528.908	106	90	110	
Manganese	0.10	0.100704	101	80	120		10	10.4377	104	90	110	
Potassium	5.00	5.20131	104	80	120		200	250.712	125 a	90	110	
Sodium	2.50	2.56413	103	80	120		1000	1241.80	124 a	90	110	
Aluminum	2.00	1.88957	94	80	120		500	494.080	99	90	110	
Boron	0.2	0.198182	99	80	120		5	4.02917	81 a	90	110	
Zinc	0.1	0.0954725	95	80	120		10	10.0219	100	90	110	
Copper	0.05	0.0489388	98	80	120		10	9.85526	99	90	110	
Molybdenum	0.025	0.0234109	94	80	120		10	10.6094	106	90	110	
Nickel	0.05	0.0472202	94	80	120		10	10.2362	102	90	110	
Selenium	0.05	0.0392141	78 a	80	120		5	4.75660	95	90	110	
Silicon	0.1	0.154776	155 a	80	120		25	27.4744	110	90	110	
Tin	0.2	0.196420	98	80	120		10	10.6758	107	90	110	
Vanadium	0.1	0.0971455	97	80	120		10	9.91978	99	90	110	
Titanium	0.1	0.102889	103	80	120		10	10.7103	107	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 03/05/20
Data File: S25469A3
Prep Batch: 82711
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-12	Rec	CCV V-321090-23	Rec	CCV V-321090-30	Rec	CCV V-321090-37	Rec	CCV V-321090-44	Rec	CCV V-321090-56	Rec	CCV V-321090-67	Rec
Aluminum	5/5	4.92077	98	5.00311	100	4.98573	100	4.94696	99	5.02198	100	4.99601	100	5.02130	100	4.92623	99
Barium	.5/.5	0.48871	98	0.49748	99	0.49520	99	0.49108	98	0.49765	100	0.49475	99	0.49557	99	0.49110	98
Calcium	50/50	49.29500	99	50.48800	101	49.38790	99	49.98740	100	50.10560	100	49.94500	100	50.72570	101	49.52080	99
Chromium	.5/.5	0.49302	99	0.50457	101	0.50139	100	0.49830	100	0.50425	101	0.50190	100	0.50188	100	0.49615	99
Cobalt	.5/.5	0.51158	102	0.52175	104	0.50921	102	0.51433	103	0.51844	104	0.51766	104	0.52460	105	0.51427	103
Copper	.5/.5	0.48917	98	0.49227	98	0.49208	98	0.49131	98	0.49765	100	0.49513	99	0.53464	107	0.49529	99
Iron	5/5	4.92189	98	5.04440	101	5.05813	101	5.04348	101	5.12740	103	5.11451	102	5.11763	102	5.07865	102
Lead	.5/.5	0.48966	98	0.49949	100	0.48158	96	0.48391	97	0.48842	98	0.48565	97	0.49927	100	0.48651	97
Magnesium	50/50	49.54940	99	50.62490	101	49.19950	98	49.85230	100	49.96830	100	49.83750	100	50.64410	101	49.69660	99
Manganese	.5/.5	0.49318	99	0.50287	101	0.50173	100	0.49761	100	0.50529	101	0.50288	101	0.50348	101	0.49835	100
Nickel	.5/.5	0.51011	102	0.52082	104	0.50634	101	0.51144	102	0.51571	103	0.51415	103	0.52206	104	0.51143	102
Vanadium	.5/.5	0.50361	101	0.51410	103	0.51199	102	0.50967	102	0.51500	103	0.51276	103	0.51319	103	0.50713	101
Zinc	.5/.5	0.49475	99	0.50559	101	0.50439	101	0.50374	101	0.51584	103	0.51578	103	0.69196	138 c	0.54206	108

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-78	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	5/5	4.92077	98	4.97959	100						
Barium	.5/.5	0.48871	98	0.49373	99						
Calcium	50/50	49.29500	99	49.53810	99						
Chromium	.5/.5	0.49302	99	0.50085	100						
Cobalt	.5/.5	0.51158	102	0.51714	103						
Copper	.5/.5	0.48917	98	0.49521	99						
Iron	5/5	4.92189	98	5.12803	103						
Lead	.5/.5	0.48966	98	0.48890	98						
Magnesium	50/50	49.54940	99	49.75490	100						
Manganese	.5/.5	0.49318	99	0.50245	100						
Nickel	.5/.5	0.51011	102	0.51391	103						
Vanadium	.5/.5	0.50361	101	0.51037	102						
Zinc	.5/.5	0.49475	99	0.53126	106						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 03/05/20
Data File: S25469A3
Prep Batch: 82711
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-319737	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-321254	Recovery	Low Limit	High Limit
Molybdenum	0.025	0.0279887	112	80	120	10	9.71719	97	90	110
Aluminum	2.0	2.08893	104	80	120	500	500.378	100	90	110
Arsenic	0.04	0.0444715	111	80	120	10	10.6171	106	90	110
Barium	0.1	0.106869	107	80	120	10	10.1809	102	90	110
Beryllium	0.012	0.0155862	130 a	80	120	5	5.03786	101	90	110
Calcium	10	10.4935	105	80	120	500	479.799	96	90	110
Cadmium	0.012	0.0097687	81	80	120	5	5.46531	109	90	110
Cobalt	0.025	0.0228818	92	80	120	5	4.95626	99	90	110
Chromium	0.05	0.0563328	113	80	120	10	10.1392	101	90	110
Copper	0.05	0.0533630	107	80	120	10	10.7830	108	90	110
Iron	2.0	2.10046	105	80	120	400	387.287	97	90	110
Potassium	NA	-42.6587		80	120	200	132.369	66 a	90	110
Silver	0.015	0.0154667	103	80	120	1	1.07995	108	90	110
Manganese	0.1	0.104778	105	80	120	10	10.0760	101	90	110
Silicon	0.1	0.225991	226 a	80	120	25	24.6671	99	90	110
Sodium	NA	3.02884		80	120	1000	1138.27	114 a	90	110
Nickel	0.05	0.0489947	98	80	120	10	9.97168	100	90	110
Lead	0.05	0.0536808	107	80	120	10	9.94749	99	90	110
Antimony	0.04	0.0407916	102	80	120	5	5.56119	111 a	90	110
Selenium	0.05	0.0542875	109	80	120	5	5.26044	105	90	110
Tin	0.2	0.216130	108	80	120	10	10.1599	102	90	110
Titanium	0.1	0.103707	104	80	120	10	10.4460	104	90	110
Thallium	0.05	0.0531844	106	80	120	5	4.88664	98	90	110
Vanadium	0.1	0.107462	107	80	120	10	9.93477	99	90	110
Zinc	0.1	0.103457	103	80	120	10	10.0396	100	90	110
Boron	0.2	0.202275	101	80	120	5	4.48136	90	90	110
Magnesium	5.0	5.49043	110	80	120	500	501.229	100	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 03/05/20
Data File: H25469S
Prep Batch: 82711
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-32									
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec
Mercury	20/10	20.23000	101	10.09000	101	10.08000	101								

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
(ICV/CCV Summary)

Date Analyzed: 03/06/20
Data File: S030620ANEW
Prep Batch: 82712
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-322623-8	Rec	CCV V-322627-15	Rec	CCV V-322627-27	Rec	CCV V-322627-39	Rec	CCV V-322627-43	Rec	CCV V-322627-55	Rec	CCV V-322627-67	Rec	CCV V-322627-71	Rec
Antimony	50/50	46.87500	94	47.24700	94	47.23900	94	45.79800	92	47.34600	95	46.13900	92	45.25900	91	46.84500	94
Arsenic	50/50	50.30300	101	48.89700	98	47.16100	94	46.83600	94	46.70700	93	45.39700	91	46.43700	93	45.96400	92
Beryllium	50/50	54.96800	110	53.30700	107	52.38900	105	47.68100	95	48.67800	97	43.40900	87 c	45.33600	91	45.80200	92
Cadmium	50/50	49.66700	99	49.06800	98	49.50300	99	48.32700	97	49.80600	100	48.33500	97	47.79600	96	49.24400	98
Selenium	50/250	48.88700	98	242.54800	97	241.18800	96	238.73500	95	237.45600	95	233.29400	93	235.29300	94	239.74700	96
Silver	10/50	9.76700	98	46.73200	93	47.11100	94	46.39100	93	47.56400	95	45.23800	90	45.65300	91	46.77400	94
Thallium	50/50	49.46000	99	51.36100	103	51.23100	102	49.85300	100	51.24600	102	50.97600	102	50.19300	100	50.74100	101
Vanadium	50/50	48.49800	97	47.18200	94	46.67700	93	45.84900	92	45.64100	91	44.11300	88 c	44.97100	90	44.87700	90

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 03/06/20
Data File: S030620ANEW
Prep Batch: 82712
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-322628	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-322626	Recovery	Low Limit	High Limit	
Magnesium	500	472.195	94	80	120		50000	47036.045	94	90	110	
Aluminum	500	483.168	97	80	120		15000	14843.286	99	90	110	
Chromium	2	1.909	95	80	120		500	494.198	99	90	110	
Copper	10	10.368	104	80	120		500	486.759	97	90	110	
Iron	500	494.832	99	80	120		50000	48150.025	96	90	110	
Arsenic	1	0.969	97	80	120		500	491.519	98	90	110	
Barium	5	4.949	99	80	120		500	514.332	103	90	110	
Beryllium	1	1.085	108	80	120		500	502.528	101	90	110	
Calcium	500	479.690	96	80	120		50000	49832.682	100	90	110	
Cadmium	2	1.946	97	80	120		500	541.591	108	90	110	
Silver	1	0.900	90	80	120		500	832.054	166 a	90	110	
Potassium	500	472.904	95	80	120		50000	48171.378	96	90	110	
Zinc	20	19.756	99	80	120		500	466.712	93	90	110	
Manganese	6	5.753	96	80	120		500	506.966	101	90	110	
Molybdenum	1	0.971	97	80	120		500	537.593	108	90	110	
Sodium	500	465.591	93	80	120		50000	47806.819	96	90	110	
Nickel	3	2.806	94	80	120		500	458.755	92	90	110	
Lead	2	1.822	91	80	120		500	465.626	93	90	110	
Antimony	4	4.059	101	80	120		500	507.377	101	90	110	
Selenium	10	9.578	96	80	120		2500	2392.209	96	90	110	
Thallium	2	1.799	90	80	120		500	471.889	94	90	110	
Vanadium	1	0.939	94	80	120		500	505.586	101	90	110	
Cobalt	2	1.911	96	80	120		500	489.056	98	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/05/20
Data File: S25464A4
Prep Batch: 82711
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-317800-6	CCB V-317800-13	CCB V-317800-24	CCB V-317800-29	CCB V-317800-40	CCB V-317800-51	CCB V-317800-62	CCB V-317800-70
Potassium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	1.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U

Analyte	CCB V-317800-76	MB 82711 (100)-30
Potassium	5 U	250 U
Sodium	2.5 U	125 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/05/20
Data File: S25469A3
Prep Batch: 82711
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-317800-6	CCB V-317800-13	CCB V-317800-24	CCB V-317800-31	CCB V-317800-38	CCB V-317800-45	CCB V-317800-57	CCB V-317800-68
Aluminum	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Calcium	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	.025 U	.025 U	.025 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U	.1 U

Analyte	CCB V-317800-79	MB 82711 (100)-14
Aluminum	2 U	100 U
Barium	.1 U	5 U
Calcium	10 U	500 U
Chromium	.05 U	2.5 U
Cobalt	.025 U	1.3 U
Copper	.05 U	2.5 U
Iron	2 U	100 U
Lead	.05 U	2.5 U
Magnesium	5 U	250 U
Manganese	.1 U	5 U
Nickel	.05 U	2.5 U
Vanadium	.1 U	5 U
Zinc	.1 U	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/05/20
Data File: H25469S
Prep Batch: 82711
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-33	MB 82711 [167]-11
Mercury	.5 U	.5 U	.5 U	83 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/06/20
Data File: S030620ANEW
Prep Batch: 82712
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-322624-10	CCB V-322624-16	CCB V-322624-28	CCB V-322624-40	CCB V-322624-44	CCB V-322624-56	CCB V-322624-68	CCB V-322624-72
Antimony	2 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Arsenic	.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Beryllium	.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Selenium	5 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver	.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Thallium	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Vanadium	.5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Analyte	MB 82712-17
Antimony	400 U
Arsenic	100 U
Beryllium	100 U
Cadmium	200 U
Selenium	1000 U
Silver	100 U
Thallium	200 U
Vanadium	100 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 03/05/20
Data File: S25464A4
Prep Batch: 82711
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-317801-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	499.169	100							
Calcium	500	509.515	102							
Iron	200	187.244	94							
Magnesium	500	525.796	105							
Potassium	0	U								
Sodium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 03/05/20
Data File: S25469A3
Prep Batch: 82711
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-321157-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	490.824	98							
Barium	0	U								
Calcium	500	475.652	95							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	191.775	96							
Lead	0	U								
Magnesium	500	501.413	100							
Manganese	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 03/06/20
Data File: S030620ANEW
Prep Batch: 82712
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0030402

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-322625-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	47663.63	95							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	150457.3	100							
Iron	125000	116739.3	93							
Magnesium	50000	45790.76	92							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								
Vanadium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82711

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82711

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82711	1	S25469A3	16	91.3150	110	83		55	152
Barium	82711	1	S25469A3	16	7.5122	8.92	84		65	110
Calcium	82711	1	S25469A3	16	168.9120	207.00	82		69	110
Chromium	82711	1	S25469A3	16	1.8848	2.27	83		61	114
Cobalt	82711	1	S25469A3	16	2.3550	2.87	82		64	110
Copper	82711	1	S25469A3	16	1.7546	2.09	84		66	110
Iron	82711	1	S25469A3	16	154.6300	192.00	81		34	138
Lead	82711	1	S25469A3	16	1.3038	1.63	80		62	110
Magnesium	82711	1	S25469A3	16	61.9447	74.60	83		26	114
Manganese	82711	1	S25469A3	16	4.9762	6.03	83		68	110
Mercury	82711	4	H25469S	15	6.8970	41.64	66		39	110
Nickel	82711	1	S25469A3	16	0.4855	.553	88		61	114
Potassium	82711	1	S25464A4	32	17.6856	22.60	78		61	140
Sodium	82711	1	S25464A4	32	6.9615	8.67	80		57	125
Vanadium	82711	1	S25469A3	16	2.4127	3.00	80		66	110
Zinc	82711	1	S25469A3	16	5.9277	7.13	83		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 82711

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82711	1	S25469A3	15	88.1162	110	80		55	152
Barium	82711	1	S25469A3	15	6.5113	8.92	73		65	110
Calcium	82711	1	S25469A3	15	163.2760	207.00	79		69	110
Chromium	82711	1	S25469A3	15	1.8008	2.27	79		61	114
Cobalt	82711	1	S25469A3	15	2.2463	2.87	78		64	110
Copper	82711	1	S25469A3	15	1.6684	2.09	80		66	110
Iron	82711	1	S25469A3	15	145.7850	192.00	76		34	138
Lead	82711	1	S25469A3	15	1.2535	1.63	77		62	110
Magnesium	82711	1	S25469A3	15	59.3469	74.60	80		26	114
Manganese	82711	1	S25469A3	15	4.7605	6.03	79		68	110
Mercury	82711	4	H25469S	14	8.1440	41.64	78		39	110
Nickel	82711	1	S25469A3	15	0.4605	.553	83		61	114
Potassium	82711	1	S25464A4	31	17.0342	22.60	75		61	140
Sodium	82711	1	S25464A4	31	6.6779	8.67	77		57	125
Vanadium	82711	1	S25469A3	15	2.2942	3.00	76		66	110
Zinc	82711	1	S25469A3	15	5.6629	7.13	79		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82711	1	S25469A3	20	S25469A3	17	29.9378	23.7474	5.0	124		75	125
Barium	82711	1	S25469A3	20	S25469A3	17	0.6279	0.1685	0.5	92		75	125
Calcium	82711	1	S25469A3	20	S25469A3	17	55.2124	10U	50	110		75	125
Chromium	82711	1	S25469A3	20	S25469A3	17	0.5289	0.0727	0.5	91		75	125
Cobalt	82711	1	S25469A3	20	S25469A3	17	0.5072	0.0251	0.5	96		75	125
Copper	82711	1	S25469A3	20	S25469A3	17	0.5214	0.0810	0.5	88		75	125
Iron	82711	1	S25469A3	20	S25469A3	17	57.0690	62.2325	5.0	-100	b	75	125
Lead	82711	1	S25469A3	20	S25469A3	17	0.4818	0.1141	0.5	74	a	75	125
Magnesium	82711	1	S25469A3	20	S25469A3	17	62.7107	16.0069	50	93		75	125
Manganese	82711	1	S25469A3	20	S25469A3	17	2.3116	1.8129	0.5	100		75	125
Mercury	82711	1	H25469S	19	H25469S	16	10.4200	.5U	10	104		75	125
Nickel	82711	1	S25469A3	20	S25469A3	17	0.5737	0.1042	0.5	94		75	125
Potassium	82711	1	S25464A4	36	S25464A4	33	52.7112	5.6176	50	94		75	125
Sodium	82711	1	S25464A4	36	S25464A4	33	47.0406	2.5U	50	94		75	125
Vanadium	82711	1	S25469A3	20	S25469A3	17	0.5397	0.1U	0.5	108		75	125
Zinc	82711	1	S25469A3	20	S25469A3	17	0.6173	0.2308	0.5	77		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82711

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82711	1	S25469A3	19	S25469A3	17	28.8155	23.7474	5.0	101		75	125
Barium	82711	1	S25469A3	19	S25469A3	17	0.6232	0.1685	0.5	91		75	125
Calcium	82711	1	S25469A3	19	S25469A3	17	55.4801	10U	50	111		75	125
Chromium	82711	1	S25469A3	19	S25469A3	17	0.5241	0.0727	0.5	90		75	125
Cobalt	82711	1	S25469A3	19	S25469A3	17	0.5063	0.0251	0.5	96		75	125
Copper	82711	1	S25469A3	19	S25469A3	17	0.5494	0.0810	0.5	94		75	125
Iron	82711	1	S25469A3	19	S25469A3	17	61.1595	62.2325	5.0	-21	b	75	125
Lead	82711	1	S25469A3	19	S25469A3	17	0.5090	0.1141	0.5	79		75	125
Magnesium	82711	1	S25469A3	19	S25469A3	17	60.2659	16.0069	50	89		75	125
Manganese	82711	1	S25469A3	19	S25469A3	17	1.9731	1.8129	0.5	32	a	75	125
Mercury	82711	1	H25469S	18	H25469S	16	10.8400	.5U	10	108		75	125
Nickel	82711	1	S25469A3	19	S25469A3	17	0.5547	0.1042	0.5	90		75	125
Potassium	82711	1	S25464A4	35	S25464A4	33	51.4394	5.6176	50	92		75	125
Sodium	82711	1	S25464A4	35	S25464A4	33	46.7138	2.5U	50	93		75	125
Vanadium	82711	1	S25469A3	19	S25469A3	17	0.5385	0.1U	0.5	108		75	125
Zinc	82711	1	S25469A3	19	S25469A3	17	0.6727	0.2308	0.5	88		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82711

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD16013-007

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S25469A3	21	S25469A3	17	28.0950	23.7474	5.0	87		75	125
Barium	1	S25469A3	21	S25469A3	17	0.6413	0.1685	0.50	95		75	125
Calcium	1	S25469A3	21	S25469A3	17	53.8544	10U	50	108		75	125
Chromium	1	S25469A3	21	S25469A3	17	0.5511	0.0727	0.50	96		75	125
Cobalt	1	S25469A3	21	S25469A3	17	0.5282	0.0251	0.50	101		75	125
Copper	1	S25469A3	21	S25469A3	17	0.5605	0.0810	0.50	96		75	125
Iron	1	S25469A3	21	S25469A3	17	62.4424	62.2325	5.0	4.2	b	75	125
Lead	1	S25469A3	21	S25469A3	17	0.5834	0.1141	0.50	94		75	125
Magnesium	1	S25469A3	21	S25469A3	17	60.1536	16.0069	50	88		75	125
Manganese	1	S25469A3	21	S25469A3	17	2.1424	1.8129	0.50	66	a	75	125
Nickel	1	S25469A3	21	S25469A3	17	0.6104	0.1042	0.50	101		75	125
Potassium	1	S25464A4	37	S25464A4	33	52.0585	5.6176	50	93		75	125
Sodium	1	S25464A4	37	S25464A4	33	46.5854	2.5U	50	93		75	125
Vanadium	1	S25469A3	21	S25469A3	17	0.5727	0.1U	0.50	115		75	125
Zinc	1	S25469A3	21	S25469A3	17	0.6954	0.2308	0.50	93		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82712

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82712

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82712	1	S030620A	19	15.9830	117	14		10	110
Arsenic	82712	1	S030620A	19	37.4400	49.4	76		61	113
Beryllium	82712	1	S030620A	19	152.5850	187	82		66	110
Cadmium	82712	1	S030620A	19	159.9830	197	81		64	110
Selenium	82712	1	S030620A	19	277.5570	364	76		60	112
Silver	82712	1	S030620A	19	73.8090	94.0	79		61	111
Thallium	82712	1	S030620A	19	186.9930	229	82		61	110

TxtQcType: LCS Matrix: SOIL SampleID: LCS 82712

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82712	1	S030620A	18	15.4760	117	13		10	110
Arsenic	82712	1	S030620A	18	35.7550	49.4	72		61	113
Beryllium	82712	1	S030620A	18	146.9600	187	79		66	110
Cadmium	82712	1	S030620A	18	150.3930	197	76		64	110
Selenium	82712	1	S030620A	18	265.2500	364	73		60	112
Silver	82712	1	S030620A	18	75.3090	94.0	80		61	111
Thallium	82712	1	S030620A	18	174.2730	229	76		61	110

TxtQcType: MSD Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82712	1	S030620A	24	S030620A	20	112.2220	4U	250	45	a	75	125
Arsenic	82712	1	S030620A	24	S030620A	20	197.6480	2.3030	250	78		75	125
Beryllium	82712	1	S030620A	24	S030620A	20	207.7950	1U	250	83		75	125
Cadmium	82712	1	S030620A	24	S030620A	20	200.9700	2U	250	80		75	125
Selenium	82712	1	S030620A	24	S030620A	20	204.9780	10U	250	82		75	125
Silver	82712	1	S030620A	24	S030620A	20	6.5800	1U	50	13	a	75	125
Thallium	82712	1	S030620A	24	S030620A	20	195.0160	2U	250	78		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82712	1	S030620A	23	S030620A	20	123.3830	4U	250	49	a	75	125
Arsenic	82712	1	S030620A	23	S030620A	20	188.5560	2.3030	250	75		75	125
Beryllium	82712	1	S030620A	23	S030620A	20	196.6090	1U	250	79		75	125
Cadmium	82712	1	S030620A	23	S030620A	20	188.7450	2U	250	75		75	125
Selenium	82712	1	S030620A	23	S030620A	20	189.6630	10U	250	76		75	125
Silver	82712	1	S030620A	23	S030620A	20	14.6940	1U	50	29	a	75	125
Thallium	82712	1	S030620A	23	S030620A	20	188.6300	2U	250	75		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82712

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD16013-007

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S030620A	25	S030620A	20	43.9020	4U	50	88		75	125
Arsenic	1	S030620A	25	S030620A	20	47.1790	2.3030	50	90		75	125
Beryllium	1	S030620A	25	S030620A	20	49.1700	1U	50	98		75	125
Cadmium	1	S030620A	25	S030620A	20	45.6490	2U	50	91		75	125
Selenium	1	S030620A	25	S030620A	20	227.0400	10U	250	91		75	125
Silver	1	S030620A	25	S030620A	20	43.6780	1U	50	87		75	125
Thallium	1	S030620A	25	S030620A	20	46.4530	2U	50	93		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82711

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82711

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82711	S25469A3	16	S25469A3	15	91.3150	88.1162	3.6		20
Barium	82711	S25469A3	16	S25469A3	15	7.5122	6.5113	14		20
Calcium	82711	S25469A3	16	S25469A3	15	168.9120	163.2760	3.4		20
Chromium	82711	S25469A3	16	S25469A3	15	1.8848	1.8008	4.6		20
Cobalt	82711	S25469A3	16	S25469A3	15	2.3550	2.2463	4.7		20
Copper	82711	S25469A3	16	S25469A3	15	1.7546	1.6684	5		20
Iron	82711	S25469A3	16	S25469A3	15	154.6300	145.7850	5.9		20
Lead	82711	S25469A3	16	S25469A3	15	1.3038	1.2535	3.9		20
Magnesium	82711	S25469A3	16	S25469A3	15	61.9447	59.3469	4.3		20
Manganese	82711	S25469A3	16	S25469A3	15	4.9762	4.7605	4.4		20
Mercury	82711	H25469S	15	H25469S	14	6.8970	8.1440	17		20
Nickel	82711	S25469A3	16	S25469A3	15	0.4855	0.4605	5.3		20
Potassium	82711	S25464A4	32	S25464A4	31	17.6856	17.0342	3.8		20
Sodium	82711	S25464A4	32	S25464A4	31	6.9615	6.6779	4.2		20
Vanadium	82711	S25469A3	16	S25469A3	15	2.4127	2.2942	5		20
Zinc	82711	S25469A3	16	S25469A3	15	5.9277	5.6629	4.6		20

TxtQcType: MR Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82711	S25469A3	18	S25469A3	17	22.7835	23.7474	4.1		20
Barium	82711	S25469A3	18	S25469A3	17	0.1967	0.1685	15		20
Calcium	82711	S25469A3	18	S25469A3	17	10U	10U	---		20
Chromium	82711	S25469A3	18	S25469A3	17	0.0690	0.0727	5.1		20
Cobalt	82711	S25469A3	18	S25469A3	17	0.025U	0.0251	---		20
Copper	82711	S25469A3	18	S25469A3	17	0.0660	0.0810	20		20
Iron	82711	S25469A3	18	S25469A3	17	54.8512	62.2325	13		20
Lead	82711	S25469A3	18	S25469A3	17	0.05U	0.1141	---		20
Magnesium	82711	S25469A3	18	S25469A3	17	15.5040	16.0069	3.2		20
Manganese	82711	S25469A3	18	S25469A3	17	1.7375	1.8129	4.2		20
Mercury	82711	H25469S	17	H25469S	16	.5U	.5U	---		20
Nickel	82711	S25469A3	18	S25469A3	17	0.0870	0.1042	18		20
Potassium	82711	S25464A4	34	S25464A4	33	5.7129	5.6176	1.7		20
Sodium	82711	S25464A4	34	S25464A4	33	2.5U	2.5U	---		20
Vanadium	82711	S25469A3	18	S25469A3	17	0.1U	0.1U	---		20
Zinc	82711	S25469A3	18	S25469A3	17	0.1715	0.2308	29	b	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82711

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82711	S25469A3	20	S25469A3	19	29.9378	28.8155	3.8		20
Barium	82711	S25469A3	20	S25469A3	19	0.6279	0.6232	.76		20
Calcium	82711	S25469A3	20	S25469A3	19	55.2124	55.4801	.48		20
Chromium	82711	S25469A3	20	S25469A3	19	0.5289	0.5241	.9		20
Cobalt	82711	S25469A3	20	S25469A3	19	0.5072	0.5063	.18		20
Copper	82711	S25469A3	20	S25469A3	19	0.5214	0.5494	5.2		20
Iron	82711	S25469A3	20	S25469A3	19	57.0690	61.1595	6.9		20
Lead	82711	S25469A3	20	S25469A3	19	0.4818	0.5090	5.5		20
Magnesium	82711	S25469A3	20	S25469A3	19	62.7107	60.2659	4		20
Manganese	82711	S25469A3	20	S25469A3	19	2.3116	1.9731	16		20
Mercury	82711	H25469S	19	H25469S	18	10.4200	10.8400	4		20
Nickel	82711	S25469A3	20	S25469A3	19	0.5737	0.5547	3.4		20
Potassium	82711	S25464A4	36	S25464A4	35	52.7112	51.4394	2.4		20
Sodium	82711	S25464A4	36	S25464A4	35	47.0406	46.7138	.7		20
Vanadium	82711	S25469A3	20	S25469A3	19	0.5397	0.5385	.23		20
Zinc	82711	S25469A3	20	S25469A3	19	0.6173	0.6727	8.6		20

TxtQcType: SD Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	82711	S25469A3	22	S25469A3	17	5	4.6476	23.7474	2.1		10
Barium	82711	S25469A3	22	S25469A3	17	5	0.0308	0.1685	8.6		10
Calcium	82711	S25469A3	22	S25469A3	17	5	1.5573	7.9409	1.9		10
Chromium	82711	S25469A3	22	S25469A3	17	5	0.0126	0.0727	14	a	10
Cobalt	82711	S25469A3	22	S25469A3	17	5	0.0023	0.0251	55	c	10
Copper	82711	S25469A3	22	S25469A3	17	5	0.0177	0.0810	9.1		10
Iron	82711	S25469A3	22	S25469A3	17	5	12.1713	62.2325	2.2		10
Lead	82711	S25469A3	22	S25469A3	17	5	0.0240	0.1141	5.3		10
Magnesium	82711	S25469A3	22	S25469A3	17	5	3.2833	16.0069	2.6		10
Manganese	82711	S25469A3	22	S25469A3	17	5	0.3544	1.8129	2.3		10
Nickel	82711	S25469A3	22	S25469A3	17	5	0.0150	0.1042	28	a	10
Potassium	82711	S25464A4	38	S25464A4	33	5	1.5477	5.6176	38	c	10
Sodium	82711	S25464A4	38	S25464A4	33	5	0.4394	1.5929	38	c	10
Vanadium	82711	S25469A3	22	S25469A3	17	5	0.0126	0.0935	33	a	10
Zinc	82711	S25469A3	22	S25469A3	17	5	0.0467	0.2308	1.1		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82712

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82712

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82712	S030620A	19	S030620A	18	15.9830	15.4760	3.2		20
Arsenic	82712	S030620A	19	S030620A	18	37.4400	35.7550	4.6		20
Beryllium	82712	S030620A	19	S030620A	18	152.5850	146.9600	3.8		20
Cadmium	82712	S030620A	19	S030620A	18	159.9830	150.3930	6.2		20
Selenium	82712	S030620A	19	S030620A	18	277.5570	265.2500	4.5		20
Silver	82712	S030620A	19	S030620A	18	73.8090	75.3090	2		20
Thallium	82712	S030620A	19	S030620A	18	186.9930	174.2730	7		20

TxtQcType: MR Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82712	S030620A	21	S030620A	20	4U	4U	---		20
Arsenic	82712	S030620A	21	S030620A	20	2.4760	2.3030	7.2		20
Beryllium	82712	S030620A	21	S030620A	20	1U	1U	---		20
Cadmium	82712	S030620A	21	S030620A	20	2U	2U	---		20
Selenium	82712	S030620A	21	S030620A	20	10U	10U	---		20
Silver	82712	S030620A	21	S030620A	20	1U	1U	---		20
Thallium	82712	S030620A	21	S030620A	20	2U	2U	---		20

TxtQcType: MSD Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82712	S030620A	24	S030620A	23	112.2220	123.3830	9.5		20
Arsenic	82712	S030620A	24	S030620A	23	197.6480	188.5560	4.7		20
Beryllium	82712	S030620A	24	S030620A	23	207.7950	196.6090	5.5		20
Cadmium	82712	S030620A	24	S030620A	23	200.9700	188.7450	6.3		20
Selenium	82712	S030620A	24	S030620A	23	204.9780	189.6630	7.8		20
Silver	82712	S030620A	24	S030620A	23	6.5800	14.6940	76	a	20
Thallium	82712	S030620A	24	S030620A	23	195.0160	188.6300	3.3		20

TxtQcType: SD Matrix: SOIL SampleID: AD16013-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	82712	S030620A	22	S030620A	20	5	0.2420	1.1970	1.1		20
Arsenic	82712	S030620A	22	S030620A	20	5	0.4570	2.3030	0.78		20
Beryllium	82712	S030620A	22	S030620A	20	5	0.1640	0.7700	6.5		20
Cadmium	82712	S030620A	22	S030620A	20	5	0.0530	0.2640	0.38		20
Selenium	82712	S030620A	22	S030620A	20	5	0.1330	1.5080	---		20
Silver	82712	S030620A	22	S030620A	20	5	0.1280	0.2760	132	c	20
Thallium	82712	S030620A	22	S030620A	20	5	0.0310	0.1570	1.3		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: 25469 Analyst: BR

QC Number: 82711 Prep Date: 3/5/20

Matrix: SOIL 6010 Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL				--	
LCS	.5g					--	
LCSD						--	
1. 16013 -007							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 16013 -007							
MS 16013 -007							Balance used: 032
MSD 16013 -007							Pipettes used: 149, 160
2. 16013 -001							
3. -002							Hot Block used: 4
4. -003							
5. -004							
6. -005							
7. -006							
8. -008							
9. 16026 -001							
10. 16022 -001							
11. 16014 -001							
12. 16036 -001							
13. -003							
14. -005							
15. -007							
16. -009							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94° C (90-95° C) Start Time: 8:00 am End Time: 11:30 am

	Volume mL	Lot #
SD	.5g	V- 13005
LLCSD		V-
	0.25mL	V- 12919, 12537
MSD		V- 320443

Acid	Vol mL	Lot#
HNO_3	2.5	V-13046
HCl	5	V-
H_2O_2	1.5	V-12516

Acid	Vol mL	Lot#
1:1 HNO_3	5	V-320611
1:1 HCl		V-

Relinquished By BR Date 3/5/20

Received By [illegible] Date 3/5/2020

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HG SAMPLE PREPARATION LOG

Hampton-Clarke/Veritech

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER_____

Batch No.:* 25469

QC Number: 82711

Matrix: SD11

Analyst: BR

Prep Date: 9/5/20

Review By: BA

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25mL	25mL		CAL CURVE BLK 0ppb V- 323076
LCS	.159			
LCSD				STD 0.2 ppb V- 323077
1 16013 -007				STD 0.5 ppb V- 323078
MR 16013 -007				STD 1.0 ppb V- 323079
MS 16013 -007				STD 2.0 ppb V- 323080
MSD 16013 -007				STD 5.0 ppb V- 323081
2 16013 -001				STD 10.0 ppb V- 323082
3 -002				STD 25.0 ppb V- 323081
4 -003				ICV 10.0 ppb V- 323074
5 -004				CCV 20.0 ppb V- 323075
6 -005				
7 -006				
8 -008				Balance used: 032
9 16026 -001				Pipettes used: 149, 152, 159
10 16022 -001				
11 16014 -001				Hot Block used: 7
12				
13				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KmnO_4$: V- 321814	3.75mL	HNO_3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5mL	H2SO4		V-
		Aqua Regia	1.25mL	V- 323072

**Block Temp.: °C	93.4
Time In Block:	130 pm
Time Out of Block:	200 pm

Spike Volume & Lot #

☐ LCS V- 13005 (0.15 / 0.25 ml)

☐ MS V- 322791 0.250 ml

☐ Standards/Control Batch B- 28651

Start time: 1100 am End Time: 230 pm

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: BR

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER_____

Batch No.: ~~BP 1025469~~ 25470 Analyst: BR

QC Number: ~~82711~~ 82712 3/5/20 Prep Date: 3/5/20

Matrix: Soil ~~6010~~ 6020 Reviewed By: m

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL	25mL	50mL		–	
LCS	.19					–	
LCSD						–	
1. 16013 -007	.59						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 16013 -007							
MS 16013 -007							Balance used: 032
MSD 16013 -007							Pipettes used: 149, 160
2. 16013 -001							
3. -002							Hot Block used: 5
4. -003							
5. -004							
6. -005							
7. -006							
8. -008							
9. 16026 -001							
10. 16022 -001							
11. 16014 -001							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94.7 C (90-95° C) Start Time: 800 am End Time: 1200 pm

	Volume mL	Lot #
LCS, LCSD	.19	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25mL	V-12919, 12537
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V-13046
HCl		V-
H_2O_2	1.5	V-~~12516~~ 12516

Acid	Vol mL	Lot#
1:1 HNO_3	5	V-320611
1:1 HCl		V-

Relinquished By BR Date 3/5/20

Received By m Date 3/5/20

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S25469A3.txt

Analysis Date: 03/05/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-317800	1	CAL	12:56	1							V-317800(ICB/CCB)
CALST2 V-319737	1	CAL	13:00	2							V-319737(LLICV/LLCCV soil)
CALST3 V-321087	1	CAL	13:04	3							V-321087(ICS3 - Middle Std)
CALST4 V-321088	1	CAL	13:08	4							V-321088(ICS4 High std)
ICV V-321090	1	ICV	13:12	5							V-321090(CCV)
ICB V-317800	1	ICB	13:16	6							V-317800(ICB/CCB)
LRS V-321254	1	LRS	13:20	7	MET-TAL6010S	SOIL	SOIL	SW846	82711		V-321254(LRS)
ICS3 V-321087	1	ICS	13:25	8							V-321087(ICS3 - Middle Std)
RINSE	1	NA	13:29	9	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
LLICV V-319737	1	LLICV	13:33	10	MET-TAL6010S	SOIL	SOIL	SW846	82711		V-319737(LLICV/LLCCV soil)
ICSA V-321157	1	ICSA	13:37	11							V-321157(ICSA)
CCV V-321090	1	CCV	13:42	12							V-321090(CCV)
CCB V-317800	1	CCB	13:46	13							V-317800(ICB/CCB)
MB 82711 (100)	1	MB	13:50	14	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
LCS 82711	1	LCS	13:53	15	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
LCS MR 82711	1	LCS	13:59	16	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-007	1	SMP	14:04	17	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-007	1	MR	14:08	18	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-007	1	MS	14:12	19	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-007	1	MSD	14:16	20	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-007	1	PS	14:20	21	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-007	5	SD	14:24	22	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
CCV V-321090	1	CCV	14:28	23							V-321090(CCV)
CCB V-317800	1	CCB	14:32	24							V-317800(ICB/CCB)
AD16036-001	1	SMP	14:36	25	PB-SOIL	SOIL	SOIL	SW846	82711		()
AD16036-003	1	SMP	14:40	26	PB-SOIL	SOIL	SOIL	SW846	82711		()
AD16036-005	1	SMP	14:43	27	PB-SOIL	SOIL	SOIL	SW846	82711		()
AD16036-007	1	SMP	14:47	28	PB-SOIL	SOIL	SOIL	SW846	82711		()
AD16036-009	1	SMP	14:51	29	PB-SOIL	SOIL	SOIL	SW846	82711		()
CCV V-321090	1	CCV	14:55	30							V-321090(CCV)
CCB V-317800	1	CCB	14:59	31							V-317800(ICB/CCB)
AD16013-001	1	SMP	15:03	32	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-002	1	SMP	15:07	33	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-003	1	SMP	15:11	34	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-004	1	SMP	15:15	35	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-005	1	SMP	15:19	36	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
CCV V-321090	1	CCV	15:23	37							V-321090(CCV)
CCB V-317800	1	CCB	15:27	38							V-317800(ICB/CCB)
AD16013-006	1	SMP	15:31	39	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16013-008	1	SMP	15:35	40	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16026-001	1	SMP	15:39	41	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16022-001	1	SMP	15:44	42	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
AD16014-001	1	SMP	15:48	43	MET-TAL6010S	SOIL	SOIL	SW846	82711		()
CCV V-321090	1	CCV	15:52	44							V-321090(CCV)
CCB V-317800	1	CCB	15:56	45							V-317800(ICB/CCB)
MB 82713 (100)	1	MB	16:00	46		SOIL	SOIL	SW846	82713		()
LCS 82713	1	LCS	16:04	47		SOIL	SOIL	SW846	82713		()
LCS MR 82713	1	LCS	16:09	48		SOIL	SOIL	SW846	82713		()
AD16030-002	1	SMP	16:14	49	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu, Pb NOT reported (Cu, Pb over LR)	()
AD16030-002	1	MR	16:19	50	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu, Pb NOT reported (Cu, Pb over LR)	()
AD16030-002	1	MS	16:24	51	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu, Pb NOT reported (Cu, Pb over LR)	()
AD16030-002	1	MSD	16:29	52	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu, Pb NOT reported (Cu, Pb over LR)	()
AD16030-002	1	PS	16:35	53	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu, Pb NOT reported (Cu, Pb over LR)	()
AD16030-002	5	SD	16:40	54	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu, Pb NOT reported (Cu over LR)	()
RINSE	1	NA	16:45	55		SOIL	SOIL	SW846	82713	rinse	()
CCV V-321090	1	CCV	16:48	56						Zn failed	V-321090(CCV)
CCB V-317800	1	CCB	16:52	57							V-317800(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.105 3/5/2020 10:08:31 PM

RUN IS OK
25469/82711: All elements reported, except Na, K
25471/82713: All elements reported, except Zn, Na, K

3/9/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S25469A3.txt

Analysis Date: 03/05/20

Instrument: PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD16030-001	1	SMP	16:56	58	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16030-004	1	SMP	17:01	59	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16030-006	1	SMP	17:06	60	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16030-010	1	SMP	17:11	61	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16030-011	1	SMP	17:16	62	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16030-012	1	SMP	17:21	63	MET-TAL6010S	SOIL	SOIL	SW846	82713	Mn NOT reported (Mn> LR)	()
AD16030-013	1	SMP	17:27	64	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16030-014	1	SMP	17:32	65	MET-TAL6010S	SOIL	SOIL	SW846	82713	Cu NOT reported (Cu> LR)	()
AD16030-015	1	SMP	17:37	66	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
CCV V-321090	1	CCV	17:41	67							V-321090(CCV)
CCB V-317800	1	CCB	17:45	68							V-317800(ICB/CCB)
AD16030-016	1	SMP	17:49	69	MET-TAL6010S	SOIL	SOIL	SW846	82713		()
AD16040-001	1	SMP	17:54	70	MET-2-SOIL	SOIL	SOIL	SW846	82713		()
AD16040-002	1	SMP	17:58	71	MET-2-SOIL	SOIL	SOIL	SW846	82713		()
AD16040-004	1	SMP	18:02	72	MET-2-SOIL	SOIL	SOIL	SW846	82713		()
AD16040-006	1	SMP	18:06	73	MET-2-SOIL	SOIL	SOIL	SW846	82713		()
AD16040-008	1	SMP	18:10	74	MET-2-SOIL	SOIL	SOIL	SW846	82713		()
AD16040-010	1	SMP	18:14	75	MET-2-SOIL	SOIL	SOIL	SW846	82713		()
AD16020-004	1	SMP	18:18	76	PB-SOIL	SOIL	SOIL	SW846	82713		()
AD16020-005	1	SMP	18:23	77	PB-SOIL	SOIL	SOIL	SW846	82713		()
CCV V-321090	1	CCV	18:27	78							V-321090(CCV)
CCB V-317800	1	CCB	18:31	79							V-317800(ICB/CCB)

Comments/Reviewedby:

olufemi
192.168.1.105 3/5/2020 10:08:31 PM

RUN IS OK
25469/82711: All elements reported, except Na, K
25471/82713: All elements reported, except Zn, Na, K

3/9/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S25464A4.txt

Analysis Date: 03/05/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-317800	1	CAL	20:58	1							V-317800(ICB/CCB)
CALST2 V-319737	1	CAL	21:03	2							V-319737(LLICV/LLCCV soil)
CALST3 V-322983	1	CAL	21:08	3							V-322983(ICS3 - Middle Std)
CALST4 V-322978	1	CAL	21:12	4							V-322978(ICS4 High std)
ICV V-321090	1	ICV	21:17	5							V-321090(CCV)
ICB V-317800	1	ICB	21:21	6							V-317800(ICB/CCB)
LRS V-321254	1	LRS	21:26	7		SOIL	SOIL	SW846	82704		V-321254(LRS)
ICS3 V-322983	1	ICS	21:32	8							V-322983(ICS3 - Middle Std)
RINSE	1	SMP	21:36	9		SOIL	SOIL	SW846	82704		0
LLICV V-319737	1	LLICV	21:41	10		SOIL	SOIL	SW846	82704		V-319737(LLICV/LLCCV soil)
ICSA V-317801	1	ICSA	21:46	11							V-317801(ICSA)
CCV V-321090	1	CCV	21:51	12							V-321090(CCV)
CCB V-317800	1	CCB	21:55	13							V-317800(ICB/CCB)
MB 82704 (100)	1	MB	22:00	14		SOIL	SOIL	SW846	82704		0
LCS 82704	1	LCS	22:05	15		SOIL	SOIL	SW846	82704		0
LCS MR 82704	1	LCS	22:09	16		SOIL	SOIL	SW846	82704		0
AD16003-001	1	SMP	22:13	17	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16003-001	1	MR	22:17	18	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16003-001	1	MS	22:21	19	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16003-001	1	MSD	22:25	20	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16003-001	1	PS	22:29	21	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16003-001	5	SD	22:33	22	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
CCV V-321090	1	CCV	22:38	23							V-321090(CCV)
CCB V-317800	1	CCB	22:42	24							V-317800(ICB/CCB)
AD16011-002	1	SMP	22:47	25	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16011-005	1	SMP	22:51	26	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
AD16011-010	1	SMP	22:55	27	MET-TAL6010S	SOIL	SOIL	SW846	82704		0
CCV V-321090	1	CCV	22:59	28							V-321090(CCV)
CCB V-317800	1	CCB	23:03	29							V-317800(ICB/CCB)
MB 82711 (100)	1	MB	23:08	30		SOIL	SOIL	SW846	82711		0
LCS 82711	1	LCS	23:13	31		SOIL	SOIL	SW846	82711		0
LCS MR 82711	1	LCS	23:17	32		SOIL	SOIL	SW846	82711		0
AD16013-007	1	SMP	23:21	33	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-007	1	MR	23:26	34	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-007	1	MS	23:31	35	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-007	1	MSD	23:35	36	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-007	1	PS	23:39	37	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-007	5	SD	23:43	38	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
CCV V-321090	1	CCV	23:48	39							V-321090(CCV)
CCB V-317800	1	CCB	23:52	40							V-317800(ICB/CCB)
AD16013-001	1	SMP	23:57	41	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-002	1	SMP	00:01	42	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-003	1	SMP	00:05	43	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-004	1	SMP	00:09	44	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-005	1	SMP	00:13	45	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-006	1	SMP	00:17	46	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16013-008	1	SMP	00:21	47	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16026-001	1	SMP	00:26	48	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
AD16022-001	1	SMP	00:30	49	MET-TAL6010S	SOIL	SOIL	SW846	82711		0
CCV V-321090	1	CCV	00:34	50							V-321090(CCV)
CCB V-317800	1	CCB	00:38	51							V-317800(ICB/CCB)
MB 82713 (100)	1	MB	00:43	52		SOIL	SOIL	SW846	82713		0
LCS 82713	1	LCS	00:48	53		SOIL	SOIL	SW846	82713		0
LCS MR 82713	1	LCS	00:52	54		SOIL	SOIL	SW846	82713		0
AD16030-002	1	SMP	00:56	55	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-002	1	MR	01:01	56	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-002	1	MS	01:05	57	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-002	1	MSD	01:09	58	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-002	1	PS	01:14	59	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-002	5	SD	01:18	60	MET-TAL6010S	SOIL	SOIL	SW846	82713		0

Comments/Reviewedby:

carmela
192.168.1.89 3/6/2020 10:56:44 AM

ok
Na,K reported

3/9/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S25464A4.txt

Analysis Date: 03/06/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CCV V-321090	1	CCV	01:22	61							V-321090(CCV)
CCB V-317800	1	CCB	01:26	62							V-317800(ICB/CCB)
AD16030-001	1	SMP	01:31	63	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-004	1	SMP	01:35	64	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-006	1	SMP	01:39	65	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-010	1	SMP	01:43	66	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-011	1	SMP	01:47	67	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-012	1	SMP	01:52	68	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
CCV V-321090	1	CCV	01:56	69							V-321090(CCV)
CCB V-317800	1	CCB	02:00	70							V-317800(ICB/CCB)
AD16030-013	1	SMP	02:05	71	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-014	1	SMP	02:09	72	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-015	1	SMP	02:13	73	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
AD16030-016	1	SMP	02:17	74	MET-TAL6010S	SOIL	SOIL	SW846	82713		0
CCV V-321090	1	CCV	02:21	75							V-321090(CCV)
CCB V-317800	1	CCB	02:25	76							V-317800(ICB/CCB)

Comments/Reviewedby:

carmela
192.168.1.89 3/6/2020 10:56:44 AM

ok
Na,K reported

3/9/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H25469S.txt

Analysis Date: 03/05/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	13:08	1							0
.2 PPB	1	CAL	13:09	2							0
.5 PPB	1	CAL	13:10	3							0
1 PPB	1	CAL	13:12	4							0
2 PPB	1	CAL	13:13	5							0
5 PPB	1	CAL	13:14	6							0
10 PPB	1	CAL	13:15	7							0
25 PPB	1	CAL	13:17	8							0
ICV (2)	1	ICV	13:19	9							0
ICB	1	ICB	13:21	10							0
MB 82711 [167]	1	MB	13:22	11	HG-SOIL	SOIL	SOIL	SW846	82711		0
LCS 82711	1	NA	13:23	12	HG-SOIL	SOIL	SOIL	SW846	82711	Conc is higher than calibration limit	0
LCS MR 82711	1	NA	13:25	13	HG-SOIL	SOIL	SOIL	SW846	82711	Conc is higher than calibration limit	0
LCS 4D	4	LCS	13:27	14	HG-SOIL	SOIL	SOIL	SW846	82711		0
LCS MR 4D	4	LCS	13:28	15	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-007	1	SMP	13:30	16	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-007	1	MR	13:31	17	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-007	1	MS	13:32	18	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-007	1	MSD	13:34	19	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-001	1	SMP	13:36	20	HG-SOIL	SOIL	SOIL	SW846	82711		0
CCV	1	CCV	13:37	21							0
CCB	1	CCB	13:39	22							0
AD16013-002	1	SMP	13:40	23	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-003	1	SMP	13:41	24	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-004	1	SMP	13:43	25	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-005	1	SMP	13:44	26	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-006	1	SMP	13:45	27	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16013-008	1	SMP	13:47	28	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16026-001	1	SMP	13:48	29	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16022-001	1	SMP	13:49	30	HG-SOIL	SOIL	SOIL	SW846	82711		0
AD16014-001	1	SMP	13:51	31	HG-SOIL	SOIL	SOIL	SW846	82711		0
CCV	1	CCV	13:52	32							0
CCB	1	CCB	13:54	33							0

Comments/Reviewedby:

jlacca
1v2 108 1 120 3 5/2020 2:05:04 PM

OK

3/11/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-322996

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S030620ANEW.txt

Analysis Date: 03/06/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	20:14	1		SOIL	SOIL	SW846	82712		0
CalBlk V-322617	1	ISBLK	20:18	2		SOIL	SOIL				V-322617(Cal Blk WARNING)
CalStd1 V-322618	1	CAL	20:23	3							V-322618(Cal Std-1 WARNING)
CalStd2 V-322619	1	CAL	20:27	4							V-322619(Cal Std-2 WARNING)
CalStd3 V-322620	1	CAL	20:31	5							V-322620(Cal Std-3 WARNING)
CalStd4 V-322621	1	CAL	20:36	6							V-322621(Cal Std-4 WARNING)
CalStd5 V-322622	1	CAL	20:40	7							V-322622(Cal Std-5 WARNING)
ICV V-322623	1	ICV	20:44	8							V-322623(ICV WARNING)
LLICV V-322628	1	LLICV	20:48	9		SOIL	SOIL	SW846	82712		V-322628(LL-ICV/CCV SOIL WARNING)
ICB V-322624	1	ICB	20:53	10							V-322624(ICB/CCB WARNING)
ICSA V-322625	1	ICSA	20:57	11							V-322625(ICSA WARNING)
RINSE	1	NA	21:01	12		SOIL	SOIL	SW846	82712		0
LRS V-322626	1	LRS	21:06	13		SOIL	SOIL	SW846	82712	Ag fail.	V-322626(LRS WARNING)
RINSE	1	NA	21:10	14		SOIL	SOIL	SW846	82712		0
CCV V-322627	1	CCV	21:14	15							V-322627(CCV WARNING)
CCB V-322624	1	CCB	21:18	16							V-322624(ICB/CCB WARNING)
MB 82712	1	MB	21:23	17		SOIL	SOIL	SW846	82712		0
LCS 82712	1	LCS	21:27	18		SOIL	SOIL	SW846	82712		0
LCS MR 82712	1	LCS	21:31	19		SOIL	SOIL	SW846	82712		0
AD16013-007	1	SMP	21:35	20	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-007	1	MR	21:40	21	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-007	5	SD	21:44	22	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-007	1	MS	21:48	23	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-007	1	MSD	21:52	24	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-007	1	PS	21:57	25	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
RINSE	1	NA	22:01	26		SOIL	SOIL	SW846	82712		0
CCV V-322627	1	CCV	22:05	27							V-322627(CCV WARNING)
CCB V-322624	1	CCB	22:09	28							V-322624(ICB/CCB WARNING)
AD16013-001	1	SMP	22:14	29	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-002	1	SMP	22:18	30	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-003	1	SMP	22:22	31	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-004	1	SMP	22:26	32	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-005	1	SMP	22:31	33	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-006	1	SMP	22:35	34	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16013-008	1	SMP	22:39	35	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16026-001	1	SMP	22:44	36	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
AD16022-001	1	SMP	22:48	37	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
RINSE	1	NA	22:52	38		SOIL	SOIL	SW846	82712		0
CCV V-322627	1	CCV	22:56	39							V-322627(CCV WARNING)
CCB V-322624	1	CCB	23:01	40							V-322624(ICB/CCB WARNING)
AD16014-001	1	SMP	23:05	41	MET-TAL6020S	SOIL	SOIL	SW846	82712		0
RINSE	1	NA	23:09	42		SOIL	SOIL	SW846	82712		0
CCV V-322627	1	CCV	23:14	43							V-322627(CCV WARNING)
CCB V-322624	1	CCB	23:18	44							V-322624(ICB/CCB WARNING)
MB 82714	1	MB	23:22	45		SOIL	SOIL	SW846	82714	Rerun Be.	0
LCS 82714	1	LCS	23:27	46		SOIL	SOIL	SW846	82714	Rerun Be.	0
LCS MR 82714	1	LCS	23:31	47		SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-002	1	SMP	23:35	48	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-002	1	MR	23:39	49	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-002	5	SD	23:44	50	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-002	1	MS	23:48	51	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-002	1	MSD	23:52	52	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-002	1	PS	23:56	53	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
RINSE	1	NA	00:00	54		SOIL	SOIL	SW846	82714		0
CCV V-322627	1	CCV	00:04	55							V-322627(CCV WARNING)
CCB V-322624	1	CCB	00:09	56							V-322624(ICB/CCB WARNING)
AD16030-001	1	SMP	00:13	57	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-004	1	SMP	00:17	58	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-006	1	SMP	00:21	59	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-010	1	SMP	00:26	60	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0

Comments/Reviewedby:

pcousineau
192.168.1.87 3/9/2020 12:14:06 PM

B-25470 Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl. LRS fail for Ag. Ag LR = 100ppb.
B- 25472 Rerun Be. PC

3/19/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 20 5/5/20

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S030620ANEW.txt

Analysis Date: 03/07/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD16030-011	1	SMP	00:30	61	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-012	1	SMP	00:34	62	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-013	1	SMP	00:38	63	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-014	1	SMP	00:43	64	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
AD16030-015	1	SMP	00:47	65	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
RINSE	1	NA	00:51	66		SOIL	SOIL	SW846	82714		0
CCV V-322627	1	CCV	00:56	67							V-322627(CCV WARNING)
CCB V-322624	1	CCB	01:00	68							V-322624(ICB/CCB WARNING)
AD16030-016	1	SMP	01:04	69	MET-TAL6020S	SOIL	SOIL	SW846	82714	Rerun Be.	0
RINSE	1	NA	01:08	70		SOIL	SOIL	SW846	82714		0
CCV V-322627	1	CCV	01:13	71							V-322627(CCV WARNING)
CCB V-322624	1	CCB	01:17	72							V-322624(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 3/9/2020 12:14:06 PM

B-25470 Run ok. Report Ag, As, Be, Cd, Sb, Se, Tl. LRS fail for Ag. Ag LR = 100ppb.
B- 25472 Rerun Be. PC.

3/19/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2x 2/5/20

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S030620AN Sample ID: CalBlk V-322617 Sample Date 03/06/20 Sample Time: 20:18

IS ID:	Area	Area Limit		
Ho-1	2356208.65	1649346.055	-	3063071.245
In-1	1683398.59	1178379.013	-	2188418.167
Sc-1	1018850.85	713195.595	-	1324506.105
Tb-1	2432057.39	1702440.173	-	3161674.607

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-322617	2	2356208.	1683398.	1018850.	2432057.				
SMP	RINSE	1	2400271.	1671989.	1006425.	2435305.				
CAL	CalStd1 V-32261	3	2376931.	1675949.	1017906.	2423988.				
CAL	CalStd2 V-32261	4	2376297.	1682222.	1033609.	2447506.				
CAL	CalStd3 V-32262	5	2360556.	1690174.	1041874.	2422971.				
CAL	CalStd4 V-32262	6	2343461.	1643070.	1023295.	2396498.				
CAL	CalStd5 V-32262	7	2299749.	1591129.	990490.7	2355057.				
ICV	ICV V-322623	8	2325492.	1604444.	991954.9	2383074.				
LLICV	LLICV V-322628	9	2339931.	1632209.	992982.7	2381188.				
ICB	ICB V-322624	10	2331497.	1641943.	993476.5	2371164.				
ICSA	ICSA V-322625	11	2230320.	1327235.	920887.1	2259676.				
SMP	RINSE	12	2331771.	1642289.	953466.8	2376837.				
LRS	LRS V-322626	13	2224501.	1441597.	922058.2	2281820.				
SMP	RINSE	14	2321438.	1644630.	976304.5	2394447.				
CCV	CCV V-322627	15	2294626.	1600874.	959008.2	2343905.				
CCB	CCB V-322624	16	2318308.	1629243.	958522.5	2369071.				
MB	MB 82712	17	2341796.	1628697.	960859.0	2391346.				
LCS	LCS 82712	18	2361122.	1609776.	988636.8	2410217.				
MR	LCS MR 82712	19	2358043.	1615839.	984216.4	2403724.				
SMP	AD16013-007	20	2409081.	1678783.	1191135.	2474989.				
MR	AD16013-007	21	2419540.	1636574.	1188677.	2474647.				
SD	AD16013-007	22	2418589.	1679596.	1036465.	2460995.				
MS	AD16013-007	23	2340656.	1600252.	1043744.	2368793.				
MSD	AD16013-007	24	2347000.	1586558.	1066841.	2397227.				
PS	AD16013-007	25	2408712.	1656796.	1190849.	2449482.				
SMP	RINSE	26	2384190.	1700406.	1035210.	2456847.				
CCV	CCV V-322627	27	2320255.	1607984.	962669.6	2389605.				
CCB	CCB V-322624	28	2349643.	1642009.	947872.0	2419114.				
SMP	AD16013-001	29	2400520.	1624393.	1205158.	2451904.				
SMP	AD16013-002	30	2467608.	1650700.	1279153.	2524089.				
SMP	AD16013-003	31	2420046.	1639628.	1175266.	2482970.				
SMP	AD16013-004	32	2463654.	1668072.	1094034.	2524952.				
SMP	AD16013-005	33	2461502.	1701760.	1228216.	2547623.				
SMP	AD16013-006	34	2464621.	1665519.	1190549.	2521985.				
SMP	AD16013-008	35	2467901.	1700748.	1138848.	2535541.				
SMP	AD16026-001	36	2473626.	1638577.	1331443.	* 2518918.				
SMP	AD16022-001	37	2470928.	1710081.	1033252.	2533321.				
SMP	RINSE	38	2451968.	1738215.	1016316.	2500820.				
CCV	CCV V-322627	39	2426978.	1677200.	980554.1	2479686.				
CCB	CCB V-322624	40	2421662.	1698998.	971152.8	2456459.				
SMP	AD16014-001	41	2492528.	1634444.	1339353.	* 2535604.				
SMP	RINSE	42	2456541.	1753304.	1025739.	2532286.				
CCV	CCV V-322627	43	2379203.	1635454.	954626.4	2422525.				
CCB	CCB V-322624	44	2406434.	1691767.	965399.8	2467606.				
MB	MB 82714	45	2421401.	1694010.	983486.5	2478351.				
LCS	LCS 82714	46	2452353.	1661140.	990353.1	2476530.				
MR	LCS MR 82714	47	2413576.	1643304.	969340.0	2463356.				
SMP	AD16030-002	48	2494459.	1772372.	1358974.	* 2565027.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 1

MR	AD16030-002	49	2423935.	1843931.	1347916.	*	2499650.
SD	AD16030-002	50	2391439.	1634704.	961574.7		2446157.
MS	AD16030-002	51	2461524.	1851251.	1400403.	*	2515648.
MSD	AD16030-002	52	2031037.	1548483.	1260800.		2079075.
PS	AD16030-002	53	2444172.	1736328.	1397229.	*	2518361.
SMP	RINSE	54	2317330.	1586199.	864692.5		2364533.
CCV	CCV V-322627	55	2297169.	1551374.	847389.5		2352384.
CCB	CCB V-322624	56	2297732.	1549919.	832637.2		2335309.
SMP	AD16030-001	57	2507735.	1565626.	1404717.	*	2550633.
SMP	AD16030-004	58	2536103.	1636682.	1544123.	*	2580484.
SMP	AD16030-006	59	2437069.	1640058.	1300972.		2495555.
SMP	AD16030-010	60	2509575.	1668189.	1357559.	*	2558365.
SMP	AD16030-011	61	2682149.	1597478.	1690879.	*	2682858.
SMP	AD16030-012	62	2614801.	1668896.	1826429.	*	2679776.
SMP	AD16030-013	63	2452236.	1613145.	1338292.	*	2502833.
SMP	AD16030-014	64	2417651.	1586066.	1330109.	*	2466966.
SMP	AD16030-015	65	2454712.	1644781.	1291094.		2521967.
SMP	RINSE	66	2232194.	1585758.	891006.5		2297913.
CCV	CCV V-322627	67	2332018.	1628397.	918464.8		2375486.
CCB	CCB V-322624	68	2331239.	1618458.	910765.3		2392006.
SMP	AD16030-016	69	2396701.	1596721.	1251793.		2453540.
SMP	RINSE	70	2361349.	1647764.	904813.5		2413953.
CCV	CCV V-322627	71	2335282.	1599822.	912395.6		2389265.
CCB	CCB V-322624	72	2032438.	1392722.	782527.9		2093138.

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S030620AN Sample ID: CalBlk V-322617 Sample Date 03/06/20 Sample Time: 20:18

IS ID:	Area	Area Limit		
Ho-2	898839.17	629187.419	-	1168490.921
In-2	273542.21	191479.547	-	355604.873
Sc-2	44867.53	31407.271	-	58327.789
Tb-2	902979.48	632085.636	-	1173873.324

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-322617	2	898839.1	273542.2	44867.53	902979.4				
SMP	RINSE	1	905288.2	274561.6	44169.13	902239.9				
CAL	CalStd1 V-32261	3	903670.6	277613.6	45235.03	908315.9				
CAL	CalStd2 V-32261	4	914959.2	282941.0	45825.28	916135.3				
CAL	CalStd3 V-32262	5	920873.9	281343.3	45706.15	923308.1				
CAL	CalStd4 V-32262	6	907759.8	273423.6	45261.65	908779.9				
CAL	CalStd5 V-32262	7	838263.5	250729.7	41070.70	840088.9				
ICV	ICV V-322623	8	906855.5	271744.4	44062.16	905492.4				
LLICV	LLICV V-322628	9	898736.0	274641.2	44192.63	904841.2				
ICB	ICB V-322624	10	850721.8	259471.8	42167.34	852767.0				
ICSA	ICSA V-322625	11	852558.2	244203.2	41496.36	852948.3				
SMP	RINSE	12	905562.1	275768.4	43044.20	909709.9				
LRS	LRS V-322626	13	871520.7	255223.8	42861.73	871674.0				
SMP	RINSE	14	912301.1	279260.8	44688.26	915647.5				
CCV	CCV V-322627	15	911262.3	276567.7	43223.69	913946.9				
CCB	CCB V-322624	16	912018.6	277561.7	43624.36	913131.2				
MB	MB 82712	17	902947.1	275860.2	43196.93	909421.8				
LCS	LCS 82712	18	927615.4	273802.7	44202.51	928905.1				
MR	LCS MR 82712	19	935151.1	276545.1	44569.03	930200.0				
SMP	AD16013-007	20	976908.8	293730.6	53406.34	980346.4				
MR	AD16013-007	21	964643.8	278214.7	51119.89	962871.0				
SD	AD16013-007	22	961348.3	293519.0	47396.94	964431.5				
MS	AD16013-007	23	929287.2	273441.7	48642.29	928418.5				
MSD	AD16013-007	24	944453.5	275132.0	49154.69	942926.3				
PS	AD16013-007	25	980968.8	296891.4	53287.01	972505.0				
SMP	RINSE	26	947921.3	289022.0	46631.61	949473.3				
CCV	CCV V-322627	27	934712.1	278747.9	43987.53	929891.6				
CCB	CCB V-322624	28	935250.3	282844.1	43949.74	933666.0				
SMP	AD16013-001	29	955978.8	280390.6	53118.58	950368.3				
SMP	AD16013-002	30	999729.8	285893.6	55664.93	989338.2				
SMP	AD16013-003	31	972453.0	284667.2	52260.65	971994.1				
SMP	AD16013-004	32	996738.4	292056.2	50440.23	996190.8				
SMP	AD16013-005	33	988009.9	290040.5	52959.49	994235.2				
SMP	AD16013-006	34	989854.2	289422.8	51996.76	989318.2				
SMP	AD16013-008	35	993763.2	291841.1	51721.66	996231.9				
SMP	AD16026-001	36	990381.7	280158.3	57483.84	984848.3				
SMP	AD16022-001	37	994541.3	294826.9	47553.87	990703.1				
SMP	RINSE	38	979340.6	302062.4	46060.26	986952.4				
CCV	CCV V-322627	39	971746.8	288441.7	44151.32	969766.5				
CCB	CCB V-322624	40	960679.0	292165.6	44370.58	967053.2				
SMP	AD16014-001	41	999091.4	283832.1	58280.42	996360.9				
SMP	RINSE	42	986647.7	303033.8	47248.90	993766.9				
CCV	CCV V-322627	43	977802.2	289133.2	44497.67	974028.1				
CCB	CCB V-322624	44	963470.5	291422.6	44904.12	965910.2				
MB	MB 82714	45	976496.3	292363.7	45059.12	978082.6				
LCS	LCS 82714	46	950822.8	278489.0	42984.46	952333.5				
MR	LCS MR 82714	47	970308.3	282957.0	43577.68	972140.7				
SMP	AD16030-002	48	1001044.	308070.5	58604.67	* 1000693.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

MR	AD16030-002	49	1006479.	340407.8	59526.49	*	1003742.
SD	AD16030-002	50	953063.0	281165.4	43871.66		953277.8
MS	AD16030-002	51	1001005.	332144.4	60152.89	*	994228.1
MSD	AD16030-002	52	985502.9	330883.3	61881.98	*	985335.8
PS	AD16030-002	53	1011216.	316393.0	60556.52	*	1008728.
SMP	RINSE	54	901394.2	265926.4	38847.56		904905.8
CCV	CCV V-322627	55	913957.1	262981.4	39260.62		905338.3
CCB	CCB V-322624	56	894788.7	260617.3	37749.76		890583.1
SMP	AD16030-001	57	1015307.	274515.4	64149.33	*	1004690.
SMP	AD16030-004	58	1012370.	280840.4	66139.39	*	1004906.
SMP	AD16030-006	59	953602.9	275182.8	54904.81		956437.2
SMP	AD16030-010	60	843155.6	237754.3	51765.87		841939.3
SMP	AD16030-011	61	1076409.	276486.1	74616.06	*	1045591.
SMP	AD16030-012	62	1058438.	286982.5	79993.23	*	1056794.
SMP	AD16030-013	63	976208.4	273211.0	58007.59		966757.2
SMP	AD16030-014	64	970812.6	278134.5	57911.42		965086.3
SMP	AD16030-015	65	985379.1	283665.0	54804.67		982352.5
SMP	RINSE	66	932828.0	280686.7	41813.76		934243.2
CCV	CCV V-322627	67	939650.5	276603.3	41830.59		941499.8
CCB	CCB V-322624	68	927695.0	278639.1	41617.98		929172.2
SMP	AD16030-016	69	957916.0	272427.8	53160.05		954864.5
SMP	RINSE	70	935609.4	278330.2	41367.46		936685.4
CCV	CCV V-322627	71	931485.9	275571.9	41645.66		931838.7
CCB	CCB V-322624	72	925591.0	277770.7	41748.22		927564.3

* Indicates Internal Standard Area outside of limits

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD16022-001
Matrix Soil
Client SampleID: TB-102-1 COMP

Project Number: 0030402
Received Date: 3/4/2020
Collect Date: 3/3/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.31	03/06/20	03/06/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0030402**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD16022-001	TB-102-1 COMP	Soil	1	77	Percent			03/05/20	03/04/20	03/03/20
AD16022-002	TB-102-1 GRAB	Soil/Terracore	1	79	Percent			03/05/20	03/04/20	03/03/20

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10352

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD16026-002	89	89.04364	Percent	1.33	12.10	10.91	03/05/20	BEENA	1	5
Sample	AD16022-001	77	77.07930	Percent	1.32	11.66	9.30	03/05/20	BEENA		
Sample	AD16022-002	79	79.28922	Percent	1.33	9.49	7.80	03/05/20	BEENA		
Sample	AD16026-001	89	89.10761	Percent	1.33	8.95	8.12	03/05/20	BEENA		
Sample	AD16026-002	88	88.15166	Percent	1.32	11.87	10.62	03/05/20	BEENA		
Sample	AD16030-001	91	90.98117	Percent	1.33	11.42	10.51	03/05/20	BEENA		
Sample	AD16030-002	81	81.43204	Percent	1.33	9.57	8.04	03/05/20	BEENA		
Sample	AD16030-003	82	81.87423	Percent	1.33	9.44	7.97	03/05/20	BEENA		
Sample	AD16030-004	90	89.59764	Percent	1.33	11.52	10.46	03/05/20	BEENA		
Sample	AD16030-005	95	94.84444	Percent	1.32	12.57	11.99	03/05/20	BEENA		
Sample	AD16030-006	91	91.08796	Percent	1.32	9.96	9.19	03/05/20	BEENA		
Sample	AD16030-007	91	90.56153	Percent	1.32	9.69	8.90	03/05/20	BEENA		
Sample	AD16030-008	93	92.83247	Percent	1.32	12.90	12.07	03/05/20	BEENA		
Sample	AD16030-009	91	91.07726	Percent	1.32	10.51	9.69	03/05/20	BEENA		
Sample	AD16030-010	93	93.17023	Percent	1.33	11.14	10.46	03/05/20	BEENA		
Sample	AD16030-011	88	87.60081	Percent	1.32	11.24	10.01	03/05/20	BEENA		
Sample	AD16030-012	79	78.75108	Percent	1.32	12.85	10.40	03/05/20	BEENA		
Sample	AD16030-013	84	84.23138	Percent	1.32	13.94	11.95	03/05/20	BEENA		
Sample	AD16030-014	81	80.84379	Percent	1.32	10.09	8.41	03/05/20	BEENA		
Sample	AD16030-015	86	86.22087	Percent	1.33	11.20	9.84	03/05/20	BEENA		
Sample	AD16030-016	80	79.60467	Percent	1.33	12.46	10.19	03/05/20	BEENA		

* - Indicates Failed Rpd Criteria

MS/MSD/DUP Recovery

0030402 0169

Prep Batch: S-2349 Sample ID: AD16064-002
Method: EPA 9012B Matrix: Soil

Qc Type: DUP

Analyte	Limits Rpd	Dil	DUP Conc	Sample Conc	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	35	1	0	0	NA		20200306121	15	03/06/20 12:46	20200306121	14	03/06/20 12:44

Qc Type: MS

Analyte	Amt	Limits Recov	Dil	MS Conc	Sample Conc	% Rec	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.4168	0	104		20200306121	16	03/06/20 12:49	20200306121	14	03/06/20 12:44

Qc Type: MSD

Analyte	Amt	Limits Recov	Rpd	Dil	MSD Conc	Sample Conc	% Rec	Rpd	Flag	MS/MSD/DUP Batch	RunID	Analysis Date	Non Spike Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3494	0	87	17.6		20200306121	17	03/06/20 12:51	20200306121	14	03/06/20 12:44

LCS Recoveries

BatchRunID/RunID:====>			202003061214-12												
QcBatchID:====>			LCSS-2349												
Date/Time:====>			03/06/20 12:39												
Analytical Method:====>			EPA 9012B												
Matrix:====>			Soil		Soil		Soil		Soil		Soil				
	EPA 9012B														
Analyte	**Amt**	**Limits Amt**	**Limits**	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	80-120		104											

Calibration Summary:

0030402 0171

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200306121	9	ICV	107	0.4	85-115
Cyanide	20200306121	21	CCV	106	0.4	85-115
Cyanide	20200306121	33	CCV	108	0.4	85-115
Cyanide	20200306121	41	CCV	107	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 3/6/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200306121	3/6/20 12:37	MBS-2349	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200306121	3/6/20 12:35	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200306121	3/6/20 13:02	CCB	22	Cyanide	ND	0.020
20200306121	3/6/20 13:30	CCB	34	Cyanide	ND	0.020
20200306121	3/6/20 13:46	CCB	42	Cyanide	ND	0.020

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke Report Of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0032010

Sample ID: TB-106-01 COMP
Lab#: AD16322-001
Matrix: Soil

Collection Date: 3/19/2020
Receipt Date: 3/20/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		78

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0064	ND
Aldrin	1	mg/kg	0.0064	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0064	ND
delta-BHC	1	mg/kg	0.0064	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0064	ND
Endosulfan II	1	mg/kg	0.0064	ND
Endosulfan Sulfate	1	mg/kg	0.0064	ND
Endrin	1	mg/kg	0.0064	ND
Endrin Aldehyde	1	mg/kg	0.0064	ND
Endrin Ketone	1	mg/kg	0.0064	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0064	ND
Heptachlor Epoxide	1	mg/kg	0.0064	ND
Methoxychlor	1	mg/kg	0.0064	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0064	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	92.87	100	37	141	93	
TCMX-Surrogate	84.44	100	37	141	84	
DCB-Surrogate	84.27	100	33	146	84	
DCB-Surrogate	89.54	100	33	146	90	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Sample ID: TB-106-01 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-001 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	106.30	100	37	141	106	
TCMX-Surrogate	99.68	100	37	141	100	
DCB-Surrogate	77.13	100	34	146	77	
DCB-Surrogate	72.60	100	34	146	73	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND
2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	**1**	**mg/kg**	**0.043**	**0.048**
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND

N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.63	50	58	148	99	
Phenol-d5	83.31	100	49	129	83	
Nitrobenzene-d5	37.22	50	52	129	74	
2-Fluorophenol	76.87	100	43	128	77	
2-Fluorobiphenyl	38.58	50	58	125	77	
2,4,6-Tribromophenol	81.25	100	54	145	81	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.27**	**4.7JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.21**	**0.14JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.4**	**0.13J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**5J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**1400**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	1	mg/kg	6.4	ND
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.4	ND
Iron	**1**	**mg/kg**	**260**	**3600**
Lead	1	mg/kg	6.4	ND
Magnesium	**1**	**mg/kg**	**640**	**840**
Manganese	**1**	**mg/kg**	**13**	**28**
Nickel	1	mg/kg	6.4	ND
Potassium	1	mg/kg	640	ND
Sodium	**1**	**mg/kg**	**320**	**2900**
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**0.70**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.51	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.51	ND

Sample ID: TB-106-01 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-002 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**73**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.89	mg/kg	0.0024	ND
1,1,2,2-Tetrachloroethane	0.89	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.89	mg/kg	0.0024	ND
1,1,2-Trichloroethane	0.89	mg/kg	0.0024	ND
1,1-Dichloroethane	0.89	mg/kg	0.0024	ND
1,1-Dichloroethene	0.89	mg/kg	0.0024	ND
1,2,3-Trichlorobenzene	0.89	mg/kg	0.0024	ND
1,2,4-Trichlorobenzene	0.89	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	0.89	mg/kg	0.0024	ND
1,2-Dibromoethane	0.89	mg/kg	0.0012	ND
1,2-Dichlorobenzene	0.89	mg/kg	0.0024	ND
1,2-Dichloroethane	0.89	mg/kg	0.0019	ND
1,2-Dichloropropane	0.89	mg/kg	0.0024	ND
1,3-Dichlorobenzene	0.89	mg/kg	0.0024	ND
1,4-Dichlorobenzene	0.89	mg/kg	0.0024	ND
1,4-Dioxane	0.89	mg/kg	0.12	ND
2-Butanone	0.89	mg/kg	0.0024	ND
2-Hexanone	0.89	mg/kg	0.0024	ND
4-Methyl-2-pentanone	0.89	mg/kg	0.0024	ND
Acetone	0.89	mg/kg	0.012	ND
Benzene	0.89	mg/kg	0.0012	ND
Bromochloromethane	0.89	mg/kg	0.0024	ND
Bromodichloromethane	0.89	mg/kg	0.0024	ND
Bromoform	0.89	mg/kg	0.0024	ND
Bromomethane	0.89	mg/kg	0.0024	ND
Carbon disulfide	**0.89**	**mg/kg**	**0.0024**	**0.0042**
Carbon tetrachloride	0.89	mg/kg	0.0024	ND
Chlorobenzene	0.89	mg/kg	0.0024	ND
Chloroethane	0.89	mg/kg	0.0024	ND
Chloroform	0.89	mg/kg	0.0024	ND
Chloromethane	0.89	mg/kg	0.0024	ND
cis-1,2-Dichloroethene	0.89	mg/kg	0.0024	ND
cis-1,3-Dichloropropene	0.89	mg/kg	0.0024	ND
Cyclohexane	0.89	mg/kg	0.0024	ND
Dibromochloromethane	0.89	mg/kg	0.0024	ND
Dichlorodifluoromethane	0.89	mg/kg	0.0024	ND
Ethylbenzene	0.89	mg/kg	0.0012	ND
Isopropylbenzene	0.89	mg/kg	0.0012	ND
m&p-Xylenes	0.89	mg/kg	0.0012	ND
Methyl Acetate	0.89	mg/kg	0.0024	ND
Methylcyclohexane	0.89	mg/kg	0.0024	ND
Methylene chloride	**0.89**	**mg/kg**	**0.0024**	**0.0028**
Methyl-t-butyl ether	0.89	mg/kg	0.0012	ND
o-Xylene	0.89	mg/kg	0.0012	ND
Styrene	0.89	mg/kg	0.0024	ND
Tetrachloroethene	0.89	mg/kg	0.0024	ND
Toluene	**0.89**	**mg/kg**	**0.0012**	**0.0015**
trans-1,2-Dichloroethene	0.89	mg/kg	0.0024	ND
trans-1,3-Dichloropropene	0.89	mg/kg	0.0024	ND
Trichloroethene	0.89	mg/kg	0.0024	ND
Trichlorofluoromethane	0.89	mg/kg	0.0024	ND
Vinyl chloride	0.89	mg/kg	0.0024	ND
Xylenes (Total)	0.89	mg/kg	0.0012	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.15	30	68	122	90	
Dibromofluoromethane	32.11	30	63	140	107	
Bromofluorobenzene	30.35	30	64	129	101	
1,2-Dichloroethane-d4	33.08	30	63	143	110	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-01 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-002 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.89	mg/kg	NA	ND
TotalVolatileTic	0.89	mg/kg	NA	ND

Sample ID: TB-106-02 COMP | **Collection Date: 3/19/2020**
Lab#: AD16322-003 | **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**77**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0065	ND
Aldrin	1	mg/kg	0.0065	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0065	ND
delta-BHC	1	mg/kg	0.0065	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0065	ND
Endosulfan II	1	mg/kg	0.0065	ND
Endosulfan Sulfate	1	mg/kg	0.0065	ND
Endrin	1	mg/kg	0.0065	ND
Endrin Aldehyde	1	mg/kg	0.0065	ND
Endrin Ketone	1	mg/kg	0.0065	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0065	ND
Heptachlor Epoxide	1	mg/kg	0.0065	ND
Methoxychlor	1	mg/kg	0.0065	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0065	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	87.49	100	37	141	87	
TCMX-Surrogate	76.53	100	37	141	77	
DCB-Surrogate	84.97	100	33	146	85	
DCB-Surrogate	91.34	100	33	146	91	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	152.68	100	37	141	153	S8
TCMX-Surrogate	134.58	100	37	141	135	
DCB-Surrogate	113.80	100	34	146	114	
DCB-Surrogate	106.77	100	34	146	107	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND

Sample ID: TB-106-02 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-003 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Sample ID: TB-106-02 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-003 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	42.78	50	58	148	86	
Phenol-d5	64.72	100	49	129	65	
Nitrobenzene-d5	28.79	50	52	129	58	
2-Fluorophenol	64.25	100	43	128	64	
2-Fluorobiphenyl	32.29	50	58	125	65	
2,4,6-Tribromophenol	74.15	100	54	145	74	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.2JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.11JB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.38**	**0.36J**
Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]b	**1**	**mg/kg**	**6.91**	**0.13J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.8J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**790**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.5**	**11**
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.5	ND
Iron	**1**	**mg/kg**	**260**	**2000**
Lead	1	mg/kg	6.5	ND
Magnesium	1	mg/kg	650	ND
Manganese	**1**	**mg/kg**	**13**	**39**
Nickel	1	mg/kg	6.5	ND
Potassium	1	mg/kg	650	ND
Sodium	**1**	**mg/kg**	**320**	**1800**
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**0.96**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID: TB-106-02 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-004 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**35**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.62	mg/kg	0.0093	ND
1,1,2,2-Tetrachloroethane	1.62	mg/kg	0.0093	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.62	mg/kg	0.0093	ND
1,1,2-Trichloroethane	1.62	mg/kg	0.0093	ND
1,1-Dichloroethane	1.62	mg/kg	0.0093	ND
1,1-Dichloroethene	1.62	mg/kg	0.0093	ND
1,2,3-Trichlorobenzene	1.62	mg/kg	0.0093	ND
1,2,4-Trichlorobenzene	1.62	mg/kg	0.0093	ND
1,2-Dibromo-3-chloropropane	1.62	mg/kg	0.0093	ND
1,2-Dibromoethane	1.62	mg/kg	0.0046	ND
1,2-Dichlorobenzene	1.62	mg/kg	0.0093	ND
1,2-Dichloroethane	1.62	mg/kg	0.0072	ND
1,2-Dichloropropane	1.62	mg/kg	0.0093	ND
1,3-Dichlorobenzene	1.62	mg/kg	0.0093	ND
1,4-Dichlorobenzene	1.62	mg/kg	0.0093	ND
1,4-Dioxane	1.62	mg/kg	0.46	ND
2-Butanone	1.62	mg/kg	0.0093	ND
2-Hexanone	1.62	mg/kg	0.0093	ND
4-Methyl-2-pentanone	1.62	mg/kg	0.0093	ND
Acetone	**1.62**	**mg/kg**	**0.046**	**0.28**
Benzene	1.62	mg/kg	0.0046	ND
Bromochloromethane	1.62	mg/kg	0.0093	ND
Bromodichloromethane	1.62	mg/kg	0.0093	ND
Bromoform	1.62	mg/kg	0.0093	ND
Bromomethane	1.62	mg/kg	0.0093	ND
Carbon disulfide	**1.62**	**mg/kg**	**0.0093**	**0.023**
Carbon tetrachloride	1.62	mg/kg	0.0093	ND
Chlorobenzene	1.62	mg/kg	0.0093	ND
Chloroethane	1.62	mg/kg	0.0093	ND
Chloroform	1.62	mg/kg	0.0093	ND
Chloromethane	1.62	mg/kg	0.0093	ND
cis-1,2-Dichloroethene	1.62	mg/kg	0.0093	ND
cis-1,3-Dichloropropene	1.62	mg/kg	0.0093	ND
Cyclohexane	1.62	mg/kg	0.0093	ND
Dibromochloromethane	1.62	mg/kg	0.0093	ND
Dichlorodifluoromethane	1.62	mg/kg	0.0093	ND
Ethylbenzene	1.62	mg/kg	0.0046	ND
Isopropylbenzene	1.62	mg/kg	0.0046	ND
m&p-Xylenes	1.62	mg/kg	0.0046	ND
Methyl Acetate	**1.62**	**mg/kg**	**0.0093**	**0.057**
Methylcyclohexane	1.62	mg/kg	0.0093	ND
Methylene chloride	**1.62**	**mg/kg**	**0.0093**	**0.017**
Methyl-t-butyl ether	1.62	mg/kg	0.0046	ND
o-Xylene	1.62	mg/kg	0.0046	ND
Styrene	1.62	mg/kg	0.0093	ND
Tetrachloroethene	1.62	mg/kg	0.0093	ND
Toluene	**1.62**	**mg/kg**	**0.0046**	**0.0081**
trans-1,2-Dichloroethene	1.62	mg/kg	0.0093	ND
trans-1,3-Dichloropropene	1.62	mg/kg	0.0093	ND
Trichloroethene	1.62	mg/kg	0.0093	ND
Trichlorofluoromethane	1.62	mg/kg	0.0093	ND
Vinyl chloride	1.62	mg/kg	0.0093	ND
Xylenes (Total)	1.62	mg/kg	0.0046	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.24	30	68	122	91	
Dibromofluoromethane	31.58	30	63	140	105	
Bromofluorobenzene	31.09	30	64	129	104	
1,2-Dichloroethane-d4	33.48	30	63	143	112	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-02 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-004 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

unknown	1.62	mg/kg	4.32	0.032J
Acetic acid, ethyl ester	1.62	mg/kg	4.46	0.015J
TotalVolatileTic	1.62	mg/kg	NA	0.047J

Sample ID: TB-106-03 COMP | **Collection Date: 3/19/2020**
Lab#: AD16322-005 | **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**74**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0068	ND
Aldrin	1	mg/kg	0.0068	ND
Alpha-BHC	1	mg/kg	0.0014	ND
beta-BHC	1	mg/kg	0.0014	ND
Chlordane (Total)	1	mg/kg	0.0068	ND
delta-BHC	1	mg/kg	0.0068	ND
Dieldrin	1	mg/kg	0.0014	ND
Endosulfan I	1	mg/kg	0.0068	ND
Endosulfan II	1	mg/kg	0.0068	ND
Endosulfan Sulfate	1	mg/kg	0.0068	ND
Endrin	1	mg/kg	0.0068	ND
Endrin Aldehyde	1	mg/kg	0.0068	ND
Endrin Ketone	1	mg/kg	0.0068	ND
gamma-BHC	1	mg/kg	0.0014	ND
Heptachlor	1	mg/kg	0.0068	ND
Heptachlor Epoxide	1	mg/kg	0.0068	ND
Methoxychlor	1	mg/kg	0.0068	ND
p,p'-DDD	1	mg/kg	0.0034	ND
p,p'-DDE	1	mg/kg	0.0034	ND
p,p'-DDT	1	mg/kg	0.0034	ND
Toxaphene	1	mg/kg	0.034	ND
y-Chlordane	1	mg/kg	0.0068	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	92.97	100	37	141	93	
TCMX-Surrogate	82.16	100	37	141	82	
DCB-Surrogate	84.50	100	33	146	84	
DCB-Surrogate	90.07	100	33	146	90	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.034	ND
Aroclor-1016	1	mg/kg	0.034	ND
Aroclor-1221	1	mg/kg	0.034	ND
Aroclor-1232	1	mg/kg	0.034	ND
Aroclor-1242	1	mg/kg	0.034	ND
Aroclor-1248	1	mg/kg	0.034	ND
Aroclor-1254	1	mg/kg	0.034	ND
Aroclor-1260	1	mg/kg	0.034	ND
Aroclor-1262	1	mg/kg	0.034	ND
Aroclor-1268	1	mg/kg	0.034	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	100.91	100	37	141	101	
TCMX-Surrogate	96.65	100	37	141	97	
DCB-Surrogate	74.63	100	34	146	75	
DCB-Surrogate	73.30	100	34	146	73	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.045	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.045	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.045	ND
2,4,5-Trichlorophenol	1	mg/kg	0.045	ND

Sample ID: TB-106-03 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-005 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.045	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.23	ND
2,4-Dinitrotoluene	1	mg/kg	0.045	ND
2,6-Dinitrotoluene	1	mg/kg	0.045	ND
2-Chloronaphthalene	1	mg/kg	0.045	ND
2-Chlorophenol	1	mg/kg	0.045	ND
2-Methylnaphthalene	1	mg/kg	0.045	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.045	ND
2-Nitrophenol	1	mg/kg	0.045	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.045	ND
3-Nitroaniline	1	mg/kg	0.045	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.23	ND
4-Bromophenyl-phenylether	1	mg/kg	0.045	ND
4-Chloro-3-methylphenol	1	mg/kg	0.045	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.045	ND
4-Nitroaniline	1	mg/kg	0.045	ND
4-Nitrophenol	1	mg/kg	0.045	ND
Acenaphthene	1	mg/kg	0.045	ND
Acenaphthylene	1	mg/kg	0.045	ND
Acetophenone	1	mg/kg	0.045	ND
Anthracene	1	mg/kg	0.045	ND
Atrazine	1	mg/kg	0.045	ND
Benzaldehyde	1	mg/kg	0.045	ND
Benzo[a]anthracene	1	mg/kg	0.045	ND
Benzo[a]pyrene	1	mg/kg	0.045	ND
Benzo[b]fluoranthene	1	mg/kg	0.045	ND
Benzo[g,h,i]perylene	1	mg/kg	0.045	ND
Benzo[k]fluoranthene	1	mg/kg	0.045	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.045	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.045	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.045	ND
Butylbenzylphthalate	1	mg/kg	0.045	ND
Caprolactam	1	mg/kg	0.045	ND
Carbazole	1	mg/kg	0.045	ND
Chrysene	1	mg/kg	0.045	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.045	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.045	ND
Dimethylphthalate	1	mg/kg	0.045	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.045	ND
Fluoranthene	1	mg/kg	0.045	ND
Fluorene	1	mg/kg	0.045	ND
Hexachlorobenzene	1	mg/kg	0.045	ND
Hexachlorobutadiene	1	mg/kg	0.045	ND
Hexachlorocyclopentadiene	1	mg/kg	0.045	ND
Hexachloroethane	1	mg/kg	0.045	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.045	ND
Isophorone	1	mg/kg	0.045	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.045	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.045	ND
Pentachlorophenol	1	mg/kg	0.23	ND
Phenanthrene	1	mg/kg	0.045	ND
Phenol	1	mg/kg	0.045	ND
Pyrene	1	mg/kg	0.045	ND

Sample ID: TB-106-03 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-005 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	47.33	50	58	148	95	
Phenol-d5	80.91	100	49	129	81	
Nitrobenzene-d5	34.71	50	52	129	69	
2-Fluorophenol	80.65	100	43	128	81	
2-Fluorobiphenyl	38.87	50	58	125	78	
2,4,6-Tribromophenol	83.75	100	54	145	84	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.7JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.10JB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.38**	**0.16J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**270**	**1100**
Barium	1	mg/kg	14	ND
Calcium	1	mg/kg	1400	ND
Chromium	1	mg/kg	6.8	ND
Cobalt	1	mg/kg	3.4	ND
Copper	1	mg/kg	6.8	ND
Iron	**1**	**mg/kg**	**270**	**2800**
Lead	1	mg/kg	6.8	ND
Magnesium	**1**	**mg/kg**	**680**	**880**
Manganese	**1**	**mg/kg**	**14**	**43**
Nickel	1	mg/kg	6.8	ND
Potassium	1	mg/kg	680	ND
Sodium	**1**	**mg/kg**	**340**	**3200**
Vanadium	1	mg/kg	14	ND
Zinc	1	mg/kg	14	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.27**	**1.3**
Beryllium	1	mg/kg	0.27	ND
Cadmium	1	mg/kg	0.54	ND
Selenium	1	mg/kg	2.7	ND
Silver	1	mg/kg	0.27	ND
Thallium	1	mg/kg	0.54	ND

Sample ID: TB-106-03 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-006 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**72**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.11	mg/kg	0.0031	ND
1,1,2,2-Tetrachloroethane	1.11	mg/kg	0.0031	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.11	mg/kg	0.0031	ND
1,1,2-Trichloroethane	1.11	mg/kg	0.0031	ND
1,1-Dichloroethane	1.11	mg/kg	0.0031	ND
1,1-Dichloroethene	1.11	mg/kg	0.0031	ND
1,2,3-Trichlorobenzene	1.11	mg/kg	0.0031	ND
1,2,4-Trichlorobenzene	1.11	mg/kg	0.0031	ND
1,2-Dibromo-3-chloropropane	1.11	mg/kg	0.0031	ND
1,2-Dibromoethane	1.11	mg/kg	0.0015	ND
1,2-Dichlorobenzene	1.11	mg/kg	0.0031	ND
1,2-Dichloroethane	1.11	mg/kg	0.0024	ND
1,2-Dichloropropane	1.11	mg/kg	0.0031	ND
1,3-Dichlorobenzene	1.11	mg/kg	0.0031	ND
1,4-Dichlorobenzene	1.11	mg/kg	0.0031	ND
1,4-Dioxane	1.11	mg/kg	0.15	ND
2-Butanone	1.11	mg/kg	0.0031	ND
2-Hexanone	1.11	mg/kg	0.0031	ND
4-Methyl-2-pentanone	1.11	mg/kg	0.0031	ND
Acetone	**1.11**	**mg/kg**	**0.015**	**0.070**
Benzene	1.11	mg/kg	0.0015	ND
Bromochloromethane	1.11	mg/kg	0.0031	ND
Bromodichloromethane	1.11	mg/kg	0.0031	ND
Bromoform	1.11	mg/kg	0.0031	ND
Bromomethane	1.11	mg/kg	0.0031	ND
Carbon disulfide	1.11	mg/kg	0.0031	ND
Carbon tetrachloride	1.11	mg/kg	0.0031	ND
Chlorobenzene	1.11	mg/kg	0.0031	ND
Chloroethane	1.11	mg/kg	0.0031	ND
Chloroform	1.11	mg/kg	0.0031	ND
Chloromethane	1.11	mg/kg	0.0031	ND
cis-1,2-Dichloroethene	1.11	mg/kg	0.0031	ND
cis-1,3-Dichloropropene	1.11	mg/kg	0.0031	ND
Cyclohexane	1.11	mg/kg	0.0031	ND
Dibromochloromethane	1.11	mg/kg	0.0031	ND
Dichlorodifluoromethane	1.11	mg/kg	0.0031	ND
Ethylbenzene	1.11	mg/kg	0.0015	ND
Isopropylbenzene	1.11	mg/kg	0.0015	ND
m&p-Xylenes	1.11	mg/kg	0.0015	ND
Methyl Acetate	1.11	mg/kg	0.0031	ND
Methylcyclohexane	1.11	mg/kg	0.0031	ND
Methylene chloride	**1.11**	**mg/kg**	**0.0031**	**0.0042**
Methyl-t-butyl ether	1.11	mg/kg	0.0015	ND
o-Xylene	1.11	mg/kg	0.0015	ND
Styrene	1.11	mg/kg	0.0031	ND
Tetrachloroethene	1.11	mg/kg	0.0031	ND
Toluene	**1.11**	**mg/kg**	**0.0015**	**0.0050**
trans-1,2-Dichloroethene	1.11	mg/kg	0.0031	ND
trans-1,3-Dichloropropene	1.11	mg/kg	0.0031	ND
Trichloroethene	1.11	mg/kg	0.0031	ND
Trichlorofluoromethane	1.11	mg/kg	0.0031	ND
Vinyl chloride	1.11	mg/kg	0.0031	ND
Xylenes (Total)	1.11	mg/kg	0.0015	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.34	30	68	122	91	
Dibromofluoromethane	31.74	30	63	140	106	
Bromofluorobenzene	30.89	30	64	129	103	
1,2-Dichloroethane-d4	33.57	30	63	143	112	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-03 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-006 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	1.11	mg/kg	NA	ND
TotalVolatileTic	1.11	mg/kg	NA	ND

Sample ID: TB-106-04 COMP | **Collection Date: 3/19/2020**
Lab#: AD16322-007 | **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**65**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.37	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0077	ND
Aldrin	1	mg/kg	0.0077	ND
Alpha-BHC	1	mg/kg	0.0015	ND
beta-BHC	1	mg/kg	0.0015	ND
Chlordane (Total)	1	mg/kg	0.0077	ND
delta-BHC	1	mg/kg	0.0077	ND
Dieldrin	1	mg/kg	0.0015	ND
Endosulfan I	1	mg/kg	0.0077	ND
Endosulfan II	1	mg/kg	0.0077	ND
Endosulfan Sulfate	1	mg/kg	0.0077	ND
Endrin	1	mg/kg	0.0077	ND
Endrin Aldehyde	1	mg/kg	0.0077	ND
Endrin Ketone	1	mg/kg	0.0077	ND
gamma-BHC	1	mg/kg	0.0015	ND
Heptachlor	1	mg/kg	0.0077	ND
Heptachlor Epoxide	1	mg/kg	0.0077	ND
Methoxychlor	1	mg/kg	0.0077	ND
p,p'-DDD	1	mg/kg	0.0038	ND
p,p'-DDE	1	mg/kg	0.0038	ND
p,p'-DDT	1	mg/kg	0.0038	ND
Toxaphene	1	mg/kg	0.038	ND
y-Chlordane	1	mg/kg	0.0077	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	81.02	100	37	141	81	
TCMX-Surrogate	92.79	100	37	141	93	
DCB-Surrogate	81.61	100	33	146	82	
DCB-Surrogate	89.68	100	33	146	90	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.038	ND
Aroclor-1016	1	mg/kg	0.038	ND
Aroclor-1221	1	mg/kg	0.038	ND
Aroclor-1232	1	mg/kg	0.038	ND
Aroclor-1242	1	mg/kg	0.038	ND
Aroclor-1248	1	mg/kg	0.038	ND
Aroclor-1254	1	mg/kg	0.038	ND
Aroclor-1260	1	mg/kg	0.038	ND
Aroclor-1262	1	mg/kg	0.038	ND
Aroclor-1268	1	mg/kg	0.038	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	128.16	100	37	141	128	
TCMX-Surrogate	120.71	100	37	141	121	
DCB-Surrogate	93.63	100	34	146	94	
DCB-Surrogate	90.37	100	34	146	90	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.051	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.051	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.051	ND
2,4,5-Trichlorophenol	1	mg/kg	0.051	ND

Sample ID: TB-106-04 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-007 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.051	ND
2,4-Dichlorophenol	1	mg/kg	0.013	ND
2,4-Dimethylphenol	1	mg/kg	0.013	ND
2,4-Dinitrophenol	1	mg/kg	0.26	ND
2,4-Dinitrotoluene	1	mg/kg	0.051	ND
2,6-Dinitrotoluene	1	mg/kg	0.051	ND
2-Chloronaphthalene	1	mg/kg	0.051	ND
2-Chlorophenol	1	mg/kg	0.051	ND
2-Methylnaphthalene	1	mg/kg	0.051	ND
2-Methylphenol	1	mg/kg	0.013	ND
2-Nitroaniline	1	mg/kg	0.051	ND
2-Nitrophenol	1	mg/kg	0.051	ND
3&4-Methylphenol	1	mg/kg	0.013	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.051	ND
3-Nitroaniline	1	mg/kg	0.051	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.26	ND
4-Bromophenyl-phenylether	1	mg/kg	0.051	ND
4-Chloro-3-methylphenol	1	mg/kg	0.051	ND
4-Chloroaniline	1	mg/kg	0.013	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.051	ND
4-Nitroaniline	1	mg/kg	0.051	ND
4-Nitrophenol	1	mg/kg	0.051	ND
Acenaphthene	1	mg/kg	0.051	ND
Acenaphthylene	1	mg/kg	0.051	ND
Acetophenone	1	mg/kg	0.051	ND
Anthracene	1	mg/kg	0.051	ND
Atrazine	1	mg/kg	0.051	ND
Benzaldehyde	1	mg/kg	0.051	ND
Benzo[a]anthracene	1	mg/kg	0.051	ND
Benzo[a]pyrene	1	mg/kg	0.051	ND
Benzo[b]fluoranthene	1	mg/kg	0.051	ND
Benzo[g,h,i]perylene	1	mg/kg	0.051	ND
Benzo[k]fluoranthene	1	mg/kg	0.051	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.051	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.013	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.051	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.051	ND
Butylbenzylphthalate	1	mg/kg	0.051	ND
Caprolactam	1	mg/kg	0.051	ND
Carbazole	1	mg/kg	0.051	ND
Chrysene	1	mg/kg	0.051	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.051	ND
Dibenzofuran	1	mg/kg	0.013	ND
Diethylphthalate	1	mg/kg	0.051	ND
Dimethylphthalate	1	mg/kg	0.051	ND
Di-n-butylphthalate	1	mg/kg	0.013	ND
Di-n-octylphthalate	1	mg/kg	0.051	ND
Fluoranthene	1	mg/kg	0.051	ND
Fluorene	1	mg/kg	0.051	ND
Hexachlorobenzene	1	mg/kg	0.051	ND
Hexachlorobutadiene	1	mg/kg	0.051	ND
Hexachlorocyclopentadiene	1	mg/kg	0.051	ND
Hexachloroethane	1	mg/kg	0.051	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.051	ND
Isophorone	1	mg/kg	0.051	ND
Naphthalene	1	mg/kg	0.013	ND
Nitrobenzene	1	mg/kg	0.051	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.013	ND
N-Nitrosodiphenylamine	1	mg/kg	0.051	ND
Pentachlorophenol	1	mg/kg	0.26	ND
Phenanthrene	1	mg/kg	0.051	ND
Phenol	1	mg/kg	0.051	ND
Pyrene	1	mg/kg	0.051	ND

Sample ID: TB-106-04 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-007 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	51.03	50	58	148	102	
Phenol-d5	83.01	100	49	129	83	
Nitrobenzene-d5	38.36	50	52	129	77	
2-Fluorophenol	84.25	100	43	128	84	
2-Fluorobiphenyl	42.34	50	58	125	85	
2,4,6-Tribromophenol	91.19	100	54	145	91	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Pentadecane	**1**	**mg/kg**	**13.39**	**0.13J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**4.4JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.17JB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.38**	**0.16J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**310**	**7200**
Barium	1	mg/kg	15	ND
Calcium	1	mg/kg	1500	ND
Chromium	**1**	**mg/kg**	**7.7**	**23**
Cobalt	**1**	**mg/kg**	**3.8**	**5.4**
Copper	1	mg/kg	7.7	ND
Iron	**1**	**mg/kg**	**310**	**15000**
Lead	1	mg/kg	7.7	ND
Magnesium	**1**	**mg/kg**	**770**	**3300**
Manganese	**1**	**mg/kg**	**15**	**130**
Nickel	**1**	**mg/kg**	**7.7**	**13**
Potassium	**1**	**mg/kg**	**770**	**1400**
Sodium	**1**	**mg/kg**	**380**	**5300**
Vanadium	**1**	**mg/kg**	**15**	**26**
Zinc	**1**	**mg/kg**	**15**	**39**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.2	ND
Arsenic	**1**	**mg/kg**	**0.31**	**5.5**
Beryllium	**1**	**mg/kg**	**0.31**	**0.39**
Cadmium	1	mg/kg	0.62	ND
Selenium	1	mg/kg	3.1	ND
Silver	1	mg/kg	0.31	ND
Thallium	1	mg/kg	0.62	ND

Sample ID: TB-106-04 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-008 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**74**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.874	mg/kg	0.0024	ND
1,1,2,2-Tetrachloroethane	0.874	mg/kg	0.0024	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.874	mg/kg	0.0024	ND
1,1,2-Trichloroethane	0.874	mg/kg	0.0024	ND
1,1-Dichloroethane	0.874	mg/kg	0.0024	ND
1,1-Dichloroethene	0.874	mg/kg	0.0024	ND
1,2,3-Trichlorobenzene	0.874	mg/kg	0.0024	ND
1,2,4-Trichlorobenzene	0.874	mg/kg	0.0024	ND
1,2-Dibromo-3-chloropropane	0.874	mg/kg	0.0024	ND
1,2-Dibromoethane	0.874	mg/kg	0.0012	ND
1,2-Dichlorobenzene	0.874	mg/kg	0.0024	ND
1,2-Dichloroethane	0.874	mg/kg	0.0018	ND
1,2-Dichloropropane	0.874	mg/kg	0.0024	ND
1,3-Dichlorobenzene	0.874	mg/kg	0.0024	ND
1,4-Dichlorobenzene	0.874	mg/kg	0.0024	ND
1,4-Dioxane	0.874	mg/kg	0.12	ND
2-Butanone	0.874	mg/kg	0.0024	ND
2-Hexanone	0.874	mg/kg	0.0024	ND
4-Methyl-2-pentanone	0.874	mg/kg	0.0024	ND
Acetone	**0.874**	**mg/kg**	**0.012**	**0.055**
Benzene	0.874	mg/kg	0.0012	ND
Bromochloromethane	0.874	mg/kg	0.0024	ND
Bromodichloromethane	0.874	mg/kg	0.0024	ND
Bromoform	0.874	mg/kg	0.0024	ND
Bromomethane	0.874	mg/kg	0.0024	ND
Carbon disulfide	**0.874**	**mg/kg**	**0.0024**	**0.0096**
Carbon tetrachloride	0.874	mg/kg	0.0024	ND
Chlorobenzene	0.874	mg/kg	0.0024	ND
Chloroethane	0.874	mg/kg	0.0024	ND
Chloroform	0.874	mg/kg	0.0024	ND
Chloromethane	0.874	mg/kg	0.0024	ND
cis-1,2-Dichloroethene	0.874	mg/kg	0.0024	ND
cis-1,3-Dichloropropene	0.874	mg/kg	0.0024	ND
Cyclohexane	0.874	mg/kg	0.0024	ND
Dibromochloromethane	0.874	mg/kg	0.0024	ND
Dichlorodifluoromethane	0.874	mg/kg	0.0024	ND
Ethylbenzene	0.874	mg/kg	0.0012	ND
Isopropylbenzene	0.874	mg/kg	0.0012	ND
m&p-Xylenes	0.874	mg/kg	0.0012	ND
Methyl Acetate	0.874	mg/kg	0.0024	ND
Methylcyclohexane	0.874	mg/kg	0.0024	ND
Methylene chloride	**0.874**	**mg/kg**	**0.0024**	**0.0027**
Methyl-t-butyl ether	0.874	mg/kg	0.0012	ND
o-Xylene	0.874	mg/kg	0.0012	ND
Styrene	0.874	mg/kg	0.0024	ND
Tetrachloroethene	0.874	mg/kg	0.0024	ND
Toluene	**0.874**	**mg/kg**	**0.0012**	**0.0036**
trans-1,2-Dichloroethene	0.874	mg/kg	0.0024	ND
trans-1,3-Dichloropropene	0.874	mg/kg	0.0024	ND
Trichloroethene	0.874	mg/kg	0.0024	ND
Trichlorofluoromethane	0.874	mg/kg	0.0024	ND
Vinyl chloride	0.874	mg/kg	0.0024	ND
Xylenes (Total)	0.874	mg/kg	0.0012	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.04	30	68	122	90	
Dibromofluoromethane	32.25	30	63	140	108	
Bromofluorobenzene	30.19	30	64	129	101	
1,2-Dichloroethane-d4	32.31	30	63	143	108	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-04 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-008 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

Decane	0.874	mg/kg	7.57	0.0045J
TotalVolatileTic	0.874	mg/kg	NA	0.0045J

Sample ID: TB-106-05 COMP | **Collection Date: 3/19/2020**
Lab#: AD16322-009 | **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**57**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.42	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.15	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0088	ND
Aldrin	1	mg/kg	0.0088	ND
Alpha-BHC	1	mg/kg	0.0018	ND
beta-BHC	1	mg/kg	0.0018	ND
Chlordane (Total)	1	mg/kg	0.0088	ND
delta-BHC	1	mg/kg	0.0088	ND
Dieldrin	1	mg/kg	0.0018	ND
Endosulfan I	1	mg/kg	0.0088	ND
Endosulfan II	1	mg/kg	0.0088	ND
Endosulfan Sulfate	1	mg/kg	0.0088	ND
Endrin	1	mg/kg	0.0088	ND
Endrin Aldehyde	1	mg/kg	0.0088	ND
Endrin Ketone	1	mg/kg	0.0088	ND
gamma-BHC	1	mg/kg	0.0018	ND
Heptachlor	1	mg/kg	0.0088	ND
Heptachlor Epoxide	1	mg/kg	0.0088	ND
Methoxychlor	1	mg/kg	0.0088	ND
p,p'-DDD	1	mg/kg	0.0044	ND
p,p'-DDE	1	mg/kg	0.0044	ND
p,p'-DDT	1	mg/kg	0.0044	ND
Toxaphene	1	mg/kg	0.044	ND
y-Chlordane	1	mg/kg	0.0088	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	84.26	100	37	141	84	
TCMX-Surrogate	92.75	100	37	141	93	
DCB-Surrogate	85.61	100	33	146	86	
DCB-Surrogate	94.29	100	33	146	94	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.044	ND
Aroclor-1016	1	mg/kg	0.044	ND
Aroclor-1221	1	mg/kg	0.044	ND
Aroclor-1232	1	mg/kg	0.044	ND
Aroclor-1242	1	mg/kg	0.044	ND
Aroclor-1248	1	mg/kg	0.044	ND
Aroclor-1254	1	mg/kg	0.044	ND
Aroclor-1260	1	mg/kg	0.044	ND
Aroclor-1262	1	mg/kg	0.044	ND
Aroclor-1268	1	mg/kg	0.044	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	96.78	100	37	141	97	
TCMX-Surrogate	92.45	100	37	141	92	
DCB-Surrogate	70.15	100	34	146	70	
DCB-Surrogate	69.16	100	34	146	69	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.058	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.058	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.058	ND
2,4,5-Trichlorophenol	1	mg/kg	0.058	ND

Sample ID: TB-106-05 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-009 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.058	ND
2,4-Dichlorophenol	1	mg/kg	0.015	ND
2,4-Dimethylphenol	1	mg/kg	0.015	ND
2,4-Dinitrophenol	1	mg/kg	0.29	ND
2,4-Dinitrotoluene	1	mg/kg	0.058	ND
2,6-Dinitrotoluene	1	mg/kg	0.058	ND
2-Chloronaphthalene	1	mg/kg	0.058	ND
2-Chlorophenol	1	mg/kg	0.058	ND
2-Methylnaphthalene	1	mg/kg	0.058	ND
2-Methylphenol	1	mg/kg	0.015	ND
2-Nitroaniline	1	mg/kg	0.058	ND
2-Nitrophenol	1	mg/kg	0.058	ND
3&4-Methylphenol	1	mg/kg	0.015	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.058	ND
3-Nitroaniline	1	mg/kg	0.058	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.29	ND
4-Bromophenyl-phenylether	1	mg/kg	0.058	ND
4-Chloro-3-methylphenol	1	mg/kg	0.058	ND
4-Chloroaniline	1	mg/kg	0.015	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.058	ND
4-Nitroaniline	1	mg/kg	0.058	ND
4-Nitrophenol	1	mg/kg	0.058	ND
Acenaphthene	1	mg/kg	0.058	ND
Acenaphthylene	1	mg/kg	0.058	ND
Acetophenone	1	mg/kg	0.058	ND
Anthracene	1	mg/kg	0.058	ND
Atrazine	1	mg/kg	0.058	ND
Benzaldehyde	1	mg/kg	0.058	ND
Benzo[a]anthracene	1	mg/kg	0.058	ND
Benzo[a]pyrene	1	mg/kg	0.058	ND
Benzo[b]fluoranthene	1	mg/kg	0.058	ND
Benzo[g,h,i]perylene	1	mg/kg	0.058	ND
Benzo[k]fluoranthene	1	mg/kg	0.058	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.058	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.015	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.058	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.058	ND
Butylbenzylphthalate	1	mg/kg	0.058	ND
Caprolactam	1	mg/kg	0.058	ND
Carbazole	1	mg/kg	0.058	ND
Chrysene	1	mg/kg	0.058	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.058	ND
Dibenzofuran	1	mg/kg	0.015	ND
Diethylphthalate	1	mg/kg	0.058	ND
Dimethylphthalate	1	mg/kg	0.058	ND
Di-n-butylphthalate	1	mg/kg	0.015	ND
Di-n-octylphthalate	1	mg/kg	0.058	ND
Fluoranthene	1	mg/kg	0.058	ND
Fluorene	1	mg/kg	0.058	ND
Hexachlorobenzene	1	mg/kg	0.058	ND
Hexachlorobutadiene	1	mg/kg	0.058	ND
Hexachlorocyclopentadiene	1	mg/kg	0.058	ND
Hexachloroethane	1	mg/kg	0.058	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.058	ND
Isophorone	1	mg/kg	0.058	ND
Naphthalene	1	mg/kg	0.015	ND
Nitrobenzene	1	mg/kg	0.058	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.015	ND
N-Nitrosodiphenylamine	1	mg/kg	0.058	ND
Pentachlorophenol	1	mg/kg	0.29	ND
Phenanthrene	1	mg/kg	0.058	ND
Phenol	1	mg/kg	0.058	ND
Pyrene	1	mg/kg	0.058	ND

Sample ID: TB-106-05 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-009 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	48.57	50	58	148	97	
Phenol-d5	85.10	100	49	129	85	
Nitrobenzene-d5	35.29	50	52	129	71	
2-Fluorophenol	82.95	100	43	128	83	
2-Fluorobiphenyl	41.27	50	58	125	83	
2,4,6-Tribromophenol	88.07	100	54	145	88	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**5.1JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.20JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**5.3J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**350**	**13000**
Barium	**1**	**mg/kg**	**18**	**25**
Calcium	1	mg/kg	1800	ND
Chromium	**1**	**mg/kg**	**8.8**	**34**
Cobalt	**1**	**mg/kg**	**4.4**	**9.0**
Copper	1	mg/kg	8.8	ND
Iron	**1**	**mg/kg**	**350**	**35000**
Lead	**1**	**mg/kg**	**8.8**	**11**
Magnesium	**1**	**mg/kg**	**880**	**6600**
Manganese	**1**	**mg/kg**	**18**	**330**
Nickel	**1**	**mg/kg**	**8.8**	**24**
Potassium	**1**	**mg/kg**	**880**	**4000**
Sodium	**1**	**mg/kg**	**440**	**7000**
Vanadium	**1**	**mg/kg**	**18**	**35**
Zinc	**1**	**mg/kg**	**18**	**69**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.4	ND
Arsenic	**1**	**mg/kg**	**0.35**	**10**
Beryllium	**1**	**mg/kg**	**0.35**	**0.73**
Cadmium	1	mg/kg	0.70	ND
Selenium	1	mg/kg	3.5	ND
Silver	1	mg/kg	0.35	ND
Thallium	1	mg/kg	0.70	ND

Sample ID: TB-106-05 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-010 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**54**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.893	mg/kg	0.0033	ND
1,1,2,2-Tetrachloroethane	0.893	mg/kg	0.0033	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.893	mg/kg	0.0033	ND
1,1,2-Trichloroethane	0.893	mg/kg	0.0033	ND
1,1-Dichloroethane	0.893	mg/kg	0.0033	ND
1,1-Dichloroethene	0.893	mg/kg	0.0033	ND
1,2,3-Trichlorobenzene	0.893	mg/kg	0.0033	ND
1,2,4-Trichlorobenzene	0.893	mg/kg	0.0033	ND
1,2-Dibromo-3-chloropropane	0.893	mg/kg	0.0033	ND
1,2-Dibromoethane	0.893	mg/kg	0.0017	ND
1,2-Dichlorobenzene	0.893	mg/kg	0.0033	ND
1,2-Dichloroethane	0.893	mg/kg	0.0026	ND
1,2-Dichloropropane	0.893	mg/kg	0.0033	ND
1,3-Dichlorobenzene	0.893	mg/kg	0.0033	ND
1,4-Dichlorobenzene	0.893	mg/kg	0.0033	ND
1,4-Dioxane	0.893	mg/kg	0.17	ND
2-Butanone	**0.893**	**mg/kg**	**0.0033**	**0.019**
2-Hexanone	0.893	mg/kg	0.0033	ND
4-Methyl-2-pentanone	0.893	mg/kg	0.0033	ND
Acetone	**0.893**	**mg/kg**	**0.017**	**0.11**
Benzene	0.893	mg/kg	0.0017	ND
Bromochloromethane	0.893	mg/kg	0.0033	ND
Bromodichloromethane	0.893	mg/kg	0.0033	ND
Bromoform	0.893	mg/kg	0.0033	ND
Bromomethane	0.893	mg/kg	0.0033	ND
Carbon disulfide	**0.893**	**mg/kg**	**0.0033**	**0.0042**
Carbon tetrachloride	0.893	mg/kg	0.0033	ND
Chlorobenzene	0.893	mg/kg	0.0033	ND
Chloroethane	0.893	mg/kg	0.0033	ND
Chloroform	0.893	mg/kg	0.0033	ND
Chloromethane	0.893	mg/kg	0.0033	ND
cis-1,2-Dichloroethene	0.893	mg/kg	0.0033	ND
cis-1,3-Dichloropropene	0.893	mg/kg	0.0033	ND
Cyclohexane	0.893	mg/kg	0.0033	ND
Dibromochloromethane	0.893	mg/kg	0.0033	ND
Dichlorodifluoromethane	0.893	mg/kg	0.0033	ND
Ethylbenzene	0.893	mg/kg	0.0017	ND
Isopropylbenzene	0.893	mg/kg	0.0017	ND
m&p-Xylenes	0.893	mg/kg	0.0017	ND
Methyl Acetate	0.893	mg/kg	0.0033	ND
Methylcyclohexane	0.893	mg/kg	0.0033	ND
Methylene chloride	0.893	mg/kg	0.0033	ND
Methyl-t-butyl ether	0.893	mg/kg	0.0017	ND
o-Xylene	0.893	mg/kg	0.0017	ND
Styrene	0.893	mg/kg	0.0033	ND
Tetrachloroethene	0.893	mg/kg	0.0033	ND
Toluene	0.893	mg/kg	0.0017	ND
trans-1,2-Dichloroethene	0.893	mg/kg	0.0033	ND
trans-1,3-Dichloropropene	0.893	mg/kg	0.0033	ND
Trichloroethene	0.893	mg/kg	0.0033	ND
Trichlorofluoromethane	0.893	mg/kg	0.0033	ND
Vinyl chloride	0.893	mg/kg	0.0033	ND
Xylenes (Total)	0.893	mg/kg	0.0017	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.63	30	68	122	92	
Dibromofluoromethane	32.11	30	63	140	107	
Bromofluorobenzene	31.29	30	64	129	104	
1,2-Dichloroethane-d4	34.50	30	63	143	115	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-05 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-010 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.893	mg/kg	NA	ND
TotalVolatileTic	0.893	mg/kg	NA	ND

Sample ID: TB-106-06 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-011 **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**79**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0063	ND
Aldrin	1	mg/kg	0.0063	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0063	ND
delta-BHC	1	mg/kg	0.0063	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0063	ND
Endosulfan II	1	mg/kg	0.0063	ND
Endosulfan Sulfate	1	mg/kg	0.0063	ND
Endrin	1	mg/kg	0.0063	ND
Endrin Aldehyde	1	mg/kg	0.0063	ND
Endrin Ketone	1	mg/kg	0.0063	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0063	ND
Heptachlor Epoxide	1	mg/kg	0.0063	ND
Methoxychlor	1	mg/kg	0.0063	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0063	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	90.41	100	37	141	90	
TCMX-Surrogate	94.51	100	37	141	95	
DCB-Surrogate	88.73	100	33	146	89	
DCB-Surrogate	91.98	100	33	146	92	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	100.37	100	37	141	100	
TCMX-Surrogate	97.22	100	37	141	97	
DCB-Surrogate	77.06	100	34	146	77	
DCB-Surrogate	76.42	100	34	146	76	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.042	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.042	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.042	ND
2,4,5-Trichlorophenol	1	mg/kg	0.042	ND

Sample ID: TB-106-06 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-011 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.042	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.042	ND
2,6-Dinitrotoluene	1	mg/kg	0.042	ND
2-Chloronaphthalene	1	mg/kg	0.042	ND
2-Chlorophenol	1	mg/kg	0.042	ND
2-Methylnaphthalene	1	mg/kg	0.042	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.042	ND
2-Nitrophenol	1	mg/kg	0.042	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.042	ND
3-Nitroaniline	1	mg/kg	0.042	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.042	ND
4-Chloro-3-methylphenol	1	mg/kg	0.042	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.042	ND
4-Nitroaniline	1	mg/kg	0.042	ND
4-Nitrophenol	1	mg/kg	0.042	ND
Acenaphthene	1	mg/kg	0.042	ND
Acenaphthylene	1	mg/kg	0.042	ND
Acetophenone	1	mg/kg	0.042	ND
Anthracene	1	mg/kg	0.042	ND
Atrazine	1	mg/kg	0.042	ND
Benzaldehyde	1	mg/kg	0.042	ND
Benzo[a]anthracene	1	mg/kg	0.042	ND
Benzo[a]pyrene	1	mg/kg	0.042	ND
Benzo[b]fluoranthene	1	mg/kg	0.042	ND
Benzo[g,h,i]perylene	1	mg/kg	0.042	ND
Benzo[k]fluoranthene	1	mg/kg	0.042	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.042	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.042	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.042	ND
Butylbenzylphthalate	1	mg/kg	0.042	ND
Caprolactam	1	mg/kg	0.042	ND
Carbazole	1	mg/kg	0.042	ND
Chrysene	1	mg/kg	0.042	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.042	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.042	ND
Dimethylphthalate	1	mg/kg	0.042	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.042	ND
Fluoranthene	1	mg/kg	0.042	ND
Fluorene	1	mg/kg	0.042	ND
Hexachlorobenzene	1	mg/kg	0.042	ND
Hexachlorobutadiene	1	mg/kg	0.042	ND
Hexachlorocyclopentadiene	1	mg/kg	0.042	ND
Hexachloroethane	1	mg/kg	0.042	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.042	ND
Isophorone	1	mg/kg	0.042	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.042	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.042	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.042	ND
Phenol	1	mg/kg	0.042	ND
Pyrene	1	mg/kg	0.042	ND

Sample ID: TB-106-06 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-011 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	42.67	50	58	148	85	
Phenol-d5	71.48	100	49	129	71	
Nitrobenzene-d5	27.90	50	52	129	56	
2-Fluorophenol	66.14	100	43	128	66	
2-Fluorobiphenyl	32.65	50	58	125	65	
2,4,6-Tribromophenol	72.93	100	54	145	73	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.28**	**2.9JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.11JB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.38**	**0.43J**
Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]b	**1**	**mg/kg**	**6.91**	**0.13J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.6J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**990**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	1	mg/kg	6.3	ND
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.3	ND
Iron	**1**	**mg/kg**	**250**	**4400**
Lead	1	mg/kg	6.3	ND
Magnesium	1	mg/kg	630	ND
Manganese	**1**	**mg/kg**	**13**	**24**
Nickel	1	mg/kg	6.3	ND
Potassium	1	mg/kg	630	ND
Sodium	**1**	**mg/kg**	**320**	**490**
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.25**	**0.73**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.51	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.51	ND

Sample ID: TB-106-06 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-012 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**75**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.998	mg/kg	0.0027	ND
1,1,2,2-Tetrachloroethane	0.998	mg/kg	0.0027	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.998	mg/kg	0.0027	ND
1,1,2-Trichloroethane	0.998	mg/kg	0.0027	ND
1,1-Dichloroethane	0.998	mg/kg	0.0027	ND
1,1-Dichloroethene	0.998	mg/kg	0.0027	ND
1,2,3-Trichlorobenzene	0.998	mg/kg	0.0027	ND
1,2,4-Trichlorobenzene	0.998	mg/kg	0.0027	ND
1,2-Dibromo-3-chloropropane	0.998	mg/kg	0.0027	ND
1,2-Dibromoethane	0.998	mg/kg	0.0013	ND
1,2-Dichlorobenzene	0.998	mg/kg	0.0027	ND
1,2-Dichloroethane	0.998	mg/kg	0.0021	ND
1,2-Dichloropropane	0.998	mg/kg	0.0027	ND
1,3-Dichlorobenzene	0.998	mg/kg	0.0027	ND
1,4-Dichlorobenzene	0.998	mg/kg	0.0027	ND
1,4-Dioxane	0.998	mg/kg	0.13	ND
2-Butanone	0.998	mg/kg	0.0027	ND
2-Hexanone	0.998	mg/kg	0.0027	ND
4-Methyl-2-pentanone	0.998	mg/kg	0.0027	ND
Acetone	**0.998**	**mg/kg**	**0.013**	**0.089**
Benzene	0.998	mg/kg	0.0013	ND
Bromochloromethane	0.998	mg/kg	0.0027	ND
Bromodichloromethane	0.998	mg/kg	0.0027	ND
Bromoform	0.998	mg/kg	0.0027	ND
Bromomethane	0.998	mg/kg	0.0027	ND
Carbon disulfide	0.998	mg/kg	0.0027	ND
Carbon tetrachloride	0.998	mg/kg	0.0027	ND
Chlorobenzene	0.998	mg/kg	0.0027	ND
Chloroethane	0.998	mg/kg	0.0027	ND
Chloroform	0.998	mg/kg	0.0027	ND
Chloromethane	0.998	mg/kg	0.0027	ND
cis-1,2-Dichloroethene	0.998	mg/kg	0.0027	ND
cis-1,3-Dichloropropene	0.998	mg/kg	0.0027	ND
Cyclohexane	0.998	mg/kg	0.0027	ND
Dibromochloromethane	0.998	mg/kg	0.0027	ND
Dichlorodifluoromethane	0.998	mg/kg	0.0027	ND
Ethylbenzene	0.998	mg/kg	0.0013	ND
Isopropylbenzene	0.998	mg/kg	0.0013	ND
m&p-Xylenes	0.998	mg/kg	0.0013	ND
Methyl Acetate	0.998	mg/kg	0.0027	ND
Methylcyclohexane	0.998	mg/kg	0.0027	ND
Methylene chloride	**0.998**	**mg/kg**	**0.0027**	**0.0082**
Methyl-t-butyl ether	0.998	mg/kg	0.0013	ND
o-Xylene	0.998	mg/kg	0.0013	ND
Styrene	0.998	mg/kg	0.0027	ND
Tetrachloroethene	0.998	mg/kg	0.0027	ND
Toluene	**0.998**	**mg/kg**	**0.0013**	**0.010**
trans-1,2-Dichloroethene	0.998	mg/kg	0.0027	ND
trans-1,3-Dichloropropene	0.998	mg/kg	0.0027	ND
Trichloroethene	0.998	mg/kg	0.0027	ND
Trichlorofluoromethane	0.998	mg/kg	0.0027	ND
Vinyl chloride	0.998	mg/kg	0.0027	ND
Xylenes (Total)	0.998	mg/kg	0.0013	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.59	30	68	122	92	
Dibromofluoromethane	31.97	30	63	140	107	
Bromofluorobenzene	30.56	30	64	129	102	
1,2-Dichloroethane-d4	32.90	30	63	143	110	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-06 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-012 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

1-Pentene	0.998	mg/kg	3.51	0.034J
Nonane	0.998	mg/kg	6.85	0.0053J
Cyclohexane, propyl-	0.998	mg/kg	7.23	0.0059J
Decane	0.998	mg/kg	7.57	0.0084J
TotalVolatileTic	0.998	mg/kg	NA	0.054J

Sample ID: TB-106-07 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-013 **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**77**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0065	ND
Aldrin	1	mg/kg	0.0065	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0065	ND
delta-BHC	1	mg/kg	0.0065	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0065	ND
Endosulfan II	1	mg/kg	0.0065	ND
Endosulfan Sulfate	1	mg/kg	0.0065	ND
Endrin	1	mg/kg	0.0065	ND
Endrin Aldehyde	1	mg/kg	0.0065	ND
Endrin Ketone	1	mg/kg	0.0065	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0065	ND
Heptachlor Epoxide	1	mg/kg	0.0065	ND
Methoxychlor	1	mg/kg	0.0065	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0065	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	84.25	100	37	141	84	
TCMX-Surrogate	87.98	100	37	141	88	
DCB-Surrogate	89.54	100	33	146	90	
DCB-Surrogate	92.84	100	33	146	93	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	115.82	100	37	141	116	
TCMX-Surrogate	104.34	100	37	141	104	
DCB-Surrogate	89.30	100	34	146	89	
DCB-Surrogate	88.62	100	34	146	89	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND

Sample ID: TB-106-07 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-013 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Sample ID: TB-106-07 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-013 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	52.68	50	58	148	105	
Phenol-d5	79.56	100	49	129	80	
Nitrobenzene-d5	30.28	50	52	129	61	
2-Fluorophenol	68.66	100	43	128	69	
2-Fluorobiphenyl	37.43	50	58	125	75	
2,4,6-Tribromophenol	92.13	100	54	145	92	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.3JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.13JB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.39**	**0.68J**
Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]b	**1**	**mg/kg**	**6.92**	**0.12J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.2J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**1700**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.5**	**8.4**
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.5	ND
Iron	**1**	**mg/kg**	**260**	**4000**
Lead	1	mg/kg	6.5	ND
Magnesium	1	mg/kg	650	ND
Manganese	**1**	**mg/kg**	**13**	**45**
Nickel	1	mg/kg	6.5	ND
Potassium	1	mg/kg	650	ND
Sodium	**1**	**mg/kg**	**320**	**550**
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**0.61**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID: TB-106-07 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-014 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**79**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.765	mg/kg	0.0019	ND
1,1,2,2-Tetrachloroethane	0.765	mg/kg	0.0019	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.765	mg/kg	0.0019	ND
1,1,2-Trichloroethane	0.765	mg/kg	0.0019	ND
1,1-Dichloroethane	0.765	mg/kg	0.0019	ND
1,1-Dichloroethene	0.765	mg/kg	0.0019	ND
1,2,3-Trichlorobenzene	0.765	mg/kg	0.0019	ND
1,2,4-Trichlorobenzene	0.765	mg/kg	0.0019	ND
1,2-Dibromo-3-chloropropane	0.765	mg/kg	0.0019	ND
1,2-Dibromoethane	0.765	mg/kg	0.00097	ND
1,2-Dichlorobenzene	0.765	mg/kg	0.0019	ND
1,2-Dichloroethane	0.765	mg/kg	0.0015	ND
1,2-Dichloropropane	0.765	mg/kg	0.0019	ND
1,3-Dichlorobenzene	0.765	mg/kg	0.0019	ND
1,4-Dichlorobenzene	0.765	mg/kg	0.0019	ND
1,4-Dioxane	0.765	mg/kg	0.097	ND
2-Butanone	0.765	mg/kg	0.0019	ND
2-Hexanone	0.765	mg/kg	0.0019	ND
4-Methyl-2-pentanone	0.765	mg/kg	0.0019	ND
Acetone	0.765	mg/kg	0.0097	ND
Benzene	0.765	mg/kg	0.00097	ND
Bromochloromethane	0.765	mg/kg	0.0019	ND
Bromodichloromethane	0.765	mg/kg	0.0019	ND
Bromoform	0.765	mg/kg	0.0019	ND
Bromomethane	0.765	mg/kg	0.0019	ND
Carbon disulfide	0.765	mg/kg	0.0019	ND
Carbon tetrachloride	0.765	mg/kg	0.0019	ND
Chlorobenzene	0.765	mg/kg	0.0019	ND
Chloroethane	0.765	mg/kg	0.0019	ND
Chloroform	0.765	mg/kg	0.0019	ND
Chloromethane	0.765	mg/kg	0.0019	ND
cis-1,2-Dichloroethene	0.765	mg/kg	0.0019	ND
cis-1,3-Dichloropropene	0.765	mg/kg	0.0019	ND
Cyclohexane	0.765	mg/kg	0.0019	ND
Dibromochloromethane	0.765	mg/kg	0.0019	ND
Dichlorodifluoromethane	0.765	mg/kg	0.0019	ND
Ethylbenzene	0.765	mg/kg	0.00097	ND
Isopropylbenzene	0.765	mg/kg	0.00097	ND
m&p-Xylenes	0.765	mg/kg	0.00097	ND
Methyl Acetate	0.765	mg/kg	0.0019	ND
Methylcyclohexane	0.765	mg/kg	0.0019	ND
Methylene chloride	**0.765**	**mg/kg**	**0.0019**	**0.0027**
Methyl-t-butyl ether	0.765	mg/kg	0.00097	ND
o-Xylene	0.765	mg/kg	0.00097	ND
Styrene	0.765	mg/kg	0.0019	ND
Tetrachloroethene	0.765	mg/kg	0.0019	ND
Toluene	0.765	mg/kg	0.00097	ND
trans-1,2-Dichloroethene	0.765	mg/kg	0.0019	ND
trans-1,3-Dichloropropene	0.765	mg/kg	0.0019	ND
Trichloroethene	0.765	mg/kg	0.0019	ND
Trichlorofluoromethane	0.765	mg/kg	0.0019	ND
Vinyl chloride	0.765	mg/kg	0.0019	ND
Xylenes (Total)	0.765	mg/kg	0.00097	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.78	30	68	122	89	
Dibromofluoromethane	32.27	30	63	140	108	
Bromofluorobenzene	30.75	30	64	129	103	
1,2-Dichloroethane-d4	32.52	30	63	143	108	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-07 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-014 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.765	mg/kg	NA	ND
TotalVolatileTic	0.765	mg/kg	NA	ND

Sample ID: TB-106-08 COMP | **Collection Date: 3/19/2020**
Lab#: AD16322-015 | **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**75**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0067	ND
Aldrin	1	mg/kg	0.0067	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0067	ND
delta-BHC	1	mg/kg	0.0067	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0067	ND
Endosulfan II	1	mg/kg	0.0067	ND
Endosulfan Sulfate	1	mg/kg	0.0067	ND
Endrin	1	mg/kg	0.0067	ND
Endrin Aldehyde	1	mg/kg	0.0067	ND
Endrin Ketone	1	mg/kg	0.0067	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0067	ND
Heptachlor Epoxide	1	mg/kg	0.0067	ND
Methoxychlor	1	mg/kg	0.0067	ND
p,p'-DDD	1	mg/kg	0.0033	ND
p,p'-DDE	1	mg/kg	0.0033	ND
p,p'-DDT	1	mg/kg	0.0033	ND
Toxaphene	1	mg/kg	0.033	ND
y-Chlordane	1	mg/kg	0.0067	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	83.89	100	37	141	84	
TCMX-Surrogate	87.27	100	37	141	87	
DCB-Surrogate	88.06	100	33	146	88	
DCB-Surrogate	90.83	100	33	146	91	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.033	ND
Aroclor-1016	1	mg/kg	0.033	ND
Aroclor-1221	1	mg/kg	0.033	ND
Aroclor-1232	1	mg/kg	0.033	ND
Aroclor-1242	1	mg/kg	0.033	ND
Aroclor-1248	1	mg/kg	0.033	ND
Aroclor-1254	1	mg/kg	0.033	ND
Aroclor-1260	1	mg/kg	0.033	ND
Aroclor-1262	1	mg/kg	0.033	ND
Aroclor-1268	1	mg/kg	0.033	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	134.01	100	37	141	134	
TCMX-Surrogate	119.45	100	37	141	119	
DCB-Surrogate	100.19	100	34	146	100	
DCB-Surrogate	98.64	100	34	146	99	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.044	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.044	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.044	ND
2,4,5-Trichlorophenol	1	mg/kg	0.044	ND

Sample ID: TB-106-08 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-015 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.044	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.044	ND
2,6-Dinitrotoluene	1	mg/kg	0.044	ND
2-Chloronaphthalene	1	mg/kg	0.044	ND
2-Chlorophenol	1	mg/kg	0.044	ND
2-Methylnaphthalene	1	mg/kg	0.044	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.044	ND
2-Nitrophenol	1	mg/kg	0.044	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.044	ND
3-Nitroaniline	1	mg/kg	0.044	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.044	ND
4-Chloro-3-methylphenol	1	mg/kg	0.044	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.044	ND
4-Nitroaniline	1	mg/kg	0.044	ND
4-Nitrophenol	1	mg/kg	0.044	ND
Acenaphthene	1	mg/kg	0.044	ND
Acenaphthylene	1	mg/kg	0.044	ND
Acetophenone	1	mg/kg	0.044	ND
Anthracene	1	mg/kg	0.044	ND
Atrazine	1	mg/kg	0.044	ND
Benzaldehyde	1	mg/kg	0.044	ND
Benzo[a]anthracene	1	mg/kg	0.044	ND
Benzo[a]pyrene	1	mg/kg	0.044	ND
Benzo[b]fluoranthene	1	mg/kg	0.044	ND
Benzo[g,h,i]perylene	1	mg/kg	0.044	ND
Benzo[k]fluoranthene	1	mg/kg	0.044	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.044	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.044	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.044	ND
Butylbenzylphthalate	1	mg/kg	0.044	ND
Caprolactam	1	mg/kg	0.044	ND
Carbazole	1	mg/kg	0.044	ND
Chrysene	1	mg/kg	0.044	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.044	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.044	ND
Dimethylphthalate	1	mg/kg	0.044	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.044	ND
Fluoranthene	1	mg/kg	0.044	ND
Fluorene	1	mg/kg	0.044	ND
Hexachlorobenzene	1	mg/kg	0.044	ND
Hexachlorobutadiene	1	mg/kg	0.044	ND
Hexachlorocyclopentadiene	1	mg/kg	0.044	ND
Hexachloroethane	1	mg/kg	0.044	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.044	ND
Isophorone	1	mg/kg	0.044	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.044	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.044	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.044	ND
Phenol	1	mg/kg	0.044	ND
Pyrene	1	mg/kg	0.044	ND

Sample ID: TB-106-08 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-015 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	53.49	50	58	148	107	
Phenol-d5	81.80	100	49	129	82	
Nitrobenzene-d5	34.94	50	52	129	70	
2-Fluorophenol	77.27	100	43	128	77	
2-Fluorobiphenyl	41.08	50	58	125	82	
2,4,6-Tribromophenol	92.64	100	54	145	93	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.3JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.16JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.5J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**270**	**16000**
Barium	**1**	**mg/kg**	**13**	**46**
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.7**	**34**
Cobalt	**1**	**mg/kg**	**3.3**	**6.9**
Copper	**1**	**mg/kg**	**6.7**	**8.4**
Iron	**1**	**mg/kg**	**270**	**37000**
Lead	**1**	**mg/kg**	**6.7**	**10**
Magnesium	**1**	**mg/kg**	**670**	**4600**
Manganese	**1**	**mg/kg**	**13**	**220**
Nickel	**1**	**mg/kg**	**6.7**	**16**
Potassium	**1**	**mg/kg**	**670**	**2500**
Sodium	**1**	**mg/kg**	**330**	**470**
Vanadium	**1**	**mg/kg**	**13**	**31**
Zinc	**1**	**mg/kg**	**13**	**49**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.27**	**1.0**
Beryllium	**1**	**mg/kg**	**0.27**	**0.51**
Cadmium	1	mg/kg	0.53	ND
Selenium	1	mg/kg	2.7	ND
Silver	1	mg/kg	0.27	ND
Thallium	1	mg/kg	0.53	ND

Sample ID: TB-106-08 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-016 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**73**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.804	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.804	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.804	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.804	mg/kg	0.0022	ND
1,1-Dichloroethane	0.804	mg/kg	0.0022	ND
1,1-Dichloroethene	0.804	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.804	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.804	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.804	mg/kg	0.0022	ND
1,2-Dibromoethane	0.804	mg/kg	0.0011	ND
1,2-Dichlorobenzene	0.804	mg/kg	0.0022	ND
1,2-Dichloroethane	0.804	mg/kg	0.0017	ND
1,2-Dichloropropane	0.804	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.804	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.804	mg/kg	0.0022	ND
1,4-Dioxane	0.804	mg/kg	0.11	ND
2-Butanone	0.804	mg/kg	0.0022	ND
2-Hexanone	0.804	mg/kg	0.0022	ND
4-Methyl-2-pentanone	0.804	mg/kg	0.0022	ND
Acetone	0.804	mg/kg	0.011	ND
Benzene	0.804	mg/kg	0.0011	ND
Bromochloromethane	0.804	mg/kg	0.0022	ND
Bromodichloromethane	0.804	mg/kg	0.0022	ND
Bromoform	0.804	mg/kg	0.0022	ND
Bromomethane	0.804	mg/kg	0.0022	ND
Carbon disulfide	0.804	mg/kg	0.0022	ND
Carbon tetrachloride	0.804	mg/kg	0.0022	ND
Chlorobenzene	0.804	mg/kg	0.0022	ND
Chloroethane	0.804	mg/kg	0.0022	ND
Chloroform	0.804	mg/kg	0.0022	ND
Chloromethane	0.804	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.804	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.804	mg/kg	0.0022	ND
Cyclohexane	0.804	mg/kg	0.0022	ND
Dibromochloromethane	0.804	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.804	mg/kg	0.0022	ND
Ethylbenzene	0.804	mg/kg	0.0011	ND
Isopropylbenzene	0.804	mg/kg	0.0011	ND
m&p-Xylenes	0.804	mg/kg	0.0011	ND
Methyl Acetate	0.804	mg/kg	0.0022	ND
Methylcyclohexane	0.804	mg/kg	0.0022	ND
Methylene chloride	**0.804**	**mg/kg**	**0.0022**	**0.0041**
Methyl-t-butyl ether	0.804	mg/kg	0.0011	ND
o-Xylene	0.804	mg/kg	0.0011	ND
Styrene	0.804	mg/kg	0.0022	ND
Tetrachloroethene	0.804	mg/kg	0.0022	ND
Toluene	0.804	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.804	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.804	mg/kg	0.0022	ND
Trichloroethene	0.804	mg/kg	0.0022	ND
Trichlorofluoromethane	0.804	mg/kg	0.0022	ND
Vinyl chloride	0.804	mg/kg	0.0022	ND
Xylenes (Total)	0.804	mg/kg	0.0011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.52	30	68	122	92	
Dibromofluoromethane	31.96	30	63	140	107	
Bromofluorobenzene	34.07	30	64	129	114	
1,2-Dichloroethane-d4	32.77	30	63	143	109	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-08 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-016 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.804	mg/kg	NA	ND
TotalVolatileTic	0.804	mg/kg	NA	ND

Sample ID: TB-106-09 COMP | **Collection Date: 3/19/2020**
Lab#: AD16322-017 | **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**74**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0068	ND
Aldrin	1	mg/kg	0.0068	ND
Alpha-BHC	1	mg/kg	0.0014	ND
beta-BHC	1	mg/kg	0.0014	ND
Chlordane (Total)	1	mg/kg	0.0068	ND
delta-BHC	1	mg/kg	0.0068	ND
Dieldrin	1	mg/kg	0.0014	ND
Endosulfan I	1	mg/kg	0.0068	ND
Endosulfan II	1	mg/kg	0.0068	ND
Endosulfan Sulfate	1	mg/kg	0.0068	ND
Endrin	1	mg/kg	0.0068	ND
Endrin Aldehyde	1	mg/kg	0.0068	ND
Endrin Ketone	1	mg/kg	0.0068	ND
gamma-BHC	1	mg/kg	0.0014	ND
Heptachlor	1	mg/kg	0.0068	ND
Heptachlor Epoxide	1	mg/kg	0.0068	ND
Methoxychlor	1	mg/kg	0.0068	ND
p,p'-DDD	1	mg/kg	0.0034	ND
p,p'-DDE	1	mg/kg	0.0034	ND
p,p'-DDT	1	mg/kg	0.0034	ND
Toxaphene	1	mg/kg	0.034	ND
y-Chlordane	1	mg/kg	0.0068	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	86.26	100	37	141	86	
TCMX-Surrogate	80.44	100	37	141	80	
DCB-Surrogate	78.88	100	33	146	79	
DCB-Surrogate	85.53	100	33	146	86	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.034	ND
Aroclor-1016	1	mg/kg	0.034	ND
Aroclor-1221	1	mg/kg	0.034	ND
Aroclor-1232	1	mg/kg	0.034	ND
Aroclor-1242	1	mg/kg	0.034	ND
Aroclor-1248	1	mg/kg	0.034	ND
Aroclor-1254	1	mg/kg	0.034	ND
Aroclor-1260	1	mg/kg	0.034	ND
Aroclor-1262	1	mg/kg	0.034	ND
Aroclor-1268	1	mg/kg	0.034	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	108.52	100	37	141	109	
TCMX-Surrogate	104.89	100	37	141	105	
DCB-Surrogate	78.89	100	34	146	79	
DCB-Surrogate	79.55	100	34	146	80	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.045	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.045	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.045	ND
2,4,5-Trichlorophenol	1	mg/kg	0.045	ND

Sample ID: TB-106-09 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-017 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.045	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.23	ND
2,4-Dinitrotoluene	1	mg/kg	0.045	ND
2,6-Dinitrotoluene	1	mg/kg	0.045	ND
2-Chloronaphthalene	1	mg/kg	0.045	ND
2-Chlorophenol	1	mg/kg	0.045	ND
2-Methylnaphthalene	1	mg/kg	0.045	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.045	ND
2-Nitrophenol	1	mg/kg	0.045	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.045	ND
3-Nitroaniline	1	mg/kg	0.045	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.23	ND
4-Bromophenyl-phenylether	1	mg/kg	0.045	ND
4-Chloro-3-methylphenol	1	mg/kg	0.045	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.045	ND
4-Nitroaniline	1	mg/kg	0.045	ND
4-Nitrophenol	1	mg/kg	0.045	ND
Acenaphthene	1	mg/kg	0.045	ND
Acenaphthylene	1	mg/kg	0.045	ND
Acetophenone	1	mg/kg	0.045	ND
Anthracene	1	mg/kg	0.045	ND
Atrazine	1	mg/kg	0.045	ND
Benzaldehyde	1	mg/kg	0.045	ND
Benzo[a]anthracene	1	mg/kg	0.045	ND
Benzo[a]pyrene	1	mg/kg	0.045	ND
Benzo[b]fluoranthene	1	mg/kg	0.045	ND
Benzo[g,h,i]perylene	1	mg/kg	0.045	ND
Benzo[k]fluoranthene	1	mg/kg	0.045	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.045	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.045	ND
bis(2-Ethylhexyl)phthalate	**1**	**mg/kg**	**0.045**	**0.076**
Butylbenzylphthalate	1	mg/kg	0.045	ND
Caprolactam	1	mg/kg	0.045	ND
Carbazole	1	mg/kg	0.045	ND
Chrysene	1	mg/kg	0.045	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.045	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.045	ND
Dimethylphthalate	1	mg/kg	0.045	ND
Di-n-butylphthalate	**1**	**mg/kg**	**0.011**	**0.022**
Di-n-octylphthalate	1	mg/kg	0.045	ND
Fluoranthene	1	mg/kg	0.045	ND
Fluorene	1	mg/kg	0.045	ND
Hexachlorobenzene	1	mg/kg	0.045	ND
Hexachlorobutadiene	1	mg/kg	0.045	ND
Hexachlorocyclopentadiene	1	mg/kg	0.045	ND
Hexachloroethane	1	mg/kg	0.045	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.045	ND
Isophorone	1	mg/kg	0.045	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.045	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.045	ND
Pentachlorophenol	1	mg/kg	0.23	ND
Phenanthrene	1	mg/kg	0.045	ND
Phenol	1	mg/kg	0.045	ND
Pyrene	1	mg/kg	0.045	ND

Sample ID: TB-106-09 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-017 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	59.39	50	58	148	119	
Phenol-d5	65.84	100	49	129	66	
Nitrobenzene-d5	37.70	50	52	129	75	
2-Fluorophenol	61.91	100	43	128	62	
2-Fluorobiphenyl	43.37	50	58	125	87	
2,4,6-Tribromophenol	103.81	100	54	145	104	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
1,2-Propanediol	**1**	**mg/kg**	**3**	**0.32J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.28**	**4.3JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.096JB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.39**	**0.84J**
Benzene, 1-ethyl-3-methyl-	**1**	**mg/kg**	**5.41**	**0.16J**
Benzene, 1-ethyl-2-methyl-	**1**	**mg/kg**	**5.67**	**0.14J**
Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]b	**1**	**mg/kg**	**6.91**	**0.32J**
Tridecane	**1**	**mg/kg**	**7.26**	**0.10J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**6.3J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**270**	**2200**
Barium	1	mg/kg	14	ND
Calcium	1	mg/kg	1400	ND
Chromium	**1**	**mg/kg**	**6.8**	**16**
Cobalt	1	mg/kg	3.4	ND
Copper	1	mg/kg	6.8	ND
Iron	**1**	**mg/kg**	**270**	**5200**
Lead	1	mg/kg	6.8	ND
Magnesium	**1**	**mg/kg**	**680**	**760**
Manganese	**1**	**mg/kg**	**14**	**90**
Nickel	1	mg/kg	6.8	ND
Potassium	1	mg/kg	680	ND
Sodium	**1**	**mg/kg**	**340**	**430**
Vanadium	1	mg/kg	14	ND
Zinc	**1**	**mg/kg**	**14**	**16**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.27**	**1.4**
Beryllium	1	mg/kg	0.27	ND
Cadmium	1	mg/kg	0.54	ND
Selenium	1	mg/kg	2.7	ND
Silver	1	mg/kg	0.27	ND
Thallium	1	mg/kg	0.54	ND

Sample ID: TB-106-09 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-018 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**86**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.744	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.744	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.744	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.744	mg/kg	0.0017	ND
1,1-Dichloroethane	0.744	mg/kg	0.0017	ND
1,1-Dichloroethene	0.744	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.744	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.744	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.744	mg/kg	0.0017	ND
1,2-Dibromoethane	0.744	mg/kg	0.00087	ND
1,2-Dichlorobenzene	0.744	mg/kg	0.0017	ND
1,2-Dichloroethane	0.744	mg/kg	0.0013	ND
1,2-Dichloropropane	0.744	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.744	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.744	mg/kg	0.0017	ND
1,4-Dioxane	0.744	mg/kg	0.087	ND
2-Butanone	0.744	mg/kg	0.0017	ND
2-Hexanone	0.744	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.744	mg/kg	0.0017	ND
Acetone	0.744	mg/kg	0.0087	ND
Benzene	0.744	mg/kg	0.00087	ND
Bromochloromethane	0.744	mg/kg	0.0017	ND
Bromodichloromethane	0.744	mg/kg	0.0017	ND
Bromoform	0.744	mg/kg	0.0017	ND
Bromomethane	0.744	mg/kg	0.0017	ND
Carbon disulfide	0.744	mg/kg	0.0017	ND
Carbon tetrachloride	0.744	mg/kg	0.0017	ND
Chlorobenzene	0.744	mg/kg	0.0017	ND
Chloroethane	0.744	mg/kg	0.0017	ND
Chloroform	0.744	mg/kg	0.0017	ND
Chloromethane	0.744	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.744	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.744	mg/kg	0.0017	ND
Cyclohexane	0.744	mg/kg	0.0017	ND
Dibromochloromethane	0.744	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.744	mg/kg	0.0017	ND
Ethylbenzene	0.744	mg/kg	0.00087	ND
Isopropylbenzene	0.744	mg/kg	0.00087	ND
m&p-Xylenes	0.744	mg/kg	0.00087	ND
Methyl Acetate	0.744	mg/kg	0.0017	ND
Methylcyclohexane	0.744	mg/kg	0.0017	ND
Methylene chloride	**0.744**	**mg/kg**	**0.0017**	**0.0022**
Methyl-t-butyl ether	0.744	mg/kg	0.00087	ND
o-Xylene	0.744	mg/kg	0.00087	ND
Styrene	0.744	mg/kg	0.0017	ND
Tetrachloroethene	0.744	mg/kg	0.0017	ND
Toluene	0.744	mg/kg	0.00087	ND
trans-1,2-Dichloroethene	0.744	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.744	mg/kg	0.0017	ND
Trichloroethene	0.744	mg/kg	0.0017	ND
Trichlorofluoromethane	0.744	mg/kg	0.0017	ND
Vinyl chloride	0.744	mg/kg	0.0017	ND
Xylenes (Total)	0.744	mg/kg	0.00087	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.25	30	68	122	91	
Dibromofluoromethane	31.33	30	63	140	104	
Bromofluorobenzene	31.18	30	64	129	104	
1,2-Dichloroethane-d4	32.62	30	63	143	109	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-09 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-018 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.744	mg/kg	NA	ND
TotalVolatileTic	0.744	mg/kg	NA	ND

Sample ID: TB-106-10 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-019 **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**71**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.34	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.12	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0070	ND
Aldrin	1	mg/kg	0.0070	ND
Alpha-BHC	1	mg/kg	0.0014	ND
beta-BHC	1	mg/kg	0.0014	ND
Chlordane (Total)	1	mg/kg	0.0070	ND
delta-BHC	1	mg/kg	0.0070	ND
Dieldrin	1	mg/kg	0.0014	ND
Endosulfan I	1	mg/kg	0.0070	ND
Endosulfan II	1	mg/kg	0.0070	ND
Endosulfan Sulfate	1	mg/kg	0.0070	ND
Endrin	1	mg/kg	0.0070	ND
Endrin Aldehyde	1	mg/kg	0.0070	ND
Endrin Ketone	1	mg/kg	0.0070	ND
gamma-BHC	1	mg/kg	0.0014	ND
Heptachlor	1	mg/kg	0.0070	ND
Heptachlor Epoxide	1	mg/kg	0.0070	ND
Methoxychlor	1	mg/kg	0.0070	ND
p,p'-DDD	1	mg/kg	0.0035	ND
p,p'-DDE	1	mg/kg	0.0035	ND
p,p'-DDT	1	mg/kg	0.0035	ND
Toxaphene	1	mg/kg	0.035	ND
y-Chlordane	1	mg/kg	0.0070	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	90.24	100	37	141	90	
TCMX-Surrogate	95.32	100	37	141	95	
DCB-Surrogate	93.20	100	33	146	93	
DCB-Surrogate	97.14	100	33	146	97	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.035	ND
Aroclor-1016	1	mg/kg	0.035	ND
Aroclor-1221	1	mg/kg	0.035	ND
Aroclor-1232	1	mg/kg	0.035	ND
Aroclor-1242	1	mg/kg	0.035	ND
Aroclor-1248	1	mg/kg	0.035	ND
Aroclor-1254	1	mg/kg	0.035	ND
Aroclor-1260	1	mg/kg	0.035	ND
Aroclor-1262	1	mg/kg	0.035	ND
Aroclor-1268	1	mg/kg	0.035	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	130.97	100	37	141	131	
TCMX-Surrogate	119.69	100	37	141	120	
DCB-Surrogate	95.26	100	34	146	95	
DCB-Surrogate	95.13	100	34	146	95	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.047	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.047	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.047	ND
2,4,5-Trichlorophenol	1	mg/kg	0.047	ND

Sample ID: TB-106-10 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-019 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.047	ND
2,4-Dichlorophenol	1	mg/kg	0.012	ND
2,4-Dimethylphenol	1	mg/kg	0.012	ND
2,4-Dinitrophenol	1	mg/kg	0.23	ND
2,4-Dinitrotoluene	1	mg/kg	0.047	ND
2,6-Dinitrotoluene	1	mg/kg	0.047	ND
2-Chloronaphthalene	1	mg/kg	0.047	ND
2-Chlorophenol	1	mg/kg	0.047	ND
2-Methylnaphthalene	1	mg/kg	0.047	ND
2-Methylphenol	1	mg/kg	0.012	ND
2-Nitroaniline	1	mg/kg	0.047	ND
2-Nitrophenol	1	mg/kg	0.047	ND
3&4-Methylphenol	1	mg/kg	0.012	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.047	ND
3-Nitroaniline	1	mg/kg	0.047	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.23	ND
4-Bromophenyl-phenylether	1	mg/kg	0.047	ND
4-Chloro-3-methylphenol	1	mg/kg	0.047	ND
4-Chloroaniline	1	mg/kg	0.012	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.047	ND
4-Nitroaniline	1	mg/kg	0.047	ND
4-Nitrophenol	1	mg/kg	0.047	ND
Acenaphthene	1	mg/kg	0.047	ND
Acenaphthylene	1	mg/kg	0.047	ND
Acetophenone	1	mg/kg	0.047	ND
Anthracene	1	mg/kg	0.047	ND
Atrazine	1	mg/kg	0.047	ND
Benzaldehyde	1	mg/kg	0.047	ND
Benzo[a]anthracene	1	mg/kg	0.047	ND
Benzo[a]pyrene	1	mg/kg	0.047	ND
Benzo[b]fluoranthene	1	mg/kg	0.047	ND
Benzo[g,h,i]perylene	1	mg/kg	0.047	ND
Benzo[k]fluoranthene	1	mg/kg	0.047	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.047	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.012	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.047	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.047	ND
Butylbenzylphthalate	1	mg/kg	0.047	ND
Caprolactam	1	mg/kg	0.047	ND
Carbazole	1	mg/kg	0.047	ND
Chrysene	1	mg/kg	0.047	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.047	ND
Dibenzofuran	1	mg/kg	0.012	ND
Diethylphthalate	1	mg/kg	0.047	ND
Dimethylphthalate	1	mg/kg	0.047	ND
Di-n-butylphthalate	1	mg/kg	0.012	ND
Di-n-octylphthalate	1	mg/kg	0.047	ND
Fluoranthene	1	mg/kg	0.047	ND
Fluorene	1	mg/kg	0.047	ND
Hexachlorobenzene	1	mg/kg	0.047	ND
Hexachlorobutadiene	1	mg/kg	0.047	ND
Hexachlorocyclopentadiene	1	mg/kg	0.047	ND
Hexachloroethane	1	mg/kg	0.047	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.047	ND
Isophorone	1	mg/kg	0.047	ND
Naphthalene	1	mg/kg	0.012	ND
Nitrobenzene	1	mg/kg	0.047	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.012	ND
N-Nitrosodiphenylamine	1	mg/kg	0.047	ND
Pentachlorophenol	1	mg/kg	0.23	ND
Phenanthrene	1	mg/kg	0.047	ND
Phenol	1	mg/kg	0.047	ND
Pyrene	1	mg/kg	0.047	ND

Sample ID: TB-106-10 COMP **Collection Date: 3/19/2020**
Lab#: AD16322-019 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	51.08	50	58	148	102	
Phenol-d5	86.79	100	49	129	87	
Nitrobenzene-d5	38.18	50	52	129	76	
2-Fluorophenol	87.89	100	43	128	88	
2-Fluorobiphenyl	41.53	50	58	125	83	
2,4,6-Tribromophenol	93.61	100	54	145	94	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
1,2-Propanediol	**1**	**mg/kg**	**3.02**	**0.096J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**4.0JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.13JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.2J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**280**	**9400**
Barium	**1**	**mg/kg**	**14**	**34**
Calcium	1	mg/kg	1400	ND
Chromium	**1**	**mg/kg**	**7.0**	**31**
Cobalt	**1**	**mg/kg**	**3.5**	**14**
Copper	**1**	**mg/kg**	**7.0**	**10**
Iron	**1**	**mg/kg**	**280**	**33000**
Lead	**1**	**mg/kg**	**7.0**	**13**
Magnesium	**1**	**mg/kg**	**700**	**3700**
Manganese	**1**	**mg/kg**	**14**	**380**
Nickel	**1**	**mg/kg**	**7.0**	**26**
Potassium	**1**	**mg/kg**	**700**	**3000**
Sodium	1	mg/kg	350	ND
Vanadium	**1**	**mg/kg**	**14**	**28**
Zinc	**1**	**mg/kg**	**14**	**67**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.28**	**53**
Beryllium	**1**	**mg/kg**	**0.28**	**0.64**
Cadmium	1	mg/kg	0.56	ND
Selenium	1	mg/kg	2.8	ND
Silver	1	mg/kg	0.28	ND
Thallium	1	mg/kg	0.56	ND

Sample ID: TB-106-10 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-020 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**70**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.79	mg/kg	0.0023	ND
1,1,2,2-Tetrachloroethane	0.79	mg/kg	0.0023	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.79	mg/kg	0.0023	ND
1,1,2-Trichloroethane	0.79	mg/kg	0.0023	ND
1,1-Dichloroethane	0.79	mg/kg	0.0023	ND
1,1-Dichloroethene	0.79	mg/kg	0.0023	ND
1,2,3-Trichlorobenzene	0.79	mg/kg	0.0023	ND
1,2,4-Trichlorobenzene	0.79	mg/kg	0.0023	ND
1,2-Dibromo-3-chloropropane	0.79	mg/kg	0.0023	ND
1,2-Dibromoethane	0.79	mg/kg	0.0011	ND
1,2-Dichlorobenzene	0.79	mg/kg	0.0023	ND
1,2-Dichloroethane	0.79	mg/kg	0.0017	ND
1,2-Dichloropropane	0.79	mg/kg	0.0023	ND
1,3-Dichlorobenzene	0.79	mg/kg	0.0023	ND
1,4-Dichlorobenzene	0.79	mg/kg	0.0023	ND
1,4-Dioxane	0.79	mg/kg	0.11	ND
2-Butanone	0.79	mg/kg	0.0023	ND
2-Hexanone	0.79	mg/kg	0.0023	ND
4-Methyl-2-pentanone	0.79	mg/kg	0.0023	ND
Acetone	**0.79**	**mg/kg**	**0.011**	**0.20**
Benzene	0.79	mg/kg	0.0011	ND
Bromochloromethane	0.79	mg/kg	0.0023	ND
Bromodichloromethane	0.79	mg/kg	0.0023	ND
Bromoform	0.79	mg/kg	0.0023	ND
Bromomethane	0.79	mg/kg	0.0023	ND
Carbon disulfide	0.79	mg/kg	0.0023	ND
Carbon tetrachloride	0.79	mg/kg	0.0023	ND
Chlorobenzene	0.79	mg/kg	0.0023	ND
Chloroethane	0.79	mg/kg	0.0023	ND
Chloroform	0.79	mg/kg	0.0023	ND
Chloromethane	0.79	mg/kg	0.0023	ND
cis-1,2-Dichloroethene	0.79	mg/kg	0.0023	ND
cis-1,3-Dichloropropene	0.79	mg/kg	0.0023	ND
Cyclohexane	0.79	mg/kg	0.0023	ND
Dibromochloromethane	0.79	mg/kg	0.0023	ND
Dichlorodifluoromethane	0.79	mg/kg	0.0023	ND
Ethylbenzene	0.79	mg/kg	0.0011	ND
Isopropylbenzene	0.79	mg/kg	0.0011	ND
m&p-Xylenes	0.79	mg/kg	0.0011	ND
Methyl Acetate	0.79	mg/kg	0.0023	ND
Methylcyclohexane	0.79	mg/kg	0.0023	ND
Methylene chloride	**0.79**	**mg/kg**	**0.0023**	**0.0025**
Methyl-t-butyl ether	0.79	mg/kg	0.0011	ND
o-Xylene	0.79	mg/kg	0.0011	ND
Styrene	0.79	mg/kg	0.0023	ND
Tetrachloroethene	0.79	mg/kg	0.0023	ND
Toluene	0.79	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.79	mg/kg	0.0023	ND
trans-1,3-Dichloropropene	0.79	mg/kg	0.0023	ND
Trichloroethene	0.79	mg/kg	0.0023	ND
Trichlorofluoromethane	0.79	mg/kg	0.0023	ND
Vinyl chloride	0.79	mg/kg	0.0023	ND
Xylenes (Total)	0.79	mg/kg	0.0011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.08	30	68	122	94	
Dibromofluoromethane	31.95	30	63	140	106	
Bromofluorobenzene	31.65	30	64	129	105	
1,2-Dichloroethane-d4	36.32	30	63	143	121	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-10 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-020 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

Naphthalene, 1-methyl-	0.79	mg/kg	10.07	0.0061J
Acetaldehyde	0.79	mg/kg	2.01	0.0058J
unknown	0.79	mg/kg	4.32	0.0052J
Acetic acid, ethyl ester	0.79	mg/kg	4.46	0.0073J
TotalVolatileTic	0.79	mg/kg	NA	0.024J

Sample ID: TB-106-11COMP **Collection Date: 3/19/2020**
Lab#: AD16322-021 **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**81**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	**1**	**mg/kg**	**0.30**	**0.87**

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0062	ND
Aldrin	1	mg/kg	0.0062	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0062	ND
delta-BHC	1	mg/kg	0.0062	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0062	ND
Endosulfan II	1	mg/kg	0.0062	ND
Endosulfan Sulfate	1	mg/kg	0.0062	ND
Endrin	1	mg/kg	0.0062	ND
Endrin Aldehyde	1	mg/kg	0.0062	ND
Endrin Ketone	1	mg/kg	0.0062	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0062	ND
Heptachlor Epoxide	1	mg/kg	0.0062	ND
Methoxychlor	1	mg/kg	0.0062	ND
p,p'-DDD	1	mg/kg	0.0031	ND
p,p'-DDE	1	mg/kg	0.0031	ND
p,p'-DDT	1	mg/kg	0.0031	ND
Toxaphene	1	mg/kg	0.031	ND
y-Chlordane	1	mg/kg	0.0062	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	76.34	100	37	141	76	
TCMX-Surrogate	78.17	100	37	141	78	
DCB-Surrogate	77.09	100	33	146	77	
DCB-Surrogate	78.46	100	33	146	78	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	102.38	100	37	141	102	
TCMX-Surrogate	95.15	100	37	141	95	
DCB-Surrogate	76.09	100	34	146	76	
DCB-Surrogate	82.16	100	34	146	82	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND

Sample ID: TB-106-11COMP **Collection Date: 3/19/2020**
Lab#: AD16322-021 **Receipt Date: 3/20/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.041	ND
2-Chlorophenol	1	mg/kg	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.041	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.041	ND
2-Nitrophenol	1	mg/kg	0.041	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.041	ND
3-Nitroaniline	1	mg/kg	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.041	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.041	ND
4-Nitroaniline	1	mg/kg	0.041	ND
4-Nitrophenol	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Acetophenone	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Atrazine	1	mg/kg	0.041	ND
Benzaldehyde	1	mg/kg	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.041	ND
Butylbenzylphthalate	1	mg/kg	0.041	ND
Caprolactam	1	mg/kg	0.041	ND
Carbazole	1	mg/kg	0.041	ND
Chrysene	1	mg/kg	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.041	ND
Dimethylphthalate	1	mg/kg	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.041	ND
Fluoranthene	1	mg/kg	0.041	ND
Fluorene	1	mg/kg	0.041	ND
Hexachlorobenzene	1	mg/kg	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.041	ND
Hexachloroethane	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND
Isophorone	1	mg/kg	0.041	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.041	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.041	ND
Phenol	1	mg/kg	0.041	ND
Pyrene	1	mg/kg	0.041	ND

Sample ID: TB-106-11COMP **Collection Date: 3/19/2020**
Lab#: AD16322-021 **Receipt Date: 3/20/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	44.38	50	58	148	89	
Phenol-d5	71.34	100	49	129	71	
Nitrobenzene-d5	32.23	50	52	129	64	
2-Fluorophenol	64.65	100	43	128	65	
2-Fluorobiphenyl	33.97	50	58	125	68	
2,4,6-Tribromophenol	74.88	100	54	145	75	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
1,2-Propanediol	**1**	**mg/kg**	**3.04**	**0.089J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.27**	**4.2JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.21**	**0.15JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.4J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**2100**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	**1**	**mg/kg**	**6.2**	**33**
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	ND
Iron	**1**	**mg/kg**	**250**	**5700**
Lead	1	mg/kg	6.2	ND
Magnesium	1	mg/kg	620	ND
Manganese	**1**	**mg/kg**	**12**	**26**
Nickel	**1**	**mg/kg**	**6.2**	**13**
Potassium	**1**	**mg/kg**	**620**	**1200**
Sodium	1	mg/kg	310	ND
Vanadium	**1**	**mg/kg**	**12**	**14**
Zinc	**1**	**mg/kg**	**12**	**15**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.99	ND
Arsenic	**1**	**mg/kg**	**0.25**	**0.83**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.49	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: TB-106-11 GRAB | **Collection Date: 3/19/2020**
Lab#: AD16322-022 | **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**78**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.766	mg/kg	0.0020	ND
1,1,2,2-Tetrachloroethane	0.766	mg/kg	0.0020	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.766	mg/kg	0.0020	ND
1,1,2-Trichloroethane	0.766	mg/kg	0.0020	ND
1,1-Dichloroethane	0.766	mg/kg	0.0020	ND
1,1-Dichloroethene	0.766	mg/kg	0.0020	ND
1,2,3-Trichlorobenzene	0.766	mg/kg	0.0020	ND
1,2,4-Trichlorobenzene	0.766	mg/kg	0.0020	ND
1,2-Dibromo-3-chloropropane	0.766	mg/kg	0.0020	ND
1,2-Dibromoethane	0.766	mg/kg	0.00098	ND
1,2-Dichlorobenzene	0.766	mg/kg	0.0020	ND
1,2-Dichloroethane	0.766	mg/kg	0.0015	ND
1,2-Dichloropropane	0.766	mg/kg	0.0020	ND
1,3-Dichlorobenzene	0.766	mg/kg	0.0020	ND
1,4-Dichlorobenzene	0.766	mg/kg	0.0020	ND
1,4-Dioxane	0.766	mg/kg	0.098	ND
2-Butanone	0.766	mg/kg	0.0020	ND
2-Hexanone	0.766	mg/kg	0.0020	ND
4-Methyl-2-pentanone	0.766	mg/kg	0.0020	ND
Acetone	0.766	mg/kg	0.0098	ND
Benzene	0.766	mg/kg	0.00098	ND
Bromochloromethane	0.766	mg/kg	0.0020	ND
Bromodichloromethane	0.766	mg/kg	0.0020	ND
Bromoform	0.766	mg/kg	0.0020	ND
Bromomethane	0.766	mg/kg	0.0020	ND
Carbon disulfide	0.766	mg/kg	0.0020	ND
Carbon tetrachloride	0.766	mg/kg	0.0020	ND
Chlorobenzene	0.766	mg/kg	0.0020	ND
Chloroethane	0.766	mg/kg	0.0020	ND
Chloroform	0.766	mg/kg	0.0020	ND
Chloromethane	0.766	mg/kg	0.0020	ND
cis-1,2-Dichloroethene	0.766	mg/kg	0.0020	ND
cis-1,3-Dichloropropene	0.766	mg/kg	0.0020	ND
Cyclohexane	0.766	mg/kg	0.0020	ND
Dibromochloromethane	0.766	mg/kg	0.0020	ND
Dichlorodifluoromethane	0.766	mg/kg	0.0020	ND
Ethylbenzene	0.766	mg/kg	0.00098	ND
Isopropylbenzene	0.766	mg/kg	0.00098	ND
m&p-Xylenes	0.766	mg/kg	0.00098	ND
Methyl Acetate	0.766	mg/kg	0.0020	ND
Methylcyclohexane	0.766	mg/kg	0.0020	ND
Methylene chloride	**0.766**	**mg/kg**	**0.0020**	**0.0044**
Methyl-t-butyl ether	0.766	mg/kg	0.00098	ND
o-Xylene	0.766	mg/kg	0.00098	ND
Styrene	0.766	mg/kg	0.0020	ND
Tetrachloroethene	0.766	mg/kg	0.0020	ND
Toluene	0.766	mg/kg	0.00098	ND
trans-1,2-Dichloroethene	0.766	mg/kg	0.0020	ND
trans-1,3-Dichloropropene	0.766	mg/kg	0.0020	ND
Trichloroethene	0.766	mg/kg	0.0020	ND
Trichlorofluoromethane	0.766	mg/kg	0.0020	ND
Vinyl chloride	0.766	mg/kg	0.0020	ND
Xylenes (Total)	0.766	mg/kg	0.00098	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.26	30	68	122	91	
Dibromofluoromethane	32.14	30	63	140	107	
Bromofluorobenzene	30.69	30	64	129	102	
1,2-Dichloroethane-d4	33.53	30	63	143	112	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-106-11 GRAB **Collection Date: 3/19/2020**
Lab#: AD16322-022 **Receipt Date: 3/20/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	0.766	mg/kg	NA	ND
TotalVolatileTic	0.766	mg/kg	NA	ND

Sample ID: WASTE DRUM 031920 **Collection Date: 3/19/2020**
Lab#: AD16322-023 **Receipt Date: 3/20/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**60**

Mercury (TCLP) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	mg/l	0.00050	ND

pH 9040C/9045D

Analyte	DF	Units	RL	Result
pH	**1**	**ph**		**8**
Temperature	**1**	**c**		**21.5**

Reactive Cyanide

Analyte	DF	Units	RL	Result
Cyanide (Reactive)	1	mg/kg	0.50	ND

Reactive Sulfide

Analyte	DF	Units	RL	Result
Sulfide (Reactive)	1	mg/kg	100	ND

TCLP Metals 6010D

Analyte	DF	Units	RL	Result
Arsenic	1	mg/l	0.10	ND
Barium	**1**	**mg/l**	**0.25**	**0.26**
Cadmium	1	mg/l	0.050	ND
Chromium	1	mg/l	0.10	ND
Lead	1	mg/l	0.050	ND
Nickel	1	mg/l	0.10	ND
Selenium	1	mg/l	0.10	ND
Silver	1	mg/l	0.050	ND

TCLP Semivolatiles 8270

Analyte	DF	Units	RL	Result
2,4,5-Trichlorophenol	1	mg/l	0.0080	ND
2,4,6-Trichlorophenol	1	mg/l	0.0080	ND
2,4-Dinitrotoluene	1	mg/l	0.0080	ND
2-Methylphenol	1	mg/l	0.0020	ND
3&4-Methylphenol	1	mg/l	0.0020	ND
Hexachlorobenzene	1	mg/l	0.0080	ND
Hexachlorobutadiene	1	mg/l	0.0080	ND
Hexachloroethane	1	mg/l	0.0080	ND
Nitrobenzene	1	mg/l	0.0080	ND
Pentachlorophenol	1	mg/l	0.040	ND
Pyridine	1	mg/l	0.0080	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	63.60	50	55	146	127	
Phenol-d5	88.17	100	27	115	88	
Nitrobenzene-d5	52.43	50	51	139	105	
2-Fluorophenol	90.49	100	29	113	90	
2-Fluorobiphenyl	51.07	50	53	129	102	
2,4,6-Tribromophenol	123.12	100	54	149	123	

TCLP Volatiles 8260

Analyte	DF	Units	RL	Result
1,1-Dichloroethene	1	mg/l	0.0010	ND
1,2-Dichloroethane	1	mg/l	0.00050	ND
1,4-Dichlorobenzene	1	mg/l	0.0010	ND
2-Butanone	1	mg/l	0.0010	ND
Benzene	1	mg/l	0.00050	ND
Carbon tetrachloride	1	mg/l	0.0010	ND
Chlorobenzene	1	mg/l	0.0010	ND
Chloroform	1	mg/l	0.0010	ND
Tetrachloroethene	1	mg/l	0.0010	ND
Trichloroethene	1	mg/l	0.0010	ND

Sample ID: WASTE DRUM 031920 **Collection Date: 3/19/2020**
Lab#: AD16322-023 **Receipt Date: 3/20/2020**
Matrix: Soil

Vinyl chloride	1	mg/l	0.0010		ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.61	30	79	111	95	
Dibromofluoromethane	30.06	30	73	131	100	
Bromofluorobenzene	30.25	30	82	112	101	
1,2-Dichloroethane-d4	30.74	30	78	128	102	

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

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CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0032010

Page 1 of 3

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: Arcadis
Address: 17-17 St Route 208 N
Fair Lawn NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmore@arcadis.com
1d) Send Report to: Max.Goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmore
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 5001615.0004(1)

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other ___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 Days		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD16322

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air
GW - Ground Water, SL - Sludge
WW - Waste Water, OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<==== Check If Contingent <====

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA 7/5	TCL SVOC BNA 7/5	TAL Metal	TAL CN	TCL PCB	TCL Pest	8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	TB-106-01	S	3/19/20	0850	X	X	X	X	X	X	X	X	4	2							(4) NONE (2) MEOH
003/004	TB-106-02	↓	↓	0900	X	X	X	X	X	X	X	X	4	2							↓
005/006	TB-106-03			0945	X	X	X	X	X	X	X	X	4	2							
007/008	TB-106-04			1010	X	X	X	X	X	X	X	X	4	2							
009/010	TB-106-05			1045	X	X	X	X	X	X	X	X	4	2							
011/012	TB-106-06			1120	X	X	X	X	X	X	X	X	4	2							
013/014	TB-106-07			1200	X	X	X	X	X	X	X	X	4	2							
015/016	TB-106-08			1310	X	X	X	X	X	X	X	X	4	2							
017/018	TB-106-09			1420	X	X	X	X	X	X	X	X	4	2							
019/020	TB-106-10			1515	X	X	X	X	X	X	X	X	4	2							

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	3/20/20	13:04

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-9, 3-1, 2-8

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

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CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0032010

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: Arcadis
Address: 7-17 Route 208 N
Fair Lawn, NJ
1b) Email/Cell/Fax/Ph: Christopher.Gadsin@arcadis.com
1c) Send Invoice to: Richard.Gilmour@arcadis.com
1d) Send Report to: Mar.Goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Rich Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 30016150040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ (NY) PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other	[ ] 4-File [ ] EZ
6 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 days		Other

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD16322

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air
GW - Ground Water, SL - Sludge
WW - Waste Water, OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<===> Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA +15	TCL SVOC-BNA+15	TAL Metals	TAL CN	TCL PCB	TCL Pest	8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
021/022	TB-100-11	S	3/19/20	1610	X	X	X	X	X	X	X	X	4	1							

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	3/20/2013	04

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-9, 3-1, 2-8

Please note NUMBERED items. If not completed your analytical work may be delayed.
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Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)
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CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0032010

Page 3 of 3

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Customer Information

1a) Customer: Arcadis
Address: 17-17 Route 208 N, Fair Lawn, NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmour@arcadis.com
1d) Send Report to: Max.Goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Rich Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 30016615.0010

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: Tdays		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY

Batch # AD16322

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air
GW - Ground Water, SL - Sludge
WW - Waste Water, OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type Composite (C)	Sample Type Grab (G)	React Cyanide	React Sulfide	Ignitability	pH	TCLP VOC	TCLP SVOC/BNA	TCLP Metals	TCLP Prep				8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
023	Waste Drum 03/19/20	S	3/19/20	1700		X	X	X	X	X	X	X	X	X				2								

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	3/20/20	1304

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9, 3.1, 2.8

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Long Beach

Client PO: 3001615.00040

Report To: ARCADIS
17-17 Route 208 North
2nd Floor
Fairlawn, NJ 07410
Attn: Richard Gilmour/Chris Goldsmith

Received Date: 2/27/2020

Report Date: 3/18/2020

Deliverables: NYDOH-R

Lab ID: AD15946

Lab Project No: 0022703

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Sean Berls - Quality Assurance Officer OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

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Form 1 Sample Results

Inorganic Spreadsheet / QC Summary

Sample Summary

Client: ARCADIS
Project: Long Beach

HC Project #: 0022703

Lab#	SampleID	Matrix	Collection Date	Receipt Date
AD15946-001	TB-110-1 COMP	Soil	2/26/2020	2/27/2020
AD15946-002	TB-110-1 GRAB	Soil/Terracore	2/26/2020	2/27/2020

HC Case Narrative

Client: ARCADIS
Project: Long Beach

HC Project: 0022703

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Volatile Organic Analysis:

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 84511 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Base Neutral/Acid Extractable Analysis:

The Method Blank Spike for batch 83648 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for batch 83648 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Samples AD15985-001, -001(MS), -001(MSD) had one or more surrogates outside QC limits. Please refer to the applicable Form 2 for the recoveries.

PCB Analysis:

Data conforms to method requirements.

Pesticide Analysis:

Data conforms to method requirements.

Metals Analysis:

The Post Spike, Matrix Spike and/or Matrix Spike Duplicate for batches 82692, 82693 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batch 82692. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batches 82692, 82693. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batch 82692 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

The MS/MSD RPD, Matrix Spike and/or Matrix Spike Duplicate for Cyanide, batch 2348, had recoveries outside QC limits. Please refer to the QC section for the recoveries.

Sean Berls Quality Assurance Officer	Or	Jean Revolus Laboratory Director	3/18/20 Date

HC Executive Summary

Client: ARCADIS

Project: Long Beach

HC Project #: 0022703

Lab#: AD15946-001 **Sample ID: TB-110-1 COMP**

Analyte	Units	RL	Result	Analytical Method
Aluminum	mg/kg	300	16000	EPA 6010D
Barium	mg/kg	15	35	EPA 6010D
Chromium	mg/kg	7.6	38	EPA 6010D
Cobalt	mg/kg	3.8	15	EPA 6010D
Copper	mg/kg	7.6	11	EPA 6010D
Iron	mg/kg	300	40000	EPA 6010D
Lead	mg/kg	7.6	12	EPA 6010D
Magnesium	mg/kg	760	7400	EPA 6010D
Manganese	mg/kg	15	270	EPA 6010D
Nickel	mg/kg	7.6	25	EPA 6010D
Potassium	mg/kg	760	3100	EPA 6010D
Sodium	mg/kg	380	1700	EPA 6010D
Vanadium	mg/kg	15	42	EPA 6010D
Zinc	mg/kg	15	70	EPA 6010D
Arsenic	mg/kg	0.30	41	EPA 6020B
Beryllium	mg/kg	0.30	0.62	EPA 6020B
Di-n-butylphthalate	mg/kg	0.013	0.021	EPA 8270D
TotalSemiVolatileTic	mg/kg	NA	4.4J	EPA 8270D

Lab#: AD15946-002 **Sample ID: TB-110-1 GRAB**

Analyte	Units	RL	Result	Analytical Method
2-Butanone	mg/kg	0.0020	0.012	EPA 8260C
Acetone	mg/kg	0.0099	0.078	EPA 8260C

HC Report of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0022703

Sample ID: TB-110-1 COMP
Lab#: AD15946-001
Matrix: Soil

Collection Date: 2/26/2020
Receipt Date: 2/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		66

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.36	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0076	ND
Aldrin	1	mg/kg	0.0076	ND
Alpha-BHC	1	mg/kg	0.0015	ND
beta-BHC	1	mg/kg	0.0015	ND
Chlordane (Total)	1	mg/kg	0.0076	ND
delta-BHC	1	mg/kg	0.0076	ND
Dieldrin	1	mg/kg	0.0015	ND
Endosulfan I	1	mg/kg	0.0076	ND
Endosulfan II	1	mg/kg	0.0076	ND
Endosulfan Sulfate	1	mg/kg	0.0076	ND
Endrin	1	mg/kg	0.0076	ND
Endrin Aldehyde	1	mg/kg	0.0076	ND
Endrin Ketone	1	mg/kg	0.0076	ND
gamma-BHC	1	mg/kg	0.0015	ND
Heptachlor	1	mg/kg	0.0076	ND
Heptachlor Epoxide	1	mg/kg	0.0076	ND
Methoxychlor	1	mg/kg	0.0076	ND
p,p'-DDD	1	mg/kg	0.0038	ND
p,p'-DDE	1	mg/kg	0.0038	ND
p,p'-DDT	1	mg/kg	0.0038	ND
Toxaphene	1	mg/kg	0.038	ND
y-Chlordane	1	mg/kg	0.0076	ND

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.038	ND
Aroclor-1016	1	mg/kg	0.038	ND
Aroclor-1221	1	mg/kg	0.038	ND
Aroclor-1232	1	mg/kg	0.038	ND
Aroclor-1242	1	mg/kg	0.038	ND
Aroclor-1248	1	mg/kg	0.038	ND
Aroclor-1254	1	mg/kg	0.038	ND
Aroclor-1260	1	mg/kg	0.038	ND
Aroclor-1262	1	mg/kg	0.038	ND
Aroclor-1268	1	mg/kg	0.038	ND

Sample ID: TB-110-1 COMP
Lab#: AD15946-001
Matrix: Soil

Collection Date: 2/26/2020
Receipt Date: 2/27/2020

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.051	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.051	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.051	ND
2,4,5-Trichlorophenol	1	mg/kg	0.051	ND
2,4,6-Trichlorophenol	1	mg/kg	0.051	ND
2,4-Dichlorophenol	1	mg/kg	0.013	ND
2,4-Dimethylphenol	1	mg/kg	0.013	ND
2,4-Dinitrophenol	1	mg/kg	0.25	ND
2,4-Dinitrotoluene	1	mg/kg	0.051	ND
2,6-Dinitrotoluene	1	mg/kg	0.051	ND
2-Chloronaphthalene	1	mg/kg	0.051	ND
2-Chlorophenol	1	mg/kg	0.051	ND
2-Methylnaphthalene	1	mg/kg	0.051	ND
2-Methylphenol	1	mg/kg	0.013	ND
2-Nitroaniline	1	mg/kg	0.051	ND
2-Nitrophenol	1	mg/kg	0.051	ND
3&4-Methylphenol	1	mg/kg	0.013	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.051	ND
3-Nitroaniline	1	mg/kg	0.051	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.25	ND
4-Bromophenyl-phenylether	1	mg/kg	0.051	ND
4-Chloro-3-methylphenol	1	mg/kg	0.051	ND
4-Chloroaniline	1	mg/kg	0.013	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.051	ND
4-Nitroaniline	1	mg/kg	0.051	ND
4-Nitrophenol	1	mg/kg	0.051	ND
Acenaphthene	1	mg/kg	0.051	ND
Acenaphthylene	1	mg/kg	0.051	ND
Acetophenone	1	mg/kg	0.051	ND
Anthracene	1	mg/kg	0.051	ND
Atrazine	1	mg/kg	0.051	ND
Benzaldehyde	1	mg/kg	0.051	ND
Benzo[a]anthracene	1	mg/kg	0.051	ND
Benzo[a]pyrene	1	mg/kg	0.051	ND
Benzo[b]fluoranthene	1	mg/kg	0.051	ND
Benzo[g,h,i]perylene	1	mg/kg	0.051	ND
Benzo[k]fluoranthene	1	mg/kg	0.051	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.051	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.013	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.051	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.051	ND
Butylbenzylphthalate	1	mg/kg	0.051	ND
Caprolactam	1	mg/kg	0.051	ND
Carbazole	1	mg/kg	0.051	ND
Chrysene	1	mg/kg	0.051	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.051	ND
Dibenzofuran	1	mg/kg	0.013	ND
Diethylphthalate	1	mg/kg	0.051	ND
Dimethylphthalate	1	mg/kg	0.051	ND
Di-n-butylphthalate	**1**	**mg/kg**	**0.013**	**0.021**
Di-n-octylphthalate	1	mg/kg	0.051	ND
Fluoranthene	1	mg/kg	0.051	ND
Fluorene	1	mg/kg	0.051	ND
Hexachlorobenzene	1	mg/kg	0.051	ND

Sample ID: TB-110-1 COMP **Collection Date: 2/26/2020**
Lab#: AD15946-001 **Receipt Date: 2/27/2020**
Matrix: Soil

Hexachlorobutadiene	1	mg/kg	0.051	ND
Hexachlorocyclopentadiene	1	mg/kg	0.051	ND
Hexachloroethane	1	mg/kg	0.051	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.051	ND
Isophorone	1	mg/kg	0.051	ND
Naphthalene	1	mg/kg	0.013	ND
Nitrobenzene	1	mg/kg	0.051	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.013	ND
N-Nitrosodiphenylamine	1	mg/kg	0.051	ND
Pentachlorophenol	1	mg/kg	0.25	ND
Phenanthrene	1	mg/kg	0.051	ND
Phenol	1	mg/kg	0.051	ND
Pyrene	1	mg/kg	0.051	ND

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Eicosane	**1**	**mg/kg**	**12.65**	**0.12J**
Pentadecane	**1**	**mg/kg**	**13.42**	**0.21J**
1,2-Propanediol	**1**	**mg/kg**	**3.01**	**0.24J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.3**	**3.6JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.24**	**0.10J**
1,2,3-Propanetriol, triacetate	**1**	**mg/kg**	**7.4**	**0.11J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.4J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**300**	**16000**
Barium	**1**	**mg/kg**	**15**	**35**
Calcium	1	mg/kg	1500	ND
Chromium	**1**	**mg/kg**	**7.6**	**38**
Cobalt	**1**	**mg/kg**	**3.8**	**15**
Copper	**1**	**mg/kg**	**7.6**	**11**
Iron	**1**	**mg/kg**	**300**	**40000**
Lead	**1**	**mg/kg**	**7.6**	**12**
Magnesium	**1**	**mg/kg**	**760**	**7400**
Manganese	**1**	**mg/kg**	**15**	**270**
Nickel	**1**	**mg/kg**	**7.6**	**25**
Potassium	**1**	**mg/kg**	**760**	**3100**
Sodium	**1**	**mg/kg**	**380**	**1700**
Vanadium	**1**	**mg/kg**	**15**	**42**
Zinc	**1**	**mg/kg**	**15**	**70**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.2	ND
Arsenic	**1**	**mg/kg**	**0.30**	**41**
Beryllium	**1**	**mg/kg**	**0.30**	**0.62**
Cadmium	1	mg/kg	0.61	ND
Selenium	1	mg/kg	3.0	ND
Silver	1	mg/kg	0.30	ND
Thallium	1	mg/kg	0.61	ND

Sample ID: TB-110-1 GRAB
Lab#: AD15946-002
Matrix: Soil/Terracore

Collection Date: 2/26/2020
Receipt Date: 2/27/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		72

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.714	mg/kg	0.0020	ND
1,1,2,2-Tetrachloroethane	0.714	mg/kg	0.0020	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.714	mg/kg	0.0020	ND
1,1,2-Trichloroethane	0.714	mg/kg	0.0020	ND
1,1-Dichloroethane	0.714	mg/kg	0.0020	ND
1,1-Dichloroethene	0.714	mg/kg	0.0020	ND
1,2,3-Trichlorobenzene	0.714	mg/kg	0.0020	ND
1,2,4-Trichlorobenzene	0.714	mg/kg	0.0020	ND
1,2-Dibromo-3-chloropropane	0.714	mg/kg	0.0020	ND
1,2-Dibromoethane	0.714	mg/kg	0.00099	ND
1,2-Dichlorobenzene	0.714	mg/kg	0.0020	ND
1,2-Dichloroethane	0.714	mg/kg	0.0015	ND
1,2-Dichloropropane	0.714	mg/kg	0.0020	ND
1,3-Dichlorobenzene	0.714	mg/kg	0.0020	ND
1,4-Dichlorobenzene	0.714	mg/kg	0.0020	ND
1,4-Dioxane	0.714	mg/kg	0.099	ND
2-Butanone	**0.714**	**mg/kg**	**0.0020**	**0.012**
2-Hexanone	0.714	mg/kg	0.0020	ND
4-Methyl-2-pentanone	0.714	mg/kg	0.0020	ND
Acetone	**0.714**	**mg/kg**	**0.0099**	**0.078**
Benzene	0.714	mg/kg	0.00099	ND
Bromochloromethane	0.714	mg/kg	0.0020	ND
Bromodichloromethane	0.714	mg/kg	0.0020	ND
Bromoform	0.714	mg/kg	0.0020	ND
Bromomethane	0.714	mg/kg	0.0020	ND
Carbon disulfide	0.714	mg/kg	0.0020	ND
Carbon tetrachloride	0.714	mg/kg	0.0020	ND
Chlorobenzene	0.714	mg/kg	0.0020	ND
Chloroethane	0.714	mg/kg	0.0020	ND
Chloroform	0.714	mg/kg	0.0020	ND
Chloromethane	0.714	mg/kg	0.0020	ND
cis-1,2-Dichloroethene	0.714	mg/kg	0.0020	ND
cis-1,3-Dichloropropene	0.714	mg/kg	0.0020	ND
Cyclohexane	0.714	mg/kg	0.0020	ND
Dibromochloromethane	0.714	mg/kg	0.0020	ND
Dichlorodifluoromethane	0.714	mg/kg	0.0020	ND
Ethylbenzene	0.714	mg/kg	0.00099	ND
Isopropylbenzene	0.714	mg/kg	0.00099	ND
m&p-Xylenes	0.714	mg/kg	0.00099	ND
Methyl Acetate	0.714	mg/kg	0.0020	ND
Methylcyclohexane	0.714	mg/kg	0.0020	ND
Methylene chloride	0.714	mg/kg	0.0020	ND
Methyl-t-butyl ether	0.714	mg/kg	0.00099	ND
o-Xylene	0.714	mg/kg	0.00099	ND
Styrene	0.714	mg/kg	0.0020	ND
Tetrachloroethene	0.714	mg/kg	0.0020	ND
Toluene	0.714	mg/kg	0.00099	ND
trans-1,2-Dichloroethene	0.714	mg/kg	0.0020	ND
trans-1,3-Dichloropropene	0.714	mg/kg	0.0020	ND
Trichloroethene	0.714	mg/kg	0.0020	ND

Sample ID: TB-110-1 GRAB
Lab#: AD15946-002
Matrix: Soil/Terracore

Collection Date: 2/26/2020
Receipt Date: 2/27/2020

Trichlorofluoromethane	0.714	mg/kg	0.0020	ND
Vinyl chloride	0.714	mg/kg	0.0020	ND
Xylenes (Total)	0.714	mg/kg	0.00099	ND

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result
No Unknown Compounds Detected	0.714	mg/kg	NA	ND
TotalVolatileTic	0.714	mg/kg	NA	ND

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

LCS = Laboratory Control Spike

MBS = Method Blank Spike

MS = Matrix Spike

MSD = Matrix Spike Duplicate

MDL = Method Detection Limit

NA = Not Applicable

ND = Not Detected

PS = Post Digestion Spike

RL* = Reporting Limit

RT = Retention Time

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Laboratory Chronicle

Client: ARCADIS
Project: Long Beach

HC Project #: 0022703

Lab#: AD15946-001 **Sample ID: TB-110-1 COMP**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/28/20 00:00	BEENA
Cyanide (Soil/Waste) 9012B		03/04/20	asilva	EPA 9012B	3/4/20 14:10	ANS
Mercury (Soil/Waste) 7471B	EPA 7471B	02/28/20 08:30	bransaw	EPA 7471B	3/3/20 19:00	OA
Organochlorine Pesticides 8081	3510C/3550C	02/28/20 10:33	Mwalker	EPA 8081B	3/3/20 00:30	MS/MLC
PCB 8082	3510C/3550C	02/28/20 10:33	Mwalker	EPA 8082A	3/2/20 10:03	MS/MLC
Semivolatile Organics + 15 (8270)	3510C/3550C	03/02/20 15:51	jprevilon	EPA 8270D	3/3/20 14:18	AB/JB
TAL Metals 6010D	3005&10/3050	02/28/20 08:30	bransaw	EPA 6010D	3/2/20 14:31	OA
TAL Metals 6010D	3005&10/3050	02/28/20 08:30	bransaw	EPA 6010D	3/1/20 00:53	OA
TAL Metals 6020B	3005&10/3050	02/28/20 08:30	bransaw	EPA 6020B	2/28/20 21:58	PC

Lab#: AD15946-002 **Sample ID: TB-110-1 GRAB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	2/28/20 00:00	BEENA
Volatile Organics + 15 (8260)	EPA5030/5035			EPA 8260C	2/29/20 04:16	SG

Chain of Custody

0022703 0012

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 0022703

Page 1 of 1

Customer Information

1a) Customer: Arcadis
Address: 1777 Route 208 North
Fair Lawn, NJ 07410
1b) Email/Cell/Fax/Ph: christopher.goldsmith@arcadis.com
1c) Send Invoice to: richard.gilmor@arcadis.com
1d) Send Report to: max.goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmor
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 30016IS.00040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
6 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 days		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD15946

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air
GW - Ground Water, SL - Sludge
WW - Waste Water, OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA + IS	TCL SVOC-BNA+IS	TAL Metals	TAL CN	TCL PCB	TCL Pest	None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
002/001	TB-110-1	So	02.26.20	1030	X	X	X	X	X	X	X	X	4	1							

10) Relinquished by:	Accepted by:	Date	Time
Kim Hanson	FEDEX	02.26.20	1645
FEDEX	[illegible]	2/27/20	10:15

11) Sampler (print name): Kim Hanson Date: 02.26.2020

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.6

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD15946

Entered By: maxwell
Date Entered 2/27/2020 10:17:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	Yes	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.6
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).
15	No	Were any samples for ortho-phosphate or dissolved ferrous iron field filtered?

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD15946-001	02/27/20 10:15	MAXW	0	M	Received
AD15946-001	02/27/20 10:17	MAXW	0	M	Login
AD15946-001	02/27/20 16:09	R12	1	A	NONE
AD15946-001	02/27/20 20:42	PA	1	A	mix
AD15946-001	02/27/20 20:43	R12	1	A	NONE
AD15946-001	02/28/20 08:37	R12	1	A	NONE
AD15946-001	02/28/20 09:48	BR	1	A	TDSI/HG
AD15946-001	02/28/20 09:49	BR	1	A	R12
AD15946-001	02/28/20 10:58	MW	1	A	p/p
AD15946-001	02/28/20 10:59	R12	1	A	NONE
AD15946-001	03/02/20 15:50	JP	1	A	BNA
AD15946-001	03/02/20 15:51	R12	1	A	NONE
AD15946-001	03/04/20 09:22	ANS	1	A	CNS
AD15946-001	03/04/20 10:02	R12	1	A	NONE
AD15946-002	02/27/20 10:15	MAXW	0	M	Received
AD15946-002	02/27/20 10:17	MAXW	0	M	Login
AD15946-002	02/27/20 16:09	R12	1	A	NONE
AD15946-002	02/27/20 20:42	PA	1	A	mix
AD15946-002	02/27/20 20:43	R12	1	A	NONE
AD15946-002	02/28/20 08:37	R12	1	A	NONE
AD15946-002	02/28/20 10:36	R12	1	A	NONE
AD15946-002	02/27/20 10:21	R31	2	A	NONE
AD15946-002	02/27/20 10:21	F19	3	A	NONE
AD15946-002	02/27/20 10:21	F19	4	A	NONE
AD15946-002	02/28/20 11:55	SG	4	A	VOA

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Volatile Data

Form1

ORGANICS VOLATILE REPORT

Sample Number: AD15946-002
Client Id: TB-110-1 GRAB
Data File: 6M125361.D
Analysis Date: 02/29/20 04:16
Date Rec/Extracted: 02/27/20-NA
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 7g
Final Vol: NA
Dilution: 0.714
Solids: 72

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.00099	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.00099	U
107-06-2	1,2-Dichloroethane	0.0015	U	98-82-8	Isopropylbenzene	0.00099	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.00099	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.099	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	**2-Butanone**	**0.0020**	**0.012**	1634-04-4	Methyl-t-butyl ether	0.00099	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.00099	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	**Acetone**	**0.0099**	**0.078**	127-18-4	Tetrachloroethene	0.0020	U
71-43-2	Benzene	0.00099	U	108-88-3	Toluene	0.00099	U
74-97-5	Bromochloromethane	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-25-2	Bromoform	0.0020	U	79-01-6	Trichloroethene	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U
1330-20-7	Xylenes (Total)	0.00099	U				

Worksheet #: 547549 ***Total Target Concentration*** 0.09 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15946-002
Client Id: TB-110-1 GRAB
Data File: 6M125361.D
Analysis Date: 02/29/20 04:16
Date Rec/Extracted: 02/27/20-NA

Matrix: Soil
Initial Vol: 7g
Final Vol: NA
Dilution: 0.714
Solids: 72
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 547549

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT Reviewed)

SampleID : AD15946-002 Operator : SG Qt Meth : 6M_S0223.M
Data File: 6M125361.D Sam Mult : 1 Vial# : 25 Qt On : 02/29/20 23:36
Acq On : 02/29/20 04:16 Misc : S,5G!4 Qt Upd On: 02/24/20 05:59

Data Path : G:\GcMsData\2020\GCMS_6\Data\02-2820\
Qt Path : G:\GcMsData\2020\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	128925	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	100783	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	50573	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	34747	29.99	ug/l	0.00
Spiked Amount 30.000			Recovery = 99.97%			
39) 1,2-Dichloroethane-d4	4.934	67	18081	31.69	ug/l	0.00
Spiked Amount 30.000			Recovery = 105.63%			
66) Toluene-d8	5.983	98	129072	30.29	ug/l	0.00
Spiked Amount 30.000			Recovery = 100.97%			
76) Bromofluorobenzene	7.397	174	43397	33.08	ug/l	0.00
Spiked Amount 30.000			Recovery = 110.27%			
Target Compounds						Qvalue
19) Acetone	3.050	43	17176	78.6263	ug/l	93
41) 2-Butanone	4.434	43	4181	11.8845	ug/l	91

No Library Search Compounds Found

(#) = qualifier out of range (m) = manual integration (+) = signals summed

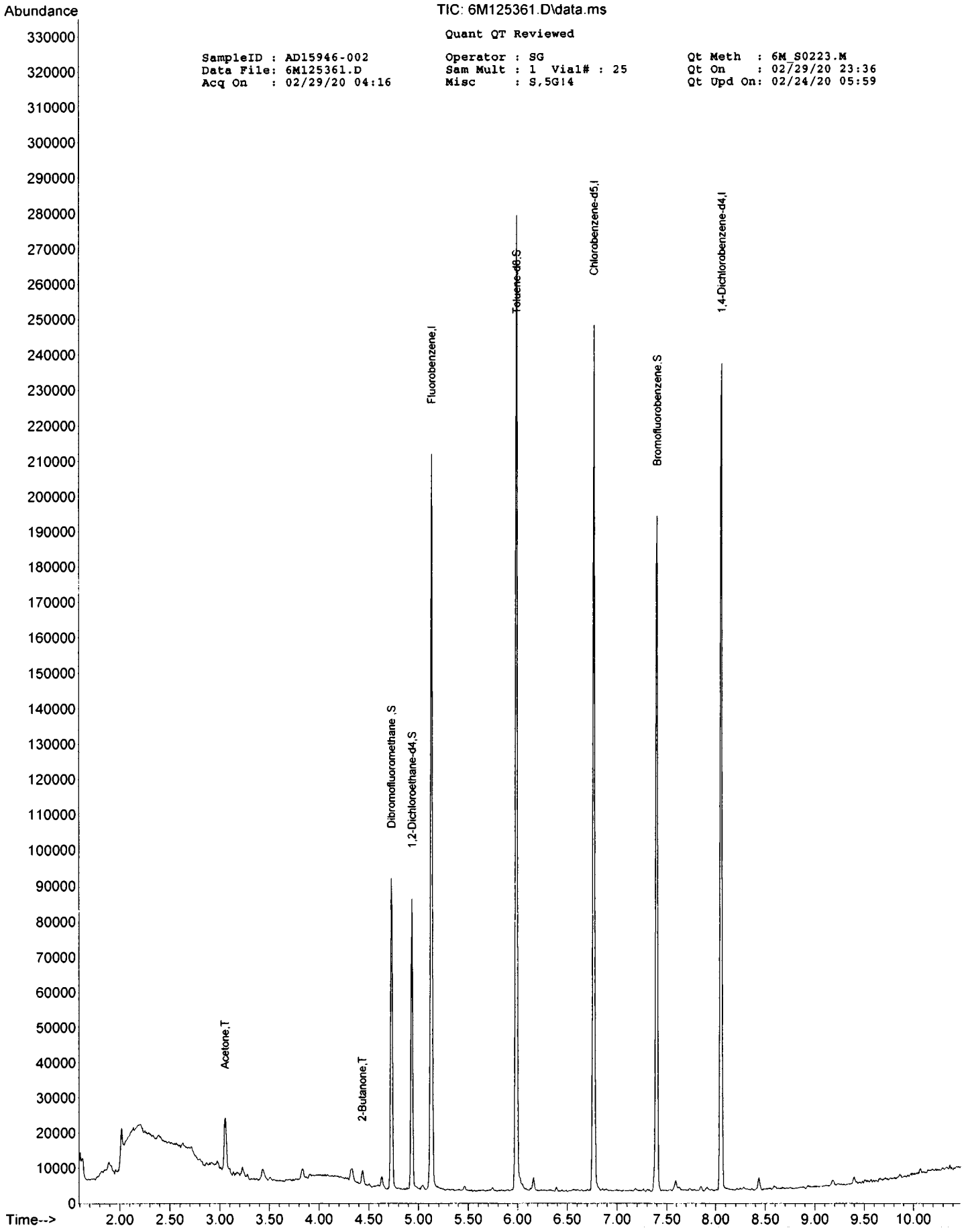
TIC: 6M125361.D\data.ms

Quant QT Reviewed

SampleID : AD15946-002
Data File: 6M125361.D
Acq On : 02/29/20 04:16

Operator : SG
Sam Mult : 1 Vial# : 25
Misc : S,5G!4

Qt Meth : 6M_S0223.M
Qt On : 02/29/20 23:36
Qt Upd On: 02/24/20 05:59



Form1

ORGANICS VOLATILE REPORT

Sample Number: DAILY BLANK
Client Id:
Data File: 6M125344.D
Analysis Date: 02/28/20 21:32
Date Rec/Extracted:
Column: DB-624 25M 0.200mm ID 1.12um film

Method: EPA 8260C
Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
71-55-6	1,1,1-Trichloroethane	0.0020	U	56-23-5	Carbon Tetrachloride	0.0020	U
79-34-5	1,1,2,2-Tetrachloroethane	0.0020	U	108-90-7	Chlorobenzene	0.0020	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluor	0.0020	U	75-00-3	Chloroethane	0.0020	U
79-00-5	1,1,2-Trichloroethane	0.0020	U	67-66-3	Chloroform	0.0020	U
75-34-3	1,1-Dichloroethane	0.0020	U	74-87-3	Chloromethane	0.0020	U
75-35-4	1,1-Dichloroethene	0.0020	U	156-59-2	cis-1,2-Dichloroethene	0.0020	U
87-61-6	1,2,3-Trichlorobenzene	0.0020	U	10061-01-5	cis-1,3-Dichloropropene	0.0020	U
120-82-1	1,2,4-Trichlorobenzene	0.0020	U	110-82-7	Cyclohexane	0.0020	U
96-12-8	1,2-Dibromo-3-Chloropropa	0.0020	U	124-48-1	Dibromochloromethane	0.0020	U
106-93-4	1,2-Dibromoethane	0.0010	U	75-71-8	Dichlorodifluoromethane	0.0020	U
95-50-1	1,2-Dichlorobenzene	0.0020	U	100-41-4	Ethylbenzene	0.0010	U
107-06-2	1,2-Dichloroethane	0.0016	U	98-82-8	Isopropylbenzene	0.0010	U
78-87-5	1,2-Dichloropropane	0.0020	U	79601-23-1	m&p-Xylenes	0.0010	U
541-73-1	1,3-Dichlorobenzene	0.0020	U	79-20-9	Methyl Acetate	0.0020	U
106-46-7	1,4-Dichlorobenzene	0.0020	U	108-87-2	Methylcyclohexane	0.0020	U
123-91-1	1,4-Dioxane	0.10	U	75-09-2	Methylene Chloride	0.0020	U
78-93-3	2-Butanone	0.0020	U	1634-04-4	Methyl-t-butyl ether	0.0010	U
591-78-6	2-Hexanone	0.0020	U	95-47-6	o-Xylene	0.0010	U
108-10-1	4-Methyl-2-Pentanone	0.0020	U	100-42-5	Styrene	0.0020	U
67-64-1	Acetone	0.010	U	127-18-4	Tetrachloroethene	0.0020	U
71-43-2	Benzene	0.0010	U	108-88-3	Toluene	0.0010	U
74-97-5	Bromochloromethane	0.0020	U	156-60-5	trans-1,2-Dichloroethene	0.0020	U
75-27-4	Bromodichloromethane	0.0020	U	10061-02-6	trans-1,3-Dichloropropene	0.0020	U
75-25-2	Bromoform	0.0020	U	79-01-6	Trichloroethene	0.0020	U
74-83-9	Bromomethane	0.0020	U	75-69-4	Trichlorofluoromethane	0.0020	U
75-15-0	Carbon Disulfide	0.0020	U	75-01-4	Vinyl Chloride	0.0020	U

Worksheet #: 547549 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS VOLATILE REPORT
Tentatively Identified Compounds

Sample Number: DAILY BLANK
Client Id:
Data File: 6M125344.D
Analysis Date: 02/28/20 21:32
Date Rec/Extracted:

Matrix: Soil
Initial Vol: 5g
Final Vol: NA
Dilution: 1.00
Solids: 100
Method: EPA 8260C

Units: mg/Kg

	Cas #	Compound	RT	Conc
1		No Unknown Compounds Detected	0.00	0 J

Worksheet #: 547549

Total Tentatively Identified Concentration 0

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

0022703 0022

SampleID : DAILY BLANK
Data File: 6M125344.D
Acq On : 02/28/20 21:32

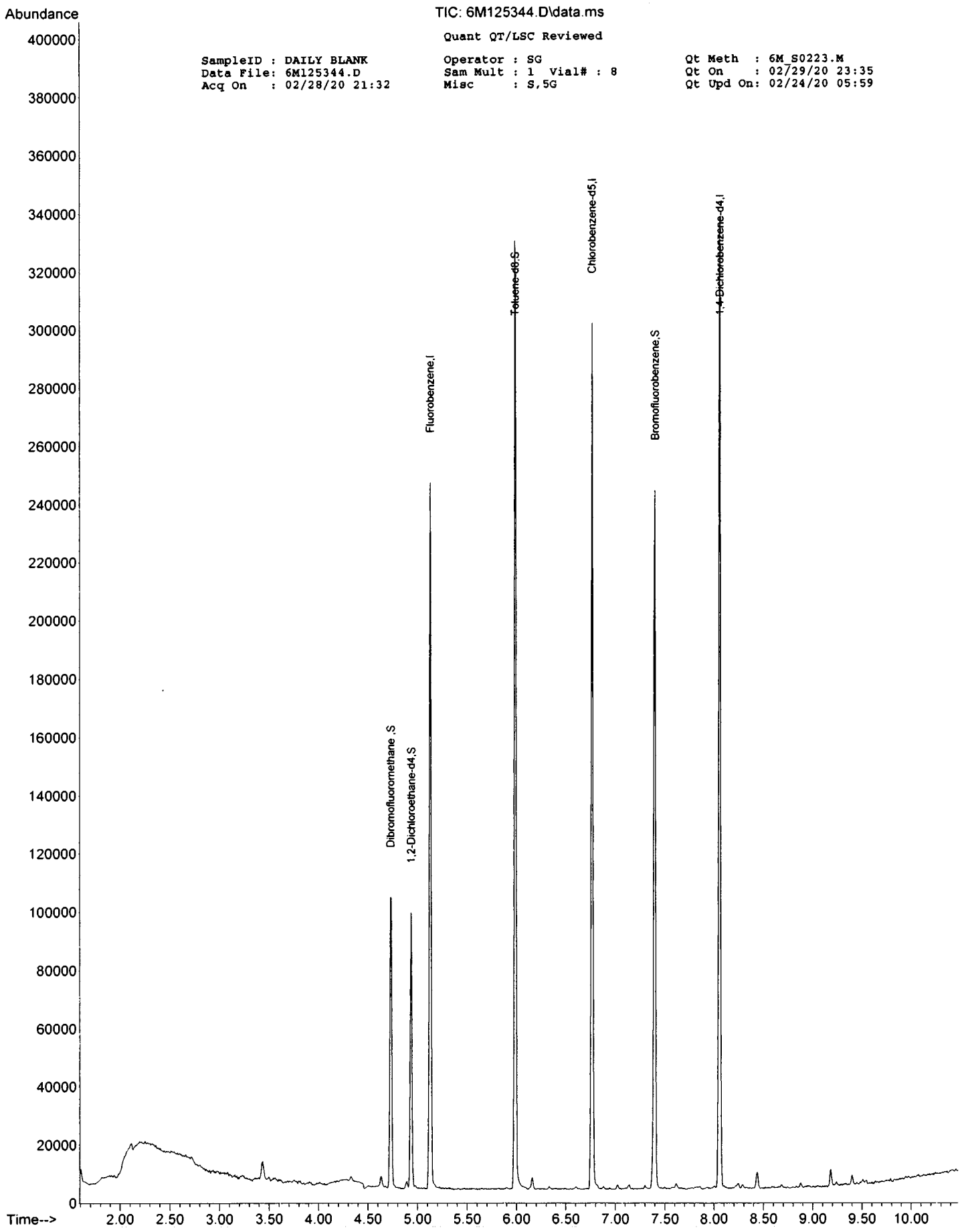
Operator : SG
Sam Mult : 1 Vial# : 8
Misc : S,5G

Qt Meth : 6M_S0223.M
Qt On : 02/29/20 23:35
Qt Upd On: 02/24/20 05:59

Data Path : G:\GcMsData\2020\GCMS_6\Data\02-2820\
Qt Path : G:\GcMsData\2020\GCMS_6\MethodQt\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
4) Fluorobenzene	5.123	96	149596	30.00	ug/l	0.00
52) Chlorobenzene-d5	6.763	117	122991	30.00	ug/l	0.00
70) 1,4-Dichlorobenzene-d4	8.056	152	69007	30.00	ug/l	0.00
System Monitoring Compounds						
37) Dibromofluoromethane	4.727	111	40646	30.24	ug/l	0.00
Spiked Amount 30.000			Recovery	=	100.80%	
39) 1,2-Dichloroethane-d4	4.934	67	21131	31.92	ug/l	0.00
Spiked Amount 30.000			Recovery	=	106.40%	
66) Toluene-d8	5.983	98	153174	29.45	ug/l	0.00
Spiked Amount 30.000			Recovery	=	98.17%	
76) Bromofluorobenzene	7.397	174	54317	30.34	ug/l	0.00
Spiked Amount 30.000			Recovery	=	101.13%	
Target Compounds						Qvalue
Library Search Internal Standards TIC Results						
1) Fluorobenzene	5.123		300249	30.00	ug/l	--
2) Chlorobenzene-d5	6.763		349015	30.00	ug/l	--
3) 1,4-Dichlorobenzene-d4	8.056		395638	30.00	ug/l	--
Library Search Compounds						

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 6M125344.D\data.ms
Quant QT/LSC Reviewed
SampleID : DAILY BLANK
Data File: 6M125344.D
Acq On : 02/28/20 21:32
Operator : SG
Sam Mult : 1 Vial# : 8
Misc : S,5G
Qt Meth : 6M_S0223.M
Qt On : 02/29/20 23:35
Qt Upd On: 02/24/20 05:59
Dibromofluoromethane ,S
1,2-Dichloroethane-d4,S
Fluorobenzene,I
Toluene-d8,S
Chlorobenzene-d5,I
Bromofluorobenzene,S
1,4-Dichlorobenzene-d4,I
Time-->

FORM2

Surrogate Recovery Method: EPA 8260C

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6M125344.D	DAILY BLANK	S	02/28/20 21:32	1		101	106	98	101		
6M125361.D	AD15946-002	S	02/29/20 04:16	1		100	106	101	110		
6M125345.D	MBS84511	S	02/28/20 21:55	1		100	102	100	100		
6M125347.D	AD15955-006	S	02/28/20 22:43	1		76	107	102	115		
6M125348.D	AD15955-006(MS)	S	02/28/20 23:07	1		88	104	98	101		
6M125349.D	AD15955-006(MSD)	S	02/28/20 23:31	1		94	106	98	103		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8260C

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=Dibromofluoromethane	30	63-140
S2=1,2-Dichloroethane-d4	30	63-143
S3=Toluene-d8	30	68-122
S4=Bromofluorobenzene	30	64-129

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84511

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125345.D	MBS84511	2/28/2020 9:55:00 PM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	29.6206	0	50	59	20	130
Dichlorodifluoromethane	1	64.9833	0	50	130	20	130
Chloromethane	1	56.5543	0	50	113	20	130
Bromomethane	1	50.2096	0	50	100	20	130
Vinyl Chloride	1	60.325	0	50	121	20	130
Chloroethane	1	55.7164	0	50	111	20	130
Trichlorofluoromethane	1	59.7585	0	50	120	20	130
Ethyl ether	1	47.1877	0	50	94	50	130
Furan	1	51.2334	0	50	102	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	58.5064	0	50	117	50	130
Methylene Chloride	1	54.73	0	50	109	50	130
Acrolein	1	231.2351	0	200	116	20	130
Acrylonitrile	1	53.4633	0	50	107	20	130
Iodomethane	1	51.4753	0	50	103	50	130
Acetone	1	256.2464	0	200	128	20	130
Carbon Disulfide	1	51.6448	0	50	103	50	130
t-Butyl Alcohol	1	236.4888	0	200	118	20	130
n-Hexane	1	62.1829	0	50	124	50	130
Di-isopropyl-ether	1	52.3173	0	50	105	50	130
1,1-Dichloroethene	1	55.6887	0	50	111	50	130
Methyl Acetate	1	52.0242	0	50	104	50	130
Methyl-t-butyl ether	1	49.2517	0	50	99	50	130
1,1-Dichloroethane	1	52.3508	0	50	105	50	130
trans-1,2-Dichloroethene	1	51.9025	0	50	104	50	130
Ethyl-t-butyl ether	1	50.9978	0	50	102	50	130
cis-1,2-Dichloroethene	1	52.6163	0	50	105	50	130
Bromochloromethane	1	54.4239	0	50	109	50	130
2,2-Dichloropropane	1	51.5118	0	50	103	50	130
Ethyl acetate	1	49.5079	0	50	99	50	130
1,4-Dioxane	1	2579.307	0	2500	103	50	130
1,1-Dichloropropene	1	56.8337	0	50	114	50	130
Chloroform	1	48.9958	0	50	98	50	130
Cyclohexane	1	59.6058	0	50	119	50	130
1,2-Dichloroethane	1	51.6307	0	50	103	50	130
2-Butanone	1	50.9181	0	50	102	20	130
1,1,1-Trichloroethane	1	53.829	0	50	108	50	130
Carbon Tetrachloride	1	57.1914	0	50	114	50	130
Vinyl Acetate	1	49.2084	0	50	98	50	130
Bromodichloromethane	1	51.8479	0	50	104	50	130
Methylcyclohexane	1	61.1091	0	50	122	50	130
Dibromomethane	1	50.2798	0	50	101	50	130
1,2-Dichloropropane	1	53.5327	0	50	107	50	130
Trichloroethene	1	53.1725	0	50	106	50	130
Benzene	1	53.3992	0	50	107	50	130
tert-Amyl methyl ether	1	49.8567	0	50	100	50	130
Iso-propylacetate	1	48.2535	0	50	97	50	130
Methyl methacrylate	1	51.1178	0	50	102	50	130
Dibromochloromethane	1	50.5728	0	50	101	50	130
2-Chloroethylvinylether	1	49.4295	0	50	99	50	130
cis-1,3-Dichloropropene	1	51.1234	0	50	102	50	130
trans-1,3-Dichloropropene	1	49.421	0	50	99	50	130
Ethyl methacrylate	1	51.2719	0	50	103	50	130
1,1,2-Trichloroethane	1	51.4466	0	50	103	50	130
1,2-Dibromoethane	1	51.9441	0	50	104	50	130
1,3-Dichloropropane	1	50.7415	0	50	101	50	130
4-Methyl-2-Pentanone	1	48.6667	0	50	97	20	130
2-Hexanone	1	49.0625	0	50	98	20	130
Tetrachloroethene	1	51.2513	0	50	103	50	130
Toluene	1	50.4444	0	50	101	50	130
1,1,1,2-Tetrachloroethane	1	51.1673	0	50	102	50	130
Chlorobenzene	1	50.2925	0	50	101	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84511

Method: 8260C | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	49.7607	0	50	100	50	130
n-Amyl acetate	1	49.9789	0	50	100	50	130
Bromoform	**1**	**50.0664**	**0**	**50**	**100**	**20**	**130**
Ethylbenzene	**1**	**47.867**	**0**	**50**	**96**	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**53.2481**	**0**	**50**	**106**	**50**	**130**
Styrene	**1**	**50.023**	**0**	**50**	**100**	**50**	**130**
m&p-Xylenes	**1**	**101.1374**	**0**	**100**	**101**	**50**	**130**
o-Xylene	**1**	**49.6682**	**0**	**50**	**99**	**50**	**130**
trans-1,4-Dichloro-2-butene	1	50.6583	0	50	101	20	130
1,3-Dichlorobenzene	**1**	**47.5555**	**0**	**50**	**95**	**50**	**130**
1,4-Dichlorobenzene	**1**	**45.995**	**0**	**50**	**92**	**50**	**130**
1,2-Dichlorobenzene	**1**	**48.274**	**0**	**50**	**97**	**50**	**130**
Isopropylbenzene	**1**	**51.6418**	**0**	**50**	**103**	**50**	**130**
Cyclohexanone	1	224.8213	0	250	90	50	130
Camphene	1	57.3178	0	50	115	50	130
1,2,3-Trichloropropane	1	49.3215	0	50	99	50	130
2-Chlorotoluene	1	51.8229	0	50	104	50	130
p-Ethyltoluene	1	52.9911	0	50	106	50	130
4-Chlorotoluene	1	49.8092	0	50	100	50	130
n-Propylbenzene	1	52.1014	0	50	104	50	130
Bromobenzene	1	51.1734	0	50	102	50	130
1,3,5-Trimethylbenzene	1	51.6962	0	50	103	50	130
Butyl methacrylate	1	50.1296	0	50	100	50	130
t-Butylbenzene	1	51.9598	0	50	104	50	130
1,2,4-Trimethylbenzene	1	49.3426	0	50	99	50	130
sec-Butylbenzene	1	53.8112	0	50	108	50	130
4-Isopropyltoluene	1	51.7824	0	50	104	50	130
n-Butylbenzene	1	52.9386	0	50	106	50	130
p-Diethylbenzene	1	51.3562	0	50	103	50	130
1,2,4,5-Tetramethylbenzene	1	48.8215	0	50	98	50	130
1,2-Dibromo-3-Chloropropane	**1**	**47.6229**	**0**	**50**	**95**	**50**	**130**
Camphor	1	499.9144	0	500	100	50	130
Hexachlorobutadiene	1	53.4755	0	50	107	50	130
1,2,4-Trichlorobenzene	**1**	**45.5561**	**0**	**50**	**91**	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**46.4721**	**0**	**50**	**93**	**50**	**130**
Naphthalene	1	46.8833	0	50	94	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84511

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125348.D	AD15955-006(MS)	2/28/2020 11:07:00 PM
Non Spike(If applicable):	6M125347.D	AD15955-006	2/28/2020 10:43:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.4189	0	50	41	20	130
Dichlorodifluoromethane	**1**	**41.0464**	**0**	**50**	**82**	**20**	**130**
Chloromethane	**1**	**39.6078**	**0**	**50**	**79**	**20**	**130**
Bromomethane	**1**	**29.2553**	**0**	**50**	**59**	**20**	**130**
Vinyl Chloride	**1**	**37.9473**	**0**	**50**	**76**	**20**	**130**
Chloroethane	**1**	**36.3763**	**0**	**50**	**73**	**20**	**130**
Trichlorofluoromethane	**1**	**34.3314**	**0**	**50**	**69**	**20**	**130**
Ethyl ether	1	35.8502	0	50	72	50	130
Furan	1	33.3529	0	50	67	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**29.2211**	**0**	**50**	**58**	**50**	**130**
Methylene Chloride	**1**	**37.7284**	**0**	**50**	**75**	**50**	**130**
Acrolein	1	0	0	200	0*	20	130
Acrylonitrile	1	30.0103	0	50	60	20	130
Iodomethane	1	26.6024	0	50	53	50	130
Acetone	**1**	**212.8311**	**63.7031**	**200**	**75**	**20**	**130**
Carbon Disulfide	**1**	**22.2625**	**0**	**50**	**45***	**50**	**130**
t-Butyl Alcohol	1	155.1517	0	200	78	20	130
n-Hexane	1	21.3758	0	50	43*	50	130
Di-isopropyl-ether	1	36.7486	0	50	73	50	130
1,1-Dichloroethene	**1**	**38.2415**	**0**	**50**	**76**	**50**	**130**
Methyl Acetate	**1**	**0**	**0**	**50**	**0***	**50**	**130**
Methyl-t-butyl ether	**1**	**37.0684**	**0**	**50**	**74**	**50**	**130**
1,1-Dichloroethane	**1**	**33.1814**	**0**	**50**	**66**	**50**	**130**
trans-1,2-Dichloroethene	**1**	**26.3857**	**0**	**50**	**53**	**50**	**130**
Ethyl-t-butyl ether	1	36.2905	0	50	73	50	130
cis-1,2-Dichloroethene	**1**	**26.8759**	**0**	**50**	**54**	**50**	**130**
Bromochloromethane	**1**	**32.0924**	**0**	**50**	**64**	**50**	**130**
2,2-Dichloropropane	1	29.4464	0	50	59	50	130
Ethyl acetate	1	18.8869	0	50	38*	50	130
1,4-Dioxane	**1**	**1662.587**	**0**	**2500**	**67**	**50**	**130**
1,1-Dichloropropene	1	26.3623	0	50	53	50	130
Chloroform	**1**	**29.6144**	**0**	**50**	**59**	**50**	**130**
Cyclohexane	**1**	**23.6683**	**0**	**50**	**47***	**50**	**130**
1,2-Dichloroethane	**1**	**31.6507**	**0**	**50**	**63**	**50**	**130**
2-Butanone	**1**	**40.0531**	**6.1562**	**50**	**68**	**20**	**130**
1,1,1-Trichloroethane	**1**	**28.9145**	**0**	**50**	**58**	**50**	**130**
Carbon Tetrachloride	**1**	**26.9188**	**0**	**50**	**54**	**50**	**130**
Vinyl Acetate	1	19.978	0	50	40*	50	130
Bromodichloromethane	**1**	**26.4326**	**0**	**50**	**53**	**50**	**130**
Methylcyclohexane	**1**	**19.7266**	**0**	**50**	**39***	**50**	**130**
Dibromomethane	1	27.7659	0	50	56	50	130
1,2-Dichloropropane	**1**	**32.2995**	**0**	**50**	**65**	**50**	**130**
Trichloroethene	**1**	**44.9703**	**0**	**50**	**90**	**50**	**130**
Benzene	**1**	**30.1691**	**0**	**50**	**60**	**50**	**130**
tert-Amyl methyl ether	1	34.6361	0	50	69	50	130
Iso-propylacetate	1	0	0	50	0*	50	130
Methyl methacrylate	1	38.9664	0	50	78	50	130
Dibromochloromethane	**1**	**24.1033**	**0**	**50**	**48***	**50**	**130**
2-Chloroethylvinylether	1	30.6742	0	50	61	50	130
cis-1,3-Dichloropropene	**1**	**24.1264**	**0**	**50**	**48***	**50**	**130**
trans-1,3-Dichloropropene	**1**	**20.7127**	**0**	**50**	**41***	**50**	**130**
Ethyl methacrylate	1	0	0	50	0*	50	130
1,1,2-Trichloroethane	**1**	**20.8554**	**0**	**50**	**42***	**50**	**130**
1,2-Dibromoethane	**1**	**25.562**	**0**	**50**	**51**	**50**	**130**
1,3-Dichloropropane	1	28.5428	0	50	57	50	130
4-Methyl-2-Pentanone	**1**	**32.4394**	**0**	**50**	**65**	**20**	**130**
2-Hexanone	**1**	**29.4717**	**0**	**50**	**59**	**20**	**130**
Tetrachloroethene	**1**	**23.5016**	**10.0231**	**50**	**27***	**50**	**130**
Toluene	**1**	**23.6755**	**0**	**50**	**47***	**50**	**130**
1,1,1,2-Tetrachloroethane	1	22.3918	0	50	45*	50	130
Chlorobenzene	**1**	**19.4964**	**0**	**50**	**39***	**50**	**130**

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84511

Method: 8260C | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	0	0	50	0*	50	130
n-Amyl acetate	1	2.758	0	50	5.5*	50	130
Bromoform	**1**	**21.5086**	**0**	**50**	**43**	**20**	**130**
Ethylbenzene	**1**	**19.583**	**0**	**50**	**39***	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**0**	**0**	**50**	**0***	**50**	**130**
Styrene	**1**	**17.4496**	**0**	**50**	**35***	**50**	**130**
m&p-Xylenes	**1**	**38.1631**	**0**	**100**	**38***	**50**	**130**
o-Xylene	**1**	**19.0202**	**0**	**50**	**38***	**50**	**130**
trans-1,4-Dichloro-2-butene	1	15.9487	0	50	32	20	130
1,3-Dichlorobenzene	**1**	**11.7124**	**0**	**50**	**23***	**50**	**130**
1,4-Dichlorobenzene	**1**	**10.9696**	**0**	**50**	**22***	**50**	**130**
1,2-Dichlorobenzene	**1**	**11.7798**	**0**	**50**	**24***	**50**	**130**
Isopropylbenzene	**1**	**17.238**	**0**	**50**	**34***	**50**	**130**
Cyclohexanone	1	147.4141	0	250	59	50	130
Camphene	1	14.6221	0	50	29*	50	130
1,2,3-Trichloropropane	1	20.9673	0	50	42*	50	130
2-Chlorotoluene	1	14.7203	0	50	29*	50	130
p-Ethyltoluene	1	15.5178	0	50	31*	50	130
4-Chlorotoluene	1	14.3746	0	50	29*	50	130
n-Propylbenzene	1	15.5093	0	50	31*	50	130
Bromobenzene	1	16.9188	0	50	34*	50	130
1,3,5-Trimethylbenzene	1	14.8405	0	50	30*	50	130
Butyl methacrylate	1	4.606	0	50	9.2*	50	130
t-Butylbenzene	1	14.3583	0	50	29*	50	130
1,2,4-Trimethylbenzene	1	13.8115	1.8282	50	24*	50	130
sec-Butylbenzene	1	13.2749	0	50	27*	50	130
4-Isopropyltoluene	1	12.2942	0	50	25*	50	130
n-Butylbenzene	1	11.0183	0	50	22*	50	130
p-Diethylbenzene	1	11.073	0	50	22*	50	130
1,2,4,5-Tetramethylbenzene	1	9.3924	0	50	19*	50	130
1,2-Dibromo-3-Chloropropane	**1**	**12.6883**	**0**	**50**	**25***	**50**	**130**
Camphor	1	271.2073	0	500	54	50	130
Hexachlorobutadiene	1	7.0787	0	50	14*	50	130
1,2,4-Trichlorobenzene	**1**	**6.3142**	**0**	**50**	**13***	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**5.7861**	**0**	**50**	**12***	**50**	**130**
Naphthalene	1	10.1571	0	50	20*	50	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84511

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125349.D	AD15955-006(MSD)	2/28/2020 11:31:00 PM
Non Spike(If applicable):	6M125347.D	AD15955-006	2/28/2020 10:43:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Chlorodifluoromethane	1	20.656	0	50	41	20	130
Dichlorodifluoromethane	1	43.7511	0	50	88	20	130
Chloromethane	1	38.7529	0	50	78	20	130
Bromomethane	1	31.2456	0	50	62	20	130
Vinyl Chloride	1	39.1944	0	50	78	20	130
Chloroethane	1	36.5334	0	50	73	20	130
Trichlorofluoromethane	1	37.0453	0	50	74	20	130
Ethyl ether	1	36.0384	0	50	72	50	130
Furan	1	33.4534	0	50	67	50	130
1,1,2-Trichloro-1,2,2-trifluoroethane	1	33.101	0	50	66	50	130
Methylene Chloride	1	37.0293	0	50	74	50	130
Acrolein	1	0	0	200	0*	20	130
Acrylonitrile	1	31.5564	0	50	63	20	130
Iodomethane	1	29.7926	0	50	60	50	130
Acetone	1	215.5151	63.7031	200	76	20	130
Carbon Disulfide	1	25.7514	0	50	52	50	130
t-Butyl Alcohol	1	153.6264	0	200	77	20	130
n-Hexane	1	24.6247	0	50	49*	50	130
Di-isopropyl-ether	1	37.1495	0	50	74	50	130
1,1-Dichloroethene	1	37.7183	0	50	75	50	130
Methyl Acetate	1	0	0	50	0*	50	130
Methyl-t-butyl ether	1	37.5618	0	50	75	50	130
1,1-Dichloroethane	1	34.5827	0	50	69	50	130
trans-1,2-Dichloroethene	1	28.5445	0	50	57	50	130
Ethyl-t-butyl ether	1	37.9147	0	50	76	50	130
cis-1,2-Dichloroethene	1	28.5081	0	50	57	50	130
Bromochloromethane	1	33.8881	0	50	68	50	130
2,2-Dichloropropane	1	31.7148	0	50	63	50	130
Ethyl acetate	1	18.9737	0	50	38*	50	130
1,4-Dioxane	1	1705.955	0	2500	68	50	130
1,1-Dichloropropene	1	30.0522	0	50	60	50	130
Chloroform	1	31.4849	0	50	63	50	130
Cyclohexane	1	27.6901	0	50	55	50	130
1,2-Dichloroethane	1	33.0613	0	50	66	50	130
2-Butanone	1	39.2703	6.1562	50	66	20	130
1,1,1-Trichloroethane	1	32.009	0	50	64	50	130
Carbon Tetrachloride	1	30.5923	0	50	61	50	130
Vinyl Acetate	1	20.5473	0	50	41*	50	130
Bromodichloromethane	1	30.164	0	50	60	50	130
Methylcyclohexane	1	23.0604	0	50	46*	50	130
Dibromomethane	1	30.3271	0	50	61	50	130
1,2-Dichloropropane	1	33.2345	0	50	66	50	130
Trichloroethene	1	51.2327	0	50	102	50	130
Benzene	1	32.2129	0	50	64	50	130
tert-Amyl methyl ether	1	36.3974	0	50	73	50	130
Iso-propylacetate	1	7.0838	0	50	14*	50	130
Methyl methacrylate	1	0	0	50	0*	50	130
Dibromochloromethane	1	27.9625	0	50	56	50	130
2-Chloroethylvinylether	1	31.4159	0	50	63	50	130
cis-1,3-Dichloropropene	1	26.6618	0	50	53	50	130
trans-1,3-Dichloropropene	1	23.8532	0	50	48*	50	130
Ethyl methacrylate	1	5.6991	0	50	11*	50	130
1,1,2-Trichloroethane	1	27.3993	0	50	55	50	130
1,2-Dibromoethane	1	27.902	0	50	56	50	130
1,3-Dichloropropane	1	30.5881	0	50	61	50	130
4-Methyl-2-Pentanone	1	33.8637	0	50	68	20	130
2-Hexanone	1	31.5838	0	50	63	20	130
Tetrachloroethene	1	28.3761	10.0231	50	37*	50	130
Toluene	1	27.533	0	50	55	50	130
1,1,1,2-Tetrachloroethane	1	26.6227	0	50	53	50	130
Chlorobenzene	1	23.8286	0	50	48*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: MBS84511

Method: 8260C | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
n-Butyl acrylate	1	0	0	50	0*	50	130
n-Amyl acetate	1	2.8808	0	50	5.8*	50	130
Bromoform	**1**	**25.2713**	**0**	**50**	**51**	**20**	**130**
Ethylbenzene	**1**	**24.0696**	**0**	**50**	**48***	**50**	**130**
1,1,2,2-Tetrachloroethane	**1**	**0**	**0**	**50**	**0***	**50**	**130**
Styrene	**1**	**22.2526**	**0**	**50**	**45***	**50**	**130**
m&p-Xylenes	**1**	**49.3686**	**0**	**100**	**49***	**50**	**130**
o-Xylene	**1**	**23.8**	**0**	**50**	**48***	**50**	**130**
trans-1,4-Dichloro-2-butene	1	18.713	0	50	37	20	130
1,3-Dichlorobenzene	**1**	**16.734**	**0**	**50**	**33***	**50**	**130**
1,4-Dichlorobenzene	**1**	**16.0152**	**0**	**50**	**32***	**50**	**130**
1,2-Dichlorobenzene	**1**	**16.4635**	**0**	**50**	**33***	**50**	**130**
Isopropylbenzene	**1**	**22.448**	**0**	**50**	**45***	**50**	**130**
Cyclohexanone	1	145.5887	0	250	58	50	130
Camphene	1	17.8664	0	50	36*	50	130
1,2,3-Trichloropropane	1	25.0072	0	50	50	50	130
2-Chlorotoluene	1	20.2826	0	50	41*	50	130
p-Ethyltoluene	1	20.9183	0	50	42*	50	130
4-Chlorotoluene	1	18.7475	0	50	37*	50	130
n-Propylbenzene	1	20.3731	0	50	41*	50	130
Bromobenzene	1	21.4368	0	50	43*	50	130
1,3,5-Trimethylbenzene	1	20.1005	0	50	40*	50	130
Butyl methacrylate	1	12.1559	0	50	24*	50	130
t-Butylbenzene	1	19.3274	0	50	39*	50	130
1,2,4-Trimethylbenzene	1	19.1543	1.8282	50	35*	50	130
sec-Butylbenzene	1	17.74	0	50	35*	50	130
4-Isopropyltoluene	1	17.2505	0	50	35*	50	130
n-Butylbenzene	1	15.6131	0	50	31*	50	130
p-Diethylbenzene	1	15.8027	0	50	32*	50	130
1,2,4,5-Tetramethylbenzene	1	13.8337	0	50	28*	50	130
1,2-Dibromo-3-Chloropropane	**1**	**18.5278**	**0**	**50**	**37***	**50**	**130**
Camphor	1	309.2598	0	500	62	50	130
Hexachlorobutadiene	1	10.3148	0	50	21*	50	130
1,2,4-Trichlorobenzene	**1**	**9.9048**	**0**	**50**	**20***	**50**	**130**
1,2,3-Trichlorobenzene	**1**	**9.3295**	**0**	**50**	**19***	**50**	**130**
Naphthalene	1	14.1554	0	50	28*	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84511

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6M125349.D	AD15955-006(MSD)	2/28/2020 11:31:00 PM
Duplicate(If applicable):	6M125348.D	AD15955-006(MS)	2/28/2020 11:07:00 PM
Inst Blank(If applicable):			

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Chlorodifluoromethane	1	20.656	20.4189	1.2	30
Dichlorodifluoromethane	**1**	**43.7511**	**41.0464**	**6.4**	**30**
Chloromethane	**1**	**38.7529**	**39.6078**	**2.2**	**30**
Bromomethane	**1**	**31.2456**	**29.2553**	**6.6**	**30**
Vinyl Chloride	**1**	**39.1944**	**37.9473**	**3.2**	**40**
Chloroethane	**1**	**36.5334**	**36.3763**	**0.43**	**30**
Trichlorofluoromethane	**1**	**37.0453**	**34.3314**	**7.6**	**30**
Ethyl ether	1	36.0384	35.8502	0.52	30
Furan	1	33.4534	33.3529	0.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	**1**	**33.101**	**29.2211**	**12**	**30**
Methylene Chloride	**1**	**37.0293**	**37.7284**	**1.9**	**30**
Acrolein	1	0	0	NA	30
Acrylonitrile	1	31.5564	30.0103	5	30
Iodomethane	1	29.7926	26.6024	11	30
Acetone	**1**	**215.5151**	**212.8311**	**1.3**	**30**
Carbon Disulfide	**1**	**25.7514**	**22.2625**	**15**	**30**
t-Butyl Alcohol	1	153.6264	155.1517	0.99	30
n-Hexane	1	24.6247	21.3758	14	30
Di-isopropyl-ether	1	37.1495	36.7486	1.1	30
1,1-Dichloroethene	**1**	**37.7183**	**38.2415**	**1.4**	**40**
Methyl Acetate	**1**	**0**	**0**	**NA**	**30**
Methyl-t-butyl ether	**1**	**37.5618**	**37.0684**	**1.3**	**30**
1,1-Dichloroethane	**1**	**34.5827**	**33.1814**	**4.1**	**40**
trans-1,2-Dichloroethene	**1**	**28.5445**	**26.3857**	**7.9**	**30**
Ethyl-t-butyl ether	1	37.9147	36.2905	4.4	30
cis-1,2-Dichloroethene	**1**	**28.5081**	**26.8759**	**5.9**	**30**
Bromochloromethane	**1**	**33.8881**	**32.0924**	**5.4**	**30**
2,2-Dichloropropane	1	31.7148	29.4464	7.4	30
Ethyl acetate	1	18.9737	18.8869	0.46	30
1,4-Dioxane	**1**	**1705.955**	**1662.587**	**2.6**	**30**
1,1-Dichloropropene	1	30.0522	26.3623	13	30
Chloroform	**1**	**31.4849**	**29.6144**	**6.1**	**40**
Cyclohexane	**1**	**27.6901**	**23.6683**	**16**	**30**
1,2-Dichloroethane	**1**	**33.0613**	**31.6507**	**4.4**	**40**
2-Butanone	**1**	**39.2703**	**40.0531**	**2**	**40**
1,1,1-Trichloroethane	**1**	**32.009**	**28.9145**	**10**	**30**
Carbon Tetrachloride	**1**	**30.5923**	**26.9188**	**13**	**40**
Vinyl Acetate	1	20.5473	19.978	2.8	30
Bromodichloromethane	**1**	**30.164**	**26.4326**	**13**	**30**
Methylcyclohexane	**1**	**23.0604**	**19.7266**	**16**	**30**
Dibromomethane	1	30.3271	27.7659	8.8	30
1,2-Dichloropropane	**1**	**33.2345**	**32.2995**	**2.9**	**30**
Trichloroethene	**1**	**51.2327**	**44.9703**	**13**	**40**
Benzene	**1**	**32.2129**	**30.1691**	**6.6**	**40**
tert-Amyl methyl ether	1	36.3974	34.6361	5	30
Iso-propylacetate	1	7.0838	0	200*	30
Methyl methacrylate	1	0	38.9664	200*	30
Dibromochloromethane	**1**	**27.9625**	**24.1033**	**15**	**30**
2-Chloroethylvinylether	1	31.4159	30.6742	2.4	30
cis-1,3-Dichloropropene	**1**	**26.6618**	**24.1264**	**10**	**30**
trans-1,3-Dichloropropene	**1**	**23.8532**	**20.7127**	**14**	**30**
Ethyl methacrylate	1	5.6991	0	200*	30
1,1,2-Trichloroethane	**1**	**27.3993**	**20.8554**	**27**	**30**
1,2-Dibromoethane	**1**	**27.902**	**25.562**	**8.8**	**30**
1,3-Dichloropropane	1	30.5881	28.5428	6.9	30
4-Methyl-2-Pentanone	**1**	**33.8637**	**32.4394**	**4.3**	**30**
2-Hexanone	**1**	**31.5838**	**29.4717**	**6.9**	**30**
Tetrachloroethene	**1**	**28.3761**	**23.5016**	**19**	**40**
Toluene	**1**	**27.533**	**23.6755**	**15**	**40**
1,1,1,2-Tetrachloroethane	1	26.6227	22.3918	17	30
Chlorobenzene	**1**	**23.8286**	**19.4964**	**20**	**40**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: MBS84511

Method: 8260C Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
n-Butyl acrylate	1	0	0	NA	30
n-Amyl acetate	1	2.8808	2.758	4.4	30
Bromoform	**1**	**25.2713**	**21.5086**	**16**	**30**
Ethylbenzene	**1**	**24.0696**	**19.583**	**21**	**30**
1,1,2,2-Tetrachloroethane	**1**	**0**	**0**	**NA**	**30**
Styrene	**1**	**22.2526**	**17.4496**	**24**	**30**
m&p-Xylenes	**1**	**49.3686**	**38.1631**	**26**	**30**
o-Xylene	**1**	**23.8**	**19.0202**	**22**	**30**
trans-1,4-Dichloro-2-butene	1	18.713	15.9487	16	30
1,3-Dichlorobenzene	**1**	**16.734**	**11.7124**	**35***	**30**
1,4-Dichlorobenzene	**1**	**16.0152**	**10.9696**	**37**	**40**
1,2-Dichlorobenzene	**1**	**16.4635**	**11.7798**	**33**	**40**
Isopropylbenzene	**1**	**22.448**	**17.238**	**26**	**30**
Cyclohexanone	1	145.5887	147.4141	1.2	30
Camphene	1	17.8664	14.6221	20	30
1,2,3-Trichloropropane	1	25.0072	20.9673	18	30
2-Chlorotoluene	1	20.2826	14.7203	32*	30
p-Ethyltoluene	1	20.9183	15.5178	30	30
4-Chlorotoluene	1	18.7475	14.3746	26	30
n-Propylbenzene	1	20.3731	15.5093	27	40
Bromobenzene	1	21.4368	16.9188	24	30
1,3,5-Trimethylbenzene	1	20.1005	14.8405	30	30
Butyl methacrylate	1	12.1559	4.606	90*	30
t-Butylbenzene	1	19.3274	14.3583	30	30
1,2,4-Trimethylbenzene	1	19.1543	13.8115	32*	30
sec-Butylbenzene	1	17.74	13.2749	29	40
4-Isopropyltoluene	1	17.2505	12.2942	34*	30
n-Butylbenzene	1	15.6131	11.0183	35*	30
p-Diethylbenzene	1	15.8027	11.073	35*	30
1,2,4,5-Tetramethylbenzene	1	13.8337	9.3924	38*	30
1,2-Dibromo-3-Chloropropane	**1**	**18.5278**	**12.6883**	**37***	**30**
Camphor	1	309.2598	271.2073	13	30
Hexachlorobutadiene	1	10.3148	7.0787	37*	30
1,2,4-Trichlorobenzene	**1**	**9.9048**	**6.3142**	**44***	**30**
1,2,3-Trichlorobenzene	**1**	**9.3295**	**5.7861**	**47***	**30**
Naphthalene	1	14.1554	10.1571	33*	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: DAILY BLANK
Blank Data File: 6M125344.D
Matrix: Soil

Blank Analysis Date: 02/28/20 21:32
Blank Extraction Date: NA
(If Applicable)
Method: EPA 8260C

Sample Number	Data File	Analysis Date
AD15946-002	6M125361.D	02/29/20 04:16
AD15955-006(MSD	6M125349.D	02/28/20 23:31
AD15955-006(MS)	6M125348.D	02/28/20 23:07
AD15955-006	6M125347.D	02/28/20 22:43
MBS84511	6M125345.D	02/28/20 21:55

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M125074.D
Analysis Date: 02/23/20 19:19
Method: EPA 8260C

Tune Scan/Time Range: Average of 7.385 to 7.397 min

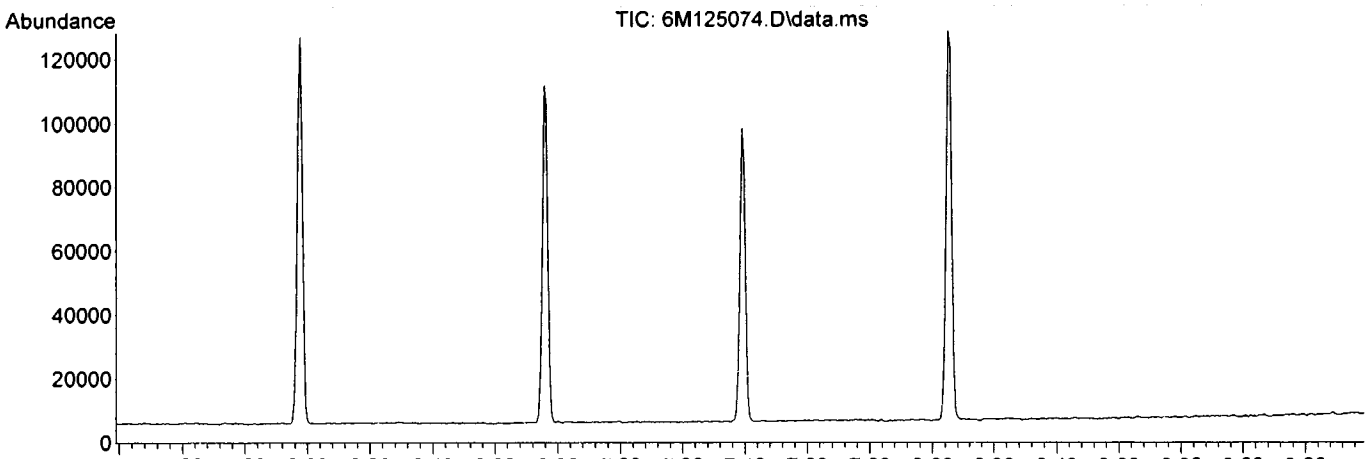
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	17.6	2677	PASS
75	95	30	60	49.3	7516	PASS
95	95	100	100	100.0	15251	PASS
96	95	5	9	6.2	947	PASS
173	174	0.00	2	0.5	67	PASS
174	95	50	100	91.8	13997	PASS
175	174	5	9	7.5	1047	PASS
176	174	95	101	98.2	13740	PASS
177	176	5	9	6.7	922	PASS

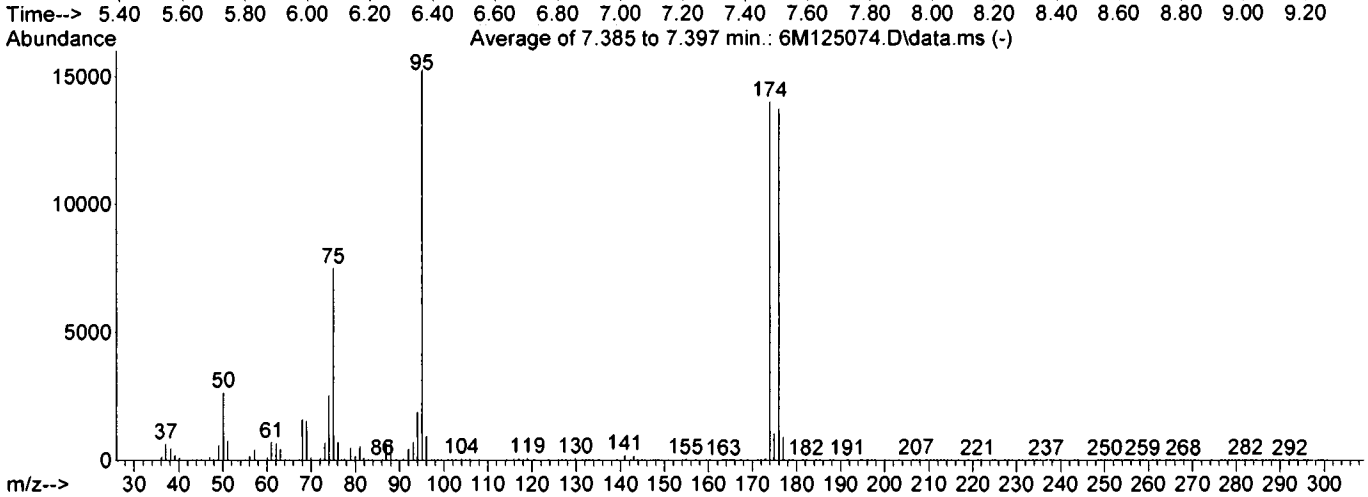
Data File	Sample Number	Analysis Date:
6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33
6M125078.D	CAL @ 1 PPB	02/23/20 20:56
6M125079.D	CAL @ 2 PPB	02/23/20 21:20
6M125080.D	CAL @ 5 PPB	02/23/20 21:44
6M125081.D	CAL @ 20 PPB	02/23/20 22:07
6M125082.D	CAL @ 50 PPB	02/23/20 22:31
6M125083.D	CAL @ 100 PPB	02/23/20 22:55
6M125084.D	250 PPB	02/23/20 23:19
6M125085.D	BLK	02/24/20 00:52
6M125086.D	CAL @ 250 PPB	02/24/20 01:15
6M125087.D	CAL @ 500 PPB	02/24/20 01:41
6M125088.D	BLK	02/24/20 02:05
6M125089.D	BLK	02/24/20 02:29
6M125090.D	BLK	02/24/20 02:53
6M125091.D	BLK	02/24/20 03:16
6M125092.D	ICV	02/24/20 03:40
6M125093.D	BLK	02/24/20 04:04
6M125094.D	BLK	02/24/20 04:28
6M125095.D	BLK	02/24/20 04:51
6M125096.D	BLK	02/24/20 05:15
6M125097.D	DAILY BLANK	02/24/20 05:39

Data Path : G:\GcMsData\2020\GCMS_6\Data\02-23-20\
Data File : 6M125074.D
Acq On : 23 Feb 2020 19:19
Operator : BK
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_6\MethodQt\6M_S0223.M
Title : @GCMS_6,ug,624,8260
Last Update : Mon Feb 24 05:59:51 2020





Spectrum Information: Average of 7.385 to 7.397 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.6	2677	PASS
75	95	30	60	49.3	7516	PASS
95	95	100	100	100.0	15251	PASS
96	95	5	9	6.2	947	PASS
173	174	0.00	2	0.5	67	PASS
174	95	50	100	91.8	13997	PASS
175	174	5	9	7.5	1047	PASS
176	174	95	101	98.2	13740	PASS
177	176	5	9	6.7	922	PASS

Form 5

Tune Name: BFB TUNE
Instrument: GCMS 6

Data File: 6M125340.D
Analysis Date: 02/28/20 19:56
Method: EPA 8260C

Tune Scan/Time Range: Scan 952

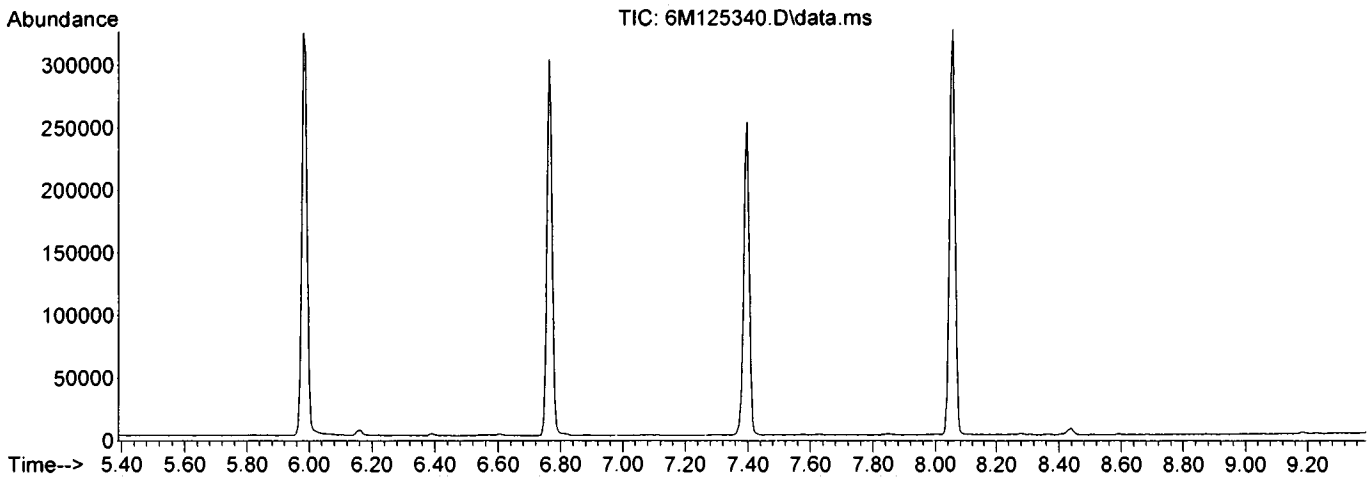
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
50	95	15	40	18.4	7913	PASS
75	95	30	60	51.5	22184	PASS
95	95	100	100	100.0	43056	PASS
96	95	5	9	6.2	2652	PASS
173	174	0.00	2	1.4	504	PASS
174	95	50	100	82.4	35488	PASS
175	174	5	9	8.2	2912	PASS
176	174	95	101	96.6	34296	PASS
177	176	5	9	6.5	2220	PASS

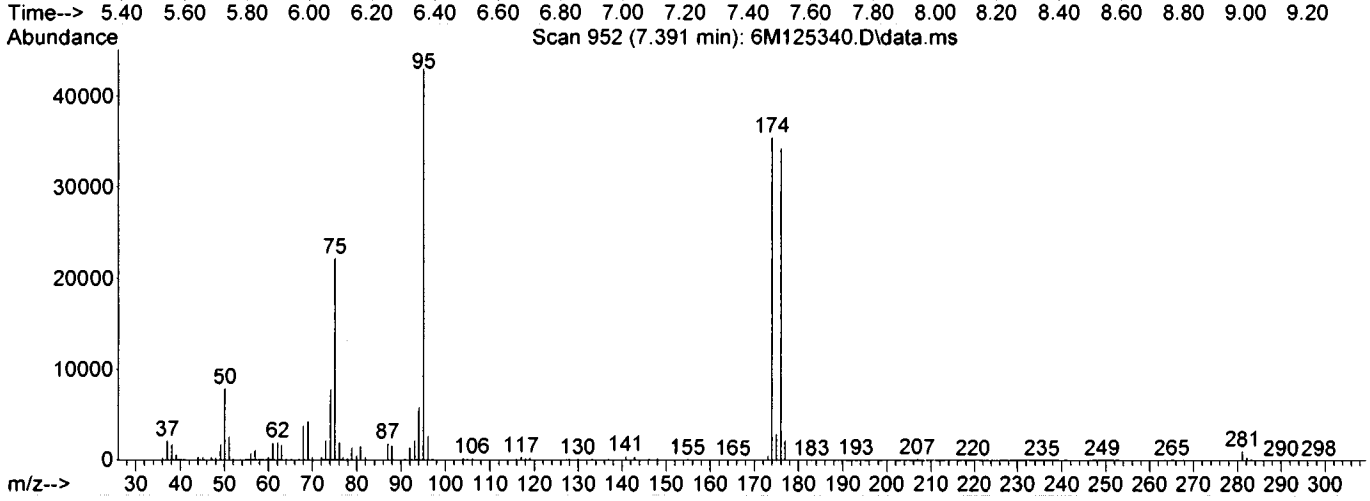
Data File	Sample Number	Analysis Date:
6M125341.D	50 PPB	02/28/20 20:20
6M125342.D	CAL @ 50 PPB	02/28/20 20:44
6M125343.D	BLK	02/28/20 21:08
6M125344.D	DAILY BLANK	02/28/20 21:32
6M125345.D	MBS84511	02/28/20 21:55
6M125346.D	BLK	02/28/20 22:19
6M125347.D	AD15955-006	02/28/20 22:43
6M125348.D	AD15955-006(MS)	02/28/20 23:07
6M125349.D	AD15955-006(MSD	02/28/20 23:31
6M125350.D	MBS84512	02/28/20 23:54
6M125351.D	BLK	02/29/20 00:18
6M125352.D	AD15955-021	02/29/20 00:42
6M125353.D	AD15955-022	02/29/20 01:06
6M125354.D	AD15955-023	02/29/20 01:29
6M125355.D	AD15955-024	02/29/20 01:53
6M125356.D	AD15955-025	02/29/20 02:17
6M125357.D	AD15955-026	02/29/20 02:41
6M125358.D	AD15956-003	02/29/20 03:05
6M125359.D	AD15956-011	02/29/20 03:28
6M125360.D	AD15956-015	02/29/20 03:52
6M125361.D	AD15946-002	02/29/20 04:16
6M125362.D	AD15945-001	02/29/20 04:40
6M125363.D	BLK	02/29/20 05:04
6M125364.D	BLK	02/29/20 05:28
6M125365.D	BLK	02/29/20 05:51
6M125366.D	BLK	02/29/20 06:15
6M125367.D	BLK	02/29/20 06:39
6M125368.D	BLK	02/29/20 07:03
6M125369.D	BLK	02/29/20 07:27

Data Path : G:\GcMsData\2020\GCMS_6\Data\02-2820\
Data File : 6M125340.D
Acq On : 28 Feb 2020 19:56
Operator : SG
Sample : BFB TUNE
Misc : S,5G
ALS Vial : 4 Sample Multiplier: 1

Integration File: RTEINT.P

Method : G:\GcMsData\2020\GCMS_6\MethodQt\6M_S0223.M
Title : @GCMS_6,ug,624,8260
Last Update : Mon Feb 24 05:59:51 2020





Spectrum Information: Scan 952

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	7913	PASS
75	95	30	60	51.5	22184	PASS
95	95	100	100	100.0	43056	PASS
96	95	5	9	6.2	2652	PASS
173	174	0.00	2	1.4	504	PASS
174	95	50	100	82.4	35488	PASS
175	174	5	9	8.2	2912	PASS
176	174	95	101	96.6	34296	PASS
177	176	5	9	6.5	2220	PASS

0022703 0038

Form 6
Initial Calibration

Method: EPA 8260C

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M125081.D	CAL @ 20 PPB	02/23/20 22:07	2	6M125080.D	CAL @ 5 PPB	02/23/20 21:44
3	6M125079.D	CAL @ 2 PPB	02/23/20 21:20	4	6M125082.D	CAL @ 50 PPB	02/23/20 22:31
5	6M125083.D	CAL @ 100 PPB	02/23/20 22:55	6	6M125086.D	CAL @ 250 PPB	02/24/20 01:15
7	6M125087.D	CAL @ 500 PPB	02/24/20 01:41	8	6M125078.D	CAL @ 1 PPB	02/23/20 20:56
9	6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Chlorodifluoromethane	1	0	Avg	0.2553	0.2806	0.2925	0.2602	0.2677	0.2267	0.2773	-----	-----	0.266	1.65	0.992	0.998	8.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dichlorodifluorometha	1	0	Avg	0.1520	0.1576	0.1886	0.1555	0.1635	0.1292	0.1819	-----	-----	0.161	1.64	0.980	0.995	12	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloromethane	1	0	Avg	0.1668	0.1888	0.1872	0.1614	0.1650	0.1556	0.1696	-----	-----	0.171	1.81	0.998	1.00	7.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromomethane	1	0	Avg	0.1300	0.1496	0.1580	0.1308	0.1423	0.1604	0.1874	-----	-----	0.151	2.23	0.994	1.00	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Chloride	1	0	Avg	0.2236	0.2442	0.2401	0.2242	0.2301	0.1922	0.2407	-----	-----	0.228	1.92	0.990	0.997	7.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroethane	1	0	Avg	0.1402	0.1521	0.1497	0.1357	0.1413	0.1278	0.1500	-----	-----	0.142	2.32	0.995	0.999	6.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichlorofluoromethan	1	0	Avg	0.3386	0.3664	0.3793	0.3430	0.3691	0.2973	0.4161	-----	-----	0.359	2.56	0.980	0.996	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl ether	1	0	Avg	0.1338	0.1360	0.1507	0.1325	0.1363	0.1297	0.1193	-----	-----	0.134	2.80	0.998	1.00	7.0	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Furan	1	0	Avg	0.2354	0.2643	0.2720	0.2402	0.2466	0.2260	0.2469	-----	-----	0.247	2.84	0.998	0.999	6.5	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloro-1,2,2-tr	1	0	Avg	0.1557	0.1625	0.1631	0.1508	0.1637	0.1284	0.1858	-----	-----	0.159	3.01	0.977	0.995	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methylene Chloride	1	0	Avg	0.2108	0.2376	0.2347	0.2107	0.2143	0.2055	0.2019	-----	-----	0.217	3.43	1.00	1.00	6.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acrolein	1	0	Avg	0.0252	0.0243	0.0250	0.0255	0.0257	0.0261	0.0250	-----	-----	0.0253	2.92	0.999	1.00	2.4		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Acrylonitrile	1	0	Avg	0.0633	0.0676	0.0611	0.0627	0.0638	0.0645	0.0626	-----	-----	0.0637	3.64	1.00	1.00	3.2		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iodomethane	1	0	Qua	0.1310	0.1147	0.1011	0.1869	0.2280	0.2269	0.2471	-----	-----	0.177	3.16	0.998	1.00	34		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Acetone	1	0	Avg	0.0479	0.0530	0.0570	0.0477	0.0470	0.0503	0.0525	-----	-----	0.0508	3.05	0.999	1.00	7.1	0.10 a	100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Carbon Disulfide	1	0	Avg	0.5163	0.5708	0.6236	0.5339	0.5627	0.4871	0.6090	-----	-----	0.558	3.23	0.990	0.998	8.8	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butyl Alcohol	1	0	Avg	0.0219	0.0231	0.0253	0.0217	0.0228	0.0241	0.0257	-----	-----	0.0236	3.51	0.999	1.00	6.7		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
n-Hexane	1	0	Avg	0.2001	0.2104	0.2068	0.2085	0.2207	0.1572	0.2406	-----	-----	0.206	3.90	0.970	0.992	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Di-isopropyl-ether	1	0	Avg	0.4238	0.4229	0.4357	0.4356	0.4503	0.4172	0.4219	-----	-----	0.430	4.06	1.00	1.00	2.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1-Dichloroethene	1	0	Avg	0.2577	0.2647	0.2843	0.2636	0.2726	0.2296	0.3000	-----	-----	0.268	3.01	0.987	0.997	8.2	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl Acetate	1	0	Avg	0.1436	0.1520	0.1602	0.1428	0.1484	0.1479	0.1411	-----	-----	0.148	3.33	0.999	1.00	4.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl-t-butyl ether	1	0	Avg	0.4804	0.4928	0.4821	0.4875	0.5046	0.4929	0.4585	0.5204	-----	0.490	3.67	0.999	1.00	3.7	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1-Dichloroethane	1	0	Avg	0.3426	0.3504	0.3658	0.3408	0.3557	0.3258	0.3572	-----	-----	0.348	4.03	0.998	0.999	3.8	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,2-Dichloroethe	1	0	Avg	0.2142	0.2276	0.2727	0.2188	0.2267	0.2073	0.2377	-----	-----	0.229	3.67	0.996	0.999	9.4	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl-t-butyl ether	1	0	Avg	0.4733	0.4727	0.4763	0.4856	0.5123	0.4900	0.4698	-----	-----	0.483	4.32	0.999	1.00	3.1	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,2-Dichloroethene	1	0	Avg	0.3250	0.3478	0.3513	0.3282	0.3430	0.3173	0.3442	-----	-----	0.337	4.43	0.999	1.00	3.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromochloromethane	1	0	Avg	0.1350	0.1490	0.1503	0.1421	0.1385	0.1264	0.1175	-----	-----	0.137	4.59	0.998	1.00	8.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2,2-Dichloropropane	1	0	Avg	0.2780	0.2926	0.2879	0.2906	0.3100	0.2766	0.3390	-----	-----	0.296	4.44	0.992	0.999	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl acetate	1	0	Avg	0.1791	0.1682	0.1753	0.1715	0.1771	0.1747	0.1689	-----	-----	0.174	4.46	1.00	1.00	2.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dioxane	1	0	Avg	0.0030	0.0027	0.0030	0.0030	0.0030	0.0032	0.0036	-----	-----	0.00311	5.52	0.998	1.00	8.3		1000.	250.0	100.0	2500.	5000.	12500	25000		
1,1-Dichloropropene	1	0	Avg	0.2747	0.2938	0.2784	0.2834	0.3000	0.2551	0.3211	-----	-----	0.287	4.85	0.990	0.998	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chloroform	1	0	Avg	0.3917	0.4647	0.5624	0.3818	0.3972	0.3730	0.3880	-----	-----	0.423	4.63	1.00	1.00	16	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromofluoromethan	1	0	Avg	0.2647	0.2666	0.2696	0.2639	0.2720	0.2766	0.2688	0.2722	0.2714	0.270	4.73	-1	-1	1.5		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Cyclohexane	1	0	Avg	0.2619	0.2703	0.2737	0.2626	0.2853	0.2065	0.3061	-----	-----	0.267	4.80	0.974	0.993	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichloroethane-d4	1	0	Avg	0.1313	0.1329	0.1285	0.1358	0.1352	0.1323	0.1251	0.1367	0.1365	0.133	4.93	-1	-1	3.0		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
1,2-Dichloroethane	1	0	Avg	0.2692	0.2812	0.2854	0.2662	0.2799	0.2676	0.2609	0.3067	-----	0.277	4.98	1.00	1.00	5.3	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
2-Butanone	1	0	Avg	0.0780	0.0758	0.0874	0.0795	0.0805	0.0846	0.0869	-----	-----	0.0819	4.43	1.00	1.00	5.5	0.10 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,1-Trichloroethane	1	0	Avg	0.3256	0.3530	0.3534	0.3398	0.3571	0.3183	0.3920	-----	-----	0.349	4.76	0.992	0.998	7.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Carbon Tetrachloride	1	0	Avg	0.2912	0.3077	0.2841	0.2983	0.3224	0.2826	0.3702	-----	-----	0.308	4.86	0.987	0.998	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Vinyl Acetate	1	0	Avg	0.3893	0.3956	0.3929	0.4086	0.4280	0.4113	0.3958	-----	-----	0.403	4.05	0.999	1.00	3.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromodichloromethan	1	0	Avg	0.2672	0.2821	0.2510	0.2751	0.2914	0.2856	0.2855	-----	-----	0.277	5.59	1.00	1.00	5.0	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.244
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M125081.D	CAL @ 20 PPB	02/23/20 22:07	2	6M125080.D	CAL @ 5 PPB	02/23/20 21:44
3	6M125079.D	CAL @ 2 PPB	02/23/20 21:20	4	6M125082.D	CAL @ 50 PPB	02/23/20 22:31
5	6M125083.D	CAL @ 100 PPB	02/23/20 22:55	6	6M125086.D	CAL @ 250 PPB	02/24/20 01:15
7	6M125087.D	CAL @ 500 PPB	02/24/20 01:41	8	6M125078.D	CAL @ 1 PPB	02/23/20 20:56
9	6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Methylcyclohexane	1	0	Avg	0.2834	0.2784	0.2954	0.2952	0.3186	0.2417	0.3434	-----	-----	0.294	5.45	0.979	0.994	11	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromomethane	1	0	Avg	0.1580	0.1537	0.1611	0.1606	0.1656	0.1641	0.1516	0.1763	-----	0.161	5.53	0.998	1.00	4.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2-Dichloropropane	1	0	Avg	0.1900	0.1995	0.1777	0.1908	0.1994	0.1833	0.1813	-----	-----	0.189	5.46	1.00	1.00	4.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Trichloroethene	1	0	Avg	0.2506	0.2669	0.2614	0.2563	0.2649	0.2459	0.2788	-----	-----	0.261	5.33	0.997	0.999	4.2	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Benzene	1	0	Avg	0.7959	0.8558	0.8335	0.8078	0.8484	0.7753	0.8491	0.7839	-----	0.819	4.98	0.998	0.999	3.9	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
tert-Amyl methyl ether	1	0	Avg	0.4824	0.4701	0.4481	0.4924	0.5177	0.5030	0.4690	-----	-----	0.483	5.02	0.999	1.00	4.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Iso-propylacetate	1	0	Avg	0.3395	0.3369	0.3208	0.3624	0.3839	0.3690	0.3437	-----	-----	0.351	4.98	0.998	1.00	6.2	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Methyl methacrylate	1	0	Avg	0.1633	0.1673	0.1512	0.1765	0.1775	0.1736	0.1614	-----	-----	0.167	5.48	0.999	1.00	5.7	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Dibromochloromethan	1	0	Avg	0.2751	0.2564	0.2579	0.2903	0.3066	0.3128	0.2956	-----	-----	0.285	6.45	0.999	1.00	7.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chloroethylvinylethe	1	0	Avg	0.1320	0.1222	0.1262	0.1399	0.1482	0.1426	0.1286	-----	-----	0.134	5.73	0.997	1.00	7.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
cis-1,3-Dichloropropen	1	0	Avg	0.3857	0.3659	0.3184	0.3964	0.4239	0.4059	0.3996	-----	-----	0.385	5.83	1.00	1.00	8.9	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
trans-1,3-Dichloroprop	1	0	Avg	0.3397	0.3074	0.3191	0.3651	0.3886	0.3857	0.3697	-----	-----	0.354	6.12	0.999	1.00	9.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethyl methacrylate	1	0	Avg	0.1680	0.1614	0.1603	0.1821	0.1887	0.1814	0.1716	-----	-----	0.173	6.14	0.999	1.00	6.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,1,2-Trichloroethane	1	0	Avg	0.2351	0.2497	0.2338	0.2378	0.2472	0.2370	0.2202	-----	-----	0.237	6.22	0.998	1.00	4.1	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromoethane	1	0	Avg	0.2440	0.2437	0.2419	0.2613	0.2625	0.2558	0.2368	0.2436	-----	0.249	6.53	0.998	1.00	3.9	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,3-Dichloropropane	1	0	Avg	0.3909	0.3843	0.4069	0.3957	0.4054	0.3883	0.3682	-----	-----	0.391	6.32	0.999	1.00	3.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Methyl-2-Pentanone	1	0	Avg	0.2010	0.1985	0.2204	0.2084	0.2204	0.2207	0.2050	-----	-----	0.211	5.90	0.999	1.00	4.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Hexanone	1	0	Avg	0.1522	0.1462	0.1592	0.1587	0.1633	0.1638	0.1582	-----	-----	0.157	6.33	1.00	1.00	4.0	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Tetrachloroethene	1	0	Avg	0.2576	0.2737	0.2682	0.2676	0.2732	0.2444	0.3004	-----	-----	0.269	6.32	0.992	0.998	6.4	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Toluene-d8	1	0	Avg	1.2585	1.2526	1.2612	1.2725	1.2751	1.2940	1.2609	1.2604	1.2820	1.27	5.98	-1	-1	1.1		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Toluene	1	0	Avg	0.6836	0.7113	0.7127	0.6747	0.7010	0.6496	0.7228	0.7084	-----	0.696	6.02	0.998	0.999	3.5	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,1,2-Tetrachloroeth	1	0	Avg	0.2567	0.2568	0.2478	0.2721	0.2850	0.2789	0.2893	-----	-----	0.270	6.81	1.00	1.00	5.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Chlorobenzene	1	0	Avg	0.7775	0.8354	0.8129	0.7902	0.8045	0.7489	0.7869	-----	-----	0.794	6.78	0.999	1.00	3.5	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Butyl acrylate	1	0	Avg	0.6563	0.6344	0.6060	0.7069	0.5678	0.7026	0.6599	-----	-----	0.648	7.02	0.998	0.998	7.7	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Amyl acetate	1	0	Avg	0.5490	0.5375	0.5832	0.5961	0.4779	0.5805	0.5440	-----	-----	0.553	7.14	0.998	0.998	7.2	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromoform	1	0	Avg	0.3303	0.3226	0.2795	0.3628	0.3053	0.4033	0.3779	-----	-----	0.340	7.23	0.997	0.997	13	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Ethylbenzene	1	0	Avg	0.6297	0.6201	0.6105	0.6219	0.4986	0.5945	0.7018	0.7027	-----	0.623	6.82	0.993	1.00	10	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,1,2,2-Tetrachloroeth	1	0	Avg	0.5433	0.5599	0.5313	0.5732	0.4507	0.5499	0.5162	-----	-----	0.532	7.45	0.998	0.998	7.6	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Bromofluorobenzene	1	0	Avg	0.7957	0.8011	0.8081	0.7999	0.6091	0.7952	0.7867	0.7922	0.8165	0.778	7.40	-1	-1	8.2		30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Styrene	1	0	Avg	1.5185	1.4610	1.4049	1.4986	1.1941	1.4484	1.5401	-----	-----	1.44	7.10	0.998	0.999	8.1	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
m&p-Xylenes	1	0	Avg	0.9156	0.9062	0.9385	0.9281	0.7209	0.8379	0.9536	0.8717	0.8423	0.879	6.88	0.995	0.999	8.2	0.10	40.00	10.00	4.00	100.0	200.0	500.0	1000.	2.00	1.00
o-Xylene	1	0	Avg	0.8989	0.8778	0.9170	0.8884	0.7005	0.8313	0.9287	0.9049	-----	0.868	7.10	0.996	0.999	8.5	0.30	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
trans-1,4-Dichloro-2-b	1	0	Avg	0.2187	0.1940	0.2470	0.2429	0.1959	0.2291	0.2638	-----	-----	0.227	7.47	0.994	1.00	12		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3-Dichlorobenzene	1	0	Avg	1.1718	1.1952	1.1647	1.1999	1.2068	1.1064	1.1432	-----	-----	1.17	8.02	1.00	1.00	3.1	0.60	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,4-Dichlorobenzene	1	0	Avg	1.1923	1.2990	1.2592	1.2063	1.1983	1.1076	1.1169	-----	-----	1.20	8.07	1.00	1.00	5.8	0.50	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dichlorobenzene	1	0	Avg	1.1008	1.1473	1.1768	1.1161	1.0745	1.0396	1.0421	-----	-----	1.10	8.29	1.00	1.00	4.7	0.40	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Isopropylbenzene	1	0	Avg	2.3224	2.3011	2.2871	2.3459	1.8777	2.0966	2.5083	2.1576	-----	2.24	7.30	0.992	1.00	8.5	0.10	20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Cyclohexanone	1	0	Avg	0.0176	0.0207	0.0259	0.0174	0.0140	0.0191	0.0214	-----	-----	0.0195	7.37	0.994	0.999	19		100.0	25.00	10.00	250.0	500.0	1250.	2500.		
Camphene	1	0	Avg	0.8011	0.6978	0.7194	0.8200	0.6783	0.6734	1.0027	-----	-----	0.770	7.47	0.973	0.998	15		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichloropropane	1	0	Avg	0.6598	0.6774	0.6353	0.6971	0.5574	0.7057	0.6805	-----	-----	0.659	7.49	0.998	0.998	7.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
2-Chlorotoluene	1	0	Avg	1.3825	1.3747	1.4402	1.3740	1.2044	1.2626	1.3588	-----	-----	1.34	7.59	0.998	1.00	6.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0		

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.244
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8260C

Form 6
Initial Calibration

Instrument: GCMS_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6M125081.D	CAL @ 20 PPB	02/23/20 22:07	2	6M125080.D	CAL @ 5 PPB	02/23/20 21:44
3	6M125079.D	CAL @ 2 PPB	02/23/20 21:20	4	6M125082.D	CAL @ 50 PPB	02/23/20 22:31
5	6M125083.D	CAL @ 100 PPB	02/23/20 22:55	6	6M125086.D	CAL @ 250 PPB	02/24/20 01:15
7	6M125087.D	CAL @ 500 PPB	02/24/20 01:41	8	6M125078.D	CAL @ 1 PPB	02/23/20 20:56
9	6M125077.D	CAL @ 0.5 PPB	02/23/20 20:33				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
p-Ethyltoluene	1	0	Avg	2.5959	2.4705	2.4429	2.5604	2.1542	2.3068	2.6088	-----	-----	2.45	7.58	0.996	1.00	6.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
4-Chlorotoluene	1	0	Avg	1.3365	1.3349	1.3304	1.3499	1.3011	1.3056	1.3735	-----	-----	1.33	7.65	0.999	1.00	1.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
n-Propylbenzene	1	0	Avg	2.6646	2.6324	2.6282	2.7384	2.2323	2.3996	2.8292	2.6186	-----	2.59	7.53	0.994	0.999	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Bromobenzene	1	0	Avg	1.3153	1.3418	1.2902	1.3317	1.0911	1.2349	1.3614	-----	-----	1.28	7.50	0.997	1.00	7.3		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,3,5-Trimethylbenzen	1	0	Avg	1.6381	1.6443	1.6311	1.7261	1.5245	1.6005	1.8960	1.5549	-----	1.65	7.61	0.994	1.00	7.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
Butyl methacrylate	1	0	Avg	0.4803	0.4719	0.4325	0.5071	0.4805	0.5001	0.5016	-----	-----	0.482	7.61	1.00	1.00	5.3	0.50 a	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
t-Butylbenzene	1	0	Avg	1.9832	1.9285	1.9373	2.0091	1.8901	1.7654	2.1713	1.7665	-----	1.93	7.81	0.992	0.999	6.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
1,2,4-Trimethylbenzen	1	0	Avg	1.9370	1.9873	1.9147	1.9773	1.9734	1.8133	2.0159	1.7418	-----	1.92	7.83	0.998	0.999	5.0		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
sec-Butylbenzene	1	0	Avg	2.5197	2.4355	2.3499	2.5745	2.6210	2.2400	2.8070	2.1794	-----	2.47	7.93	0.991	0.998	8.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
4-Isopropyltoluene	1	0	Avg	2.1679	2.0796	2.0221	2.2332	2.2834	1.9895	2.3985	1.9010	-----	2.13	8.00	0.993	0.998	7.8		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
n-Butylbenzene	1	0	Avg	2.2914	2.1521	2.1739	2.3856	2.2855	2.1205	2.5629	1.9682	-----	2.24	8.24	0.993	0.999	8.1		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	
p-Diethylbenzene	1	0	Avg	1.2214	1.1689	1.1787	1.2597	1.3082	1.1544	1.3798	-----	-----	1.24	8.23	0.994	0.998	6.7		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4,5-Tetramethylbe	1	0	Avg	1.8454	1.7991	1.6881	1.9144	1.9585	1.8199	1.9919	-----	-----	1.86	8.68	0.998	0.999	5.6		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2-Dibromo-3-Chloro	1	0	Avg	0.1422	0.1403	0.1364	0.1504	0.1500	0.1639	0.1639	-----	-----	0.150	8.74	1.00	1.00	7.3	0.05	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Camphor	1	0	Qua	0.0694	0.0833	0.1317	0.0685	0.0602	0.0733	0.0813	-----	-----	0.0811	9.18	0.996	1.00	29		200.0	50.00	20.00	500.0	1000.	2500.	5000.		
Hexachlorobutadiene	1	0	Avg	0.4621	0.3885	0.3852	0.4587	0.3795	0.4011	0.5232	-----	-----	0.428	9.32	0.986	0.999	13		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,4-Trichlorobenzen	1	0	Avg	0.7792	0.7835	0.7999	0.7915	0.6594	0.7622	0.7287	-----	-----	0.758	9.24	0.999	0.999	6.5	0.20	20.00	5.00	2.00	50.00	100.0	250.0	500.0		
1,2,3-Trichlorobenzen	1	0	Avg	0.7412	0.7545	0.7773	0.7522	0.6112	0.7044	0.6834	-----	-----	0.718	9.54	0.999	0.999	7.9		20.00	5.00	2.00	50.00	100.0	250.0	500.0		
Naphthalene	1	0	Avg	1.8455	1.9156	2.0917	1.9063	1.6187	1.8346	1.7757	2.0985	-----	1.89	9.40	0.999	0.999	8.4		20.00	5.00	2.00	50.00	100.0	250.0	500.0	1.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 7.244
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M125342.D **Instrument:** GCMS 6

Cont Calibration Date/Time 2/28/2020 8:44:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Fluorobenzene	1	0	I	5.12	30.00	30	**			0.000	0.00	
Chlorodifluoromethane	1	0		1.65	29.33	50	20	0.1	0.266	0.156	41.33	C1
Dichlorodifluoromethane	1	0		1.64	55.56	50	20	0.1	0.161	0.179	11.11	
Chloromethane	1	0		1.81	50.64	50	20	0.1	0.171	0.173	1.29	
Bromomethane	1	0		2.23	43.44	50	20	0.1	0.151	0.131	13.12	
Vinyl Chloride	1	0		1.92	51.97	50	20	0.1	0.228	0.237	3.95	
Chloroethane	1	0		2.32	47.40	50	20	0.1	0.142	0.135	5.20	
Trichlorofluoromethane	1	0		2.56	49.88	50	20	0.1	0.359	0.358	0.24	
Ethyl ether	1	0		2.81	44.32	50	20	0.5	0.134	0.119	11.36	
Furan	1	0		2.84	44.19	50	20	0.5	0.247	0.219	11.63	
1,1,2-Trichloro-1,2,2-trifluoroetha	1	0		3.01	49.30	50	20	0.1	0.159	0.156	1.39	
Methylene Chloride	1	0		3.43	47.97	50	20	0.1	0.217	0.208	4.06	
Acrolein	1	0		2.92	209.24	250	20		0.025	0.021	16.30	
Acrylonitrile	1	0		3.64	44.21	50	20		0.064	0.056	11.57	
Iodomethane	1	0		3.16	42.99	50	20		0.177	0.181	14.02	
Acetone	1	0		3.05	229.86	250	20	0.1	0.051	0.047	8.06	
Carbon Disulfide	1	0		3.23	42.70	50	20	0.1	0.558	0.476	14.59	
t-Butyl Alcohol	1	0		3.51	209.05	250	20		0.024	0.020	16.38	
n-Hexane	1	0		3.90	51.00	50	20		0.206	0.210	1.99	
Di-isopropyl-ether	1	0		4.06	45.27	50	20		0.430	0.389	9.46	
1,1-Dichloroethene	1	0		3.02	47.06	50	20	0.1	0.268	0.252	5.88	
Methyl Acetate	1	0		3.34	44.46	50	20	0.1	0.148	0.132	11.08	
Methyl-t-butyl ether	1	0		3.67	43.18	50	20	0.1	0.490	0.423	13.65	
1,1-Dichloroethane	1	0		4.03	45.67	50	20	0.2	0.348	0.318	8.67	
trans-1,2-Dichloroethene	1	0		3.68	43.80	50	20	0.1	0.229	0.201	12.39	
Ethyl-t-butyl ether	1	0		4.32	45.17	50	20	0.5	0.483	0.436	9.65	
cis-1,2-Dichloroethene	1	0		4.44	45.03	50	20	0.1	0.337	0.303	9.94	
Bromochloromethane	1	0		4.59	47.65	50	20		0.137	0.131	4.71	
2,2-Dichloropropane	1	0		4.45	44.77	50	20		0.296	0.265	10.46	
Ethyl acetate	1	0		4.46	44.67	50	20		0.174	0.155	10.66	
1,4-Dioxane	1	0		5.52	2255.41	2500	20		0.003	0.003	9.78	
1,1-Dichloropropene	1	0		4.85	47.50	50	20		0.287	0.272	5.01	
Chloroform	1	0		4.63	42.20	50	20	0.2	0.423	0.357	15.59	
Dibromofluoromethane	1	0	S	4.73	29.82	75	**		0.270	0.268	0.62	
Cyclohexane	1	0		4.80	49.81	50	20	0.1	0.267	0.266	0.39	
1,2-Dichloroethane-d4	1	0	S	4.93	30.14	75	**		0.133	0.133	0.48	
1,2-Dichloroethane	1	0		4.98	45.97	50	20	0.1	0.277	0.255	8.07	
2-Butanone	1	0		4.43	44.55	50	20	0.1	0.082	0.073	10.90	
1,1,1-Trichloroethane	1	0		4.76	45.72	50	20	0.1	0.349	0.319	8.56	
Carbon Tetrachloride	1	0		4.86	46.42	50	20	0.1	0.308	0.286	7.17	
Vinyl Acetate	1	0		4.06	43.22	50	20		0.403	0.348	13.56	
Bromodichloromethane	1	0		5.59	45.01	50	20	0.2	0.277	0.249	9.99	
Methylcyclohexane	1	0		5.45	51.04	50	20	0.1	0.294	0.300	2.07	
Dibromomethane	1	0		5.53	44.21	50	20		0.161	0.143	11.58	
1,2-Dichloropropane	1	0		5.46	46.22	50	20	0.1	0.189	0.175	7.57	
Trichloroethene	1	0		5.33	44.47	50	20	0.2	0.261	0.232	11.06	
Benzene	1	0		4.98	46.00	50	20	0.5	0.819	0.753	8.00	
tert-Amyl methyl ether	1	0		5.02	44.70	50	20		0.483	0.432	10.61	
Chlorobenzene-d5	1	0	I	6.76	30.00	30	**			0.000	0.00	
Iso-propylacetate	1	0		4.98	43.41	50	20	0.5	0.351	0.305	13.18	
Methyl methacrylate	1	0		5.48	43.07	50	20	0.5	0.167	0.144	13.86	
Dibromochloromethane	1	0		6.45	43.02	50	20	0.1	0.285	0.245	13.96	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL @ 50 PPB **Data File:** 6M125342.D **Instrument:** GCMS 6

Cont Calibration Date/Time 2/28/2020 8:44:00 P Method: EPA 8260C

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2-Chloroethylvinylether	1	0		5.73	44.52	50	20		0.134	0.120	10.97	
cis-1,3-Dichloropropene	1	0		5.83	43.60	50	20	0.2	0.385	0.336	12.79	
trans-1,3-Dichloropropene	1	0		6.12	42.55	50	20	0.1	0.354	0.301	14.90	
Ethyl methacrylate	1	0		6.14	46.00	50	20	0.5	0.173	0.160	8.00	
1,1,2-Trichloroethane	1	0		6.22	44.50	50	20	0.1	0.237	0.211	11.01	
1,2-Dibromoethane	1	0		6.53	44.86	50	20	0.1	0.249	0.223	10.29	
1,3-Dichloropropane	1	0		6.32	44.39	50	20		0.391	0.348	11.22	
4-Methyl-2-Pentanone	1	0		5.90	43.36	50	20	0.1	0.211	0.183	13.27	
2-Hexanone	1	0		6.33	42.87	50	20	0.1	0.157	0.135	14.26	
Tetrachloroethene	1	0		6.32	43.65	50	20	0.2	0.269	0.235	12.70	
Toluene-d8	1	0	S	5.98	29.40	75	**		1.269	1.243	2.00	
Toluene	1	0		6.02	43.26	50	20	0.4	0.696	0.602	13.49	
1,1,1,2-Tetrachloroethane	1	0		6.81	43.73	50	20		0.270	0.236	12.55	
Chlorobenzene	1	0		6.78	41.78	50	20	0.5	0.794	0.663	16.43	
1,4-Dichlorobenzene-d4	1	0	I	8.06	30.00	30	**			0.000	0.00	
n-Butyl acrylate	1	0		7.02	44.73	50	20	0.5	0.648	0.579	10.55	
n-Amyl acetate	1	0		7.14	44.93	50	20	0.5	0.553	0.497	10.14	
Bromoform	1	0		7.23	44.72	50	20	0.1	0.340	0.304	10.56	
Ethylbenzene	1	0		6.82	42.94	50	20	0.1	0.623	0.535	14.12	
1,1,2,2-Tetrachloroethane	1	0		7.45	47.37	50	20	0.1	0.532	0.504	5.25	
Bromofluorobenzene	1	0	S	7.40	30.93	75	**		0.778	0.803	3.11	
Styrene	1	0		7.10	44.47	50	20	0.3	1.438	1.279	11.06	
m&p-Xylenes	1	0		6.88	87.70	100	20	0.1	0.879	0.771	12.30	
o-Xylene	1	0		7.10	43.18	50	20	0.3	0.868	0.750	13.63	
trans-1,4-Dichloro-2-butene	1	0		7.47	44.80	50	20		0.227	0.204	10.41	
1,3-Dichlorobenzene	1	0		8.02	39.43	50	20	0.6	1.170	0.922	21.14	C1
1,4-Dichlorobenzene	1	0		8.07	40.13	50	20	0.5	1.197	0.961	19.75	
1,2-Dichlorobenzene	1	0		8.29	42.32	50	20	0.4	1.100	0.931	15.36	
Isopropylbenzene	1	0		7.29	46.06	50	20	0.1	2.237	2.061	7.88	
Cyclohexanone	1	0		7.37	204.95	250	20		0.019	0.016	18.02	
Camphene	1	0		7.47	49.62	50	20		0.770	0.765	0.76	
1,2,3-Trichloropropane	1	0		7.49	44.31	50	20		0.659	0.584	11.38	
2-Chlorotoluene	1	0		7.59	44.82	50	20		1.342	1.203	10.36	
p-Ethyltoluene	1	0		7.58	46.33	50	20		2.449	2.269	7.35	
4-Chlorotoluene	1	0		7.65	44.13	50	20		1.333	1.177	11.74	
n-Propylbenzene	1	0		7.53	45.65	50	20		2.593	2.367	8.70	
Bromobenzene	1	0		7.50	45.39	50	20		1.281	1.163	9.22	
1,3,5-Trimethylbenzene	1	0		7.61	45.99	50	20		1.652	1.520	8.01	
Butyl methacrylate	1	0		7.61	45.05	50	20	0.5	0.482	0.434	9.90	
t-Butylbenzene	1	0		7.81	46.47	50	20		1.931	1.795	7.05	
1,2,4-Trimethylbenzene	1	0		7.83	43.71	50	20		1.920	1.679	12.58	
sec-Butylbenzene	1	0		7.93	47.07	50	20		2.466	2.321	5.87	
4-Isopropyltoluene	1	0		8.00	42.98	50	20		2.134	1.835	14.04	
n-Butylbenzene	1	0		8.24	47.08	50	20		2.243	2.111	5.85	
p-Diethylbenzene	1	0		8.22	46.31	50	20		1.239	1.147	7.38	
1,2,4,5-Tetramethylbenzene	1	0		8.68	43.90	50	20		1.860	1.633	12.20	
1,2-Dibromo-3-Chloropropane	1	0		8.74	44.15	50	20	0.05	0.150	0.132	11.70	
Camphor	1	0		9.18	463.62	500	20		0.081	0.060	7.28	
Hexachlorobutadiene	1	0		9.32	47.70	50	20		0.428	0.409	4.59	
1,2,4-Trichlorobenzene	1	0		9.24	42.02	50	20	0.2	0.758	0.637	15.96	
1,2,3-Trichlorobenzene	1	0		9.54	42.50	50	20		0.718	0.610	15.00	
Naphthalene	1	0		9.40	42.79	50	20		1.886	1.614	14.42	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.
624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

0022703 0043

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M125081.D Method: EPA 8260C

Analysis Date/Time: 02/23/20 22:07

Lab File ID: CAL @ 20 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	159546	5.12	124450	6.76	69382	8.06								
Eval File Area Limit:	79773-319092		62225-248900		34691-138764									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									
Data File Sample#														
6M125077.D CAL @ 0.5 PPB	151887	5.12	120158	6.76	67309	8.06								
6M125078.D CAL @ 1 PPB	154994	5.12	123871	6.76	70478	8.06								
6M125079.D CAL @ 2 PPB	154384	5.12	123476	6.76	69697	8.06								
6M125080.D CAL @ 5 PPB	158016	5.12	126110	6.76	70537	8.06								
6M125081.D CAL @ 20 PPB	159546	5.12	124450	6.76	69382	8.06								
6M125082.D CAL @ 50 PPB	163481	5.12	127228	6.76	70870	8.06								
6M125083.D CAL @ 100 PPB	158680	5.12	124939	6.76	92711	8.06								
6M125084.D 250 PPB	150843	5.12	116069	6.76	8410A	8.06								
6M125085.D BLK	159451	5.12	130457	6.76	73556	8.06								
6M125086.D CAL @ 250 PPB	147779	5.12	116069	6.76	67636	8.06								
6M125087.D CAL @ 500 PPB	125318	5.12	98866	6.76	56101	8.06								
6M125088.D BLK	164378	5.12	133920	6.76	76435	8.06								
6M125089.D BLK	163682	5.12	132847	6.76	75738	8.06								
6M125090.D BLK	161197	5.12	132409	6.76	75994	8.06								
6M125091.D BLK	164423	5.12	133817	6.76	75754	8.06								
6M125092.D ICV	157797	5.12	124699	6.76	69695	8.06								
6M125093.D BLK	164984	5.12	135452	6.76	76592	8.06								
6M125094.D BLK	166949	5.12	133384	6.76	76384	8.06								
6M125095.D BLK	157486	5.12	129179	6.76	72113	8.06								
6M125096.D BLK	154221	5.12	127350	6.76	71601	8.06								
6M125097.D DAILY BLANK	157967	5.12	130204	6.76	73009	8.06								

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0022703 0044

FORM8

Internal Standard Areas

Evaluation Std Data File: 6M125342.D Method: EPA 8260C

Analysis Date/Time: 02/28/20 20:44

Lab File ID: CAL @ 50 PPB

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	152210	5.12	123316	6.76	70717	8.06								
Eval File Area Limit:	76105-304420		61658-246632		35358-141434									
Eval File Rt Limit:	4.62-5.62		6.26-7.26		7.56-8.56									

Data File	Sample#														
6M125341.D	50 PPB	163195	5.12	129140	6.76	76477	8.06								
6M125343.D	BLK	158874	5.13	131639	6.76	73240	8.06								
6M125344.D	DAILY BLANK	149596	5.12	122991	6.76	69007	8.06								
6M125345.D	MBS84511	145233	5.12	116777	6.76	69112	8.06								
6M125346.D	BLK	147028	5.12	119622	6.76	67343	8.06								
6M125347.D	AD15955-006	146620	5.12	110587	6.76	52054	8.06								
6M125348.D	AD15955-006(MS)	173833	5.12	140473	6.76	80382	8.06								
6M125349.D	AD15955-006(MSD)	171690	5.12	138707	6.76	79612	8.06								
6M125350.D	MBS84512	166602	5.12	132315	6.76	78218	8.06								
6M125351.D	BLK	150251	5.13	125852	6.76	70834	8.06								
6M125352.D	AD15955-021	148383	5.12	120669	6.76	63602	8.06								
6M125353.D	AD15955-022	150819	5.12	123059	6.76	62668	8.06								
6M125354.D	AD15955-023	154101	5.12	113203	6.76	49462	8.06								
6M125355.D	AD15955-024	156403	5.12	128961	6.76	67961	8.06								
6M125356.D	AD15955-025	101731	5.12	51329 A	6.76	18435 A	8.06								
6M125357.D	AD15955-026	145086	5.12	119001	6.76	65932	8.06								
6M125358.D	AD15956-003	154497	5.12	122617	6.76	62330	8.06								
6M125359.D	AD15956-011	149370	5.12	119294	6.76	61063	8.06								
6M125360.D	AD15956-015	150826	5.12	120407	6.76	61687	8.06								
6M125361.D	AD15946-002	128925	5.12	100783	6.76	50573	8.06								
6M125362.D	AD15945-001	156229	5.12	130569	6.76	73685	8.06								
6M125363.D	BLK	72848 A	5.12	59216 A	6.76	33277 A	8.06								
6M125364.D	BLK	155075	5.12	127540	6.76	71168	8.06								
6M125365.D	BLK	153229	5.12	126824	6.76	70638	8.06								
6M125366.D	BLK	149882	5.12	123348	6.76	68591	8.06								
6M125367.D	BLK	154710	5.12	128380	6.76	70897	8.06								
6M125368.D	BLK	140004	5.12	116368	6.76	63401	8.06								
6M125369.D	BLK	149195	5.12	122855	6.76	68380	8.06								

I1 = Fluorobenzene
I2 = Chlorobenzene-d5
I3 = 1,4-Dichlorobenzene-d4
I4 =
I5 =
I6 =
I7 =

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

Base Neutral/Acid Extractable Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD15946-001
Client Id: TB-110-1 COMP
Data File: 7M105559.D
Analysis Date: 03/03/20 14:18
Date Rec/Extracted: 02/27/20-03/02/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 66

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.051	U	205-99-2	Benzo[b]fluoranthene	0.051	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.051	U	191-24-2	Benzo[g,h,i]perylene	0.051	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.051	U	207-08-9	Benzo[k]fluoranthene	0.051	U
95-95-4	2,4,5-Trichlorophenol	0.051	U	111-91-1	bis(2-Chloroethoxy)methan	0.051	U
88-06-2	2,4,6-Trichlorophenol	0.051	U	111-44-4	bis(2-Chloroethyl)ether	0.013	U
120-83-2	2,4-Dichlorophenol	0.013	U	108-60-1	bis(2-chloroisopropyl)ether	0.051	U
105-67-9	2,4-Dimethylphenol	0.013	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.051	U
51-28-5	2,4-Dinitrophenol	0.25	U	85-68-7	Butylbenzylphthalate	0.051	U
121-14-2	2,4-Dinitrotoluene	0.051	U	105-60-2	Caprolactam	0.051	U
606-20-2	2,6-Dinitrotoluene	0.051	U	86-74-8	Carbazole	0.051	U
91-58-7	2-Chloronaphthalene	0.051	U	218-01-9	Chrysene	0.051	U
95-57-8	2-Chlorophenol	0.051	U	53-70-3	Dibenzo[a,h]anthracene	0.051	U
91-57-6	2-Methylnaphthalene	0.051	U	132-64-9	Dibenzofuran	0.013	U
95-48-7	2-Methylphenol	0.013	U	84-66-2	Diethylphthalate	0.051	U
88-74-4	2-Nitroaniline	0.051	U	131-11-3	Dimethylphthalate	0.051	U
88-75-5	2-Nitrophenol	0.051	U	**84-74-2**	**Di-n-butylphthalate**	**0.013**	**0.021**
106-44-5	3&4-Methylphenol	0.013	U	117-84-0	Di-n-octylphthalate	0.051	U
91-94-1	3,3'-Dichlorobenzidine	0.051	U	206-44-0	Fluoranthene	0.051	U
99-09-2	3-Nitroaniline	0.051	U	86-73-7	Fluorene	0.051	U
534-52-1	4,6-Dinitro-2-methylphenol	0.25	U	118-74-1	Hexachlorobenzene	0.051	U
101-55-3	4-Bromophenyl-phenylether	0.051	U	87-68-3	Hexachlorobutadiene	0.051	U
59-50-7	4-Chloro-3-methylphenol	0.051	U	77-47-4	Hexachlorocyclopentadiene	0.051	U
106-47-8	4-Chloroaniline	0.013	U	67-72-1	Hexachloroethane	0.051	U
7005-72-3	4-Chlorophenyl-phenylether	0.051	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.051	U
100-01-6	4-Nitroaniline	0.051	U	78-59-1	Isophorone	0.051	U
100-02-7	4-Nitrophenol	0.051	U	91-20-3	Naphthalene	0.013	U
83-32-9	Acenaphthene	0.051	U	98-95-3	Nitrobenzene	0.051	U
208-96-8	Acenaphthylene	0.051	U	621-64-7	N-Nitroso-di-n-propylamine	0.013	U
98-86-2	Acetophenone	0.051	U	86-30-6	n-Nitrosodiphenylamine	0.051	U
120-12-7	Anthracene	0.051	U	87-86-5	Pentachlorophenol	0.25	U
1912-24-9	Atrazine	0.051	U	85-01-8	Phenanthrene	0.051	U
100-52-7	Benzaldehyde	0.051	U	108-95-2	Phenol	0.051	U
56-55-3	Benzo[a]anthracene	0.051	U	129-00-0	Pyrene	0.051	U
50-32-8	Benzo[a]pyrene	0.051	U				

Worksheet #: 547461 *Total Target Concentration* 0.021 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: AD15946-001
Client Id: TB-110-1 COMP
Data File: 7M105559.D
Analysis Date: 03/03/20 14:18
Date Rec/Extracted: 02/27/20-03/02/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 66
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	57-55-6	1,2-Propanediol	3.01	0.24 J
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.30	3.6 JAB
3	5131-66-8	2-Propanol, 1-butoxy-	5.24	0.10 J
4	102-76-1	1,2,3-Propanetriol, triacetate	7.40	0.11 J
5	112-95-8	Eicosane	12.65	0.12 J
6	629-62-9	Pentadecane	13.42	0.21 J

Worksheet #: 547461

Total Tentatively Identified Concentration 4.4

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : AD15946-001 Operator : AB/JB Qt Meth : 7M_0210.M
Data File: 7M105559.D Sam Mult : 1 Vial# : 18 Qt On : 03/03/20 14:43
Acq On : 03/ 3/20 14:18 Misc : S,BNA Qt Upd On: 02/11/20 13:21

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-03-20\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.599	96	45438	40.00 ng	0.00
21) 1,4-Dichlorobenzene-d4	5.819	152	77111	40.00 ng	0.00
31) Naphthalene-d8	6.829	136	292179	40.00 ng	0.00
50) Acenaphthene-d10	8.251	164	176508	40.00 ng	0.00
77) Phenanthrene-d10	9.714	188	309259	40.00 ng	0.01
91) Chrysene-d12	12.764	240	277000	40.00 ng	0.01
103) Perylene-d12	14.385	264	271821	40.00 ng	0.02
System Monitoring Compounds					
11) 2-Fluorophenol	4.650	112	131862	51.75 ng	0.02
Spiked Amount 100.000			Recovery = 51.75%		
16) Phenol-d5	5.519	99	217416	65.60 ng	0.02
Spiked Amount 100.000			Recovery = 65.60%		
32) Nitrobenzene-d5	6.265	128	42989	33.99 ng	0.00
Spiked Amount 50.000			Recovery = 67.98%		
55) 2-Fluorobiphenyl	7.664	172	228554	39.16 ng	0.00
Spiked Amount 50.000			Recovery = 78.32%		
80) 2,4,6-Tribromophenol	8.992	330	80114	99.69 ng	0.00
Spiked Amount 100.000			Recovery = 99.69%		
94) Terphenyl-d14	11.512	244	226468	50.41 ng	0.00
Spiked Amount 50.000			Recovery = 100.82%		
Target Compounds					Qvalue
89) Di-n-butylphthalate	10.337	149	9079	0.8513 ng	99
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.819		498838	40.00 ng	--
2) Naphthalene-d8	6.829		651620	40.00 ng	--
3) Acenaphthene-d10	8.251		761139	40.00 ng	--
4) Phenanthrene-d10	9.714		786418	40.00 ng	--
5) Chrysene-d12	12.764		781680	40.00 ng	--
6) Perylene-d12	14.385		857683	40.00 ng	--
Library Search Compounds					
1) 57-55-6	3.010		117289	9.40 ng	78
2) 123-42-2	4.300		1785856	143.20 ng	50
3) 5131-66-8	5.240		51421	4.12 ng	78
4) 102-76-1	7.400		72310	4.44 ng	90
5) 112-95-8	12.650		93519	4.79 ng	64
6) 629-62-9	13.420		159722	8.17 ng	55

(#) = qualifier out of range (m) = manual integration (+) = signals summed

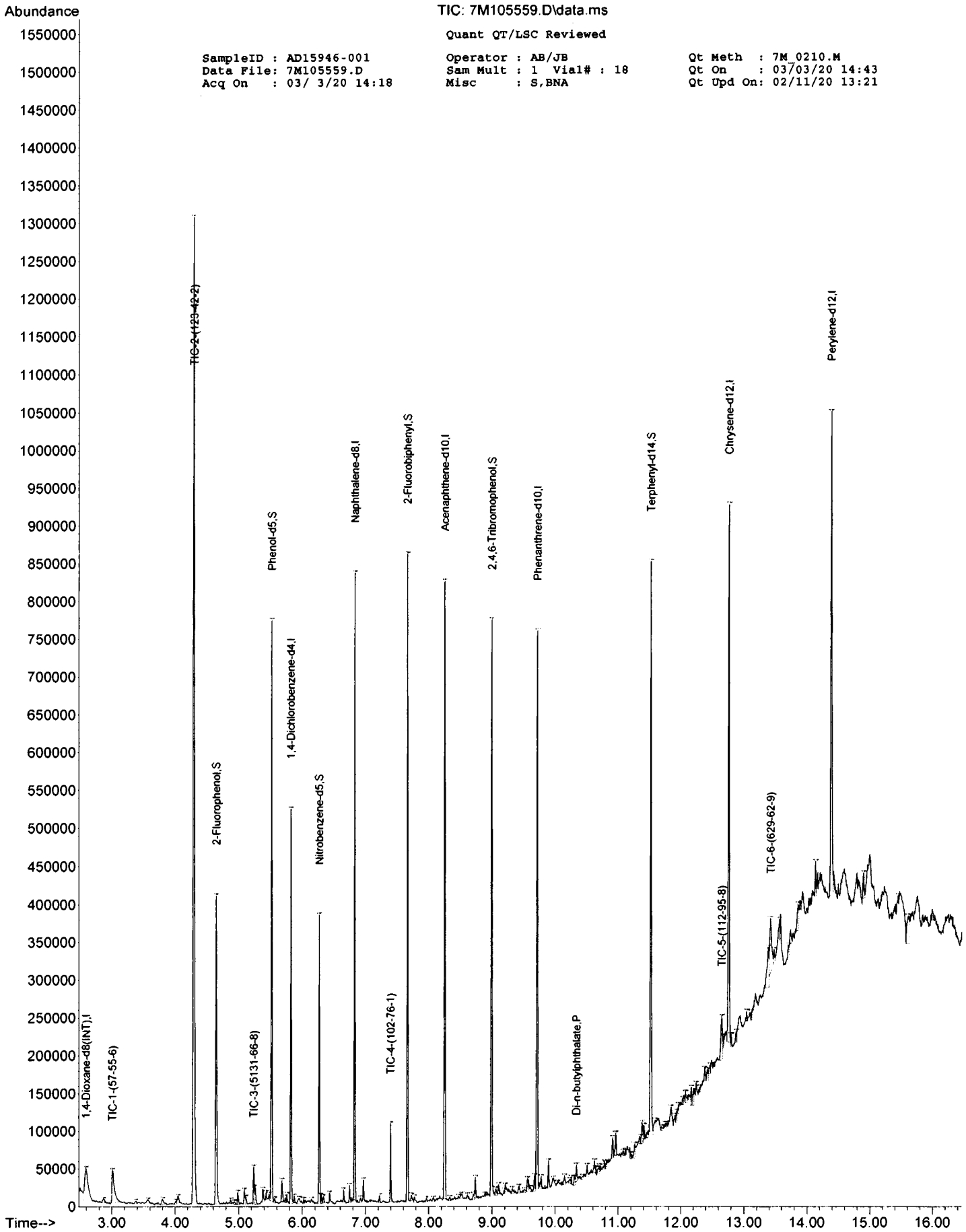
TIC: 7M105559.D\data.ms

Quant QT/LSC Reviewed

SampleID : AD15946-001
Data File: 7M105559.D
Acq On : 03/ 3/20 14:18

Operator : AB/JB
Sam Mult : 1 Vial# : 18
Misc : S,BNA

Qt Meth : 7M_0210.M
Qt On : 03/03/20 14:43
Qt Upd On: 02/11/20 13:21



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: SMB83648
Client Id:
Data File: 7M105544.D
Analysis Date: 03/03/20 08:30
Date Rec/Extracted: NA-03/02/20
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
92-52-4	1,1'-Biphenyl	0.033	U	205-99-2	Benzo[b]fluoranthene	0.033	U
95-94-3	1,2,4,5-Tetrachlorobenzene	0.033	U	191-24-2	Benzo[g,h,i]perylene	0.033	U
58-90-2	2,3,4,6-Tetrachlorophenol	0.033	U	207-08-9	Benzo[k]fluoranthene	0.033	U
95-95-4	2,4,5-Trichlorophenol	0.033	U	111-91-1	bis(2-Chloroethoxy)methan	0.033	U
88-06-2	2,4,6-Trichlorophenol	0.033	U	111-44-4	bis(2-Chloroethyl)ether	0.0083	U
120-83-2	2,4-Dichlorophenol	0.0083	U	108-60-1	bis(2-chloroisopropyl)ether	0.033	U
105-67-9	2,4-Dimethylphenol	0.0083	U	117-81-7	bis(2-Ethylhexyl)phthalate	0.033	U
51-28-5	2,4-Dinitrophenol	0.17	U	85-68-7	Butylbenzylphthalate	0.033	U
121-14-2	2,4-Dinitrotoluene	0.033	U	105-60-2	Caprolactam	0.033	U
606-20-2	2,6-Dinitrotoluene	0.033	U	86-74-8	Carbazole	0.033	U
91-58-7	2-Chloronaphthalene	0.033	U	218-01-9	Chrysene	0.033	U
95-57-8	2-Chlorophenol	0.033	U	53-70-3	Dibenzo[a,h]anthracene	0.033	U
91-57-6	2-Methylnaphthalene	0.033	U	132-64-9	Dibenzofuran	0.0083	U
95-48-7	2-Methylphenol	0.0083	U	84-66-2	Diethylphthalate	0.033	U
88-74-4	2-Nitroaniline	0.033	U	131-11-3	Dimethylphthalate	0.033	U
88-75-5	2-Nitrophenol	0.033	U	84-74-2	Di-n-butylphthalate	0.0083	U
106-44-5	3&4-Methylphenol	0.0083	U	117-84-0	Di-n-octylphthalate	0.033	U
91-94-1	3,3'-Dichlorobenzidine	0.033	U	206-44-0	Fluoranthene	0.033	U
99-09-2	3-Nitroaniline	0.033	U	86-73-7	Fluorene	0.033	U
534-52-1	4,6-Dinitro-2-methylphenol	0.17	U	118-74-1	Hexachlorobenzene	0.033	U
101-55-3	4-Bromophenyl-phenylether	0.033	U	87-68-3	Hexachlorobutadiene	0.033	U
59-50-7	4-Chloro-3-methylphenol	0.033	U	77-47-4	Hexachlorocyclopentadiene	0.033	U
106-47-8	4-Chloroaniline	0.0083	U	67-72-1	Hexachloroethane	0.033	U
7005-72-3	4-Chlorophenyl-phenylether	0.033	U	193-39-5	Indeno[1,2,3-cd]pyrene	0.033	U
100-01-6	4-Nitroaniline	0.033	U	78-59-1	Isophorone	0.033	U
100-02-7	4-Nitrophenol	0.033	U	91-20-3	Naphthalene	0.0083	U
83-32-9	Acenaphthene	0.033	U	98-95-3	Nitrobenzene	0.033	U
208-96-8	Acenaphthylene	0.033	U	621-64-7	N-Nitroso-di-n-propylamine	0.0083	U
98-86-2	Acetophenone	0.033	U	86-30-6	n-Nitrosodiphenylamine	0.033	U
120-12-7	Anthracene	0.033	U	87-86-5	Pentachlorophenol	0.17	U
1912-24-9	Atrazine	0.033	U	85-01-8	Phenanthrene	0.033	U
100-52-7	Benzaldehyde	0.033	U	108-95-2	Phenol	0.033	U
56-55-3	Benzo[a]anthracene	0.033	U	129-00-0	Pyrene	0.033	U
50-32-8	Benzo[a]pyrene	0.033	U				

Worksheet #: 547461 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
N-Nitrosodiphenylamine decomposes in the GC inlet and is detected as diphenylamine
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1e

ORGANICS SEMIVOLATILE REPORT
Tentatively Identified Compounds

Sample Number: SMB83648
Client Id:
Data File: 7M105544.D
Analysis Date: 03/03/20 08:30
Date Rec/Extracted: NA-03/02/20

Matrix: Soil
Initial Vol: 30g
Final Vol: 0.5ml
Dilution: 1
Solids: 100
Method: EPA 8270D

Units: mg/Kg

	Cas #	Compound	RT	Conc
1	141-79-7	3-Penten-2-one, 4-methyl-	3.78	0.38 JA
2	123-42-2	2-Pentanone, 4-hydroxy-4-methyl-	4.29	4.2 JA

Worksheet #: 547461

Total Tentatively Identified Concentration 4.6

A - Indicates an aldol condensate.
J - Indicates an estimated value.
B - Indicates the analyte was found in the blank as well as in the sample.
Y - Indicates the analyte was found in the blank at <10% of the concentration of the sample.
<10% - Indicates the analyte was found in the blank at < 10% of nearest Internal Standard

Quantitation Report (QT/LSC Reviewed)

SampleID : SMB83648 Operator : AB/JB Qt Meth : 7M_0210.M
Data File: 7M105544.D Sam Mult : 1 Vial# : 3 Qt On : 03/03/20 09:39
Acq On : 03/ 3/20 08:30 Misc : S,BNA Qt Upd On: 02/11/20 13:21

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-03-20\
Qt Path : G:\GCMSDATA\2020\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
7) 1,4-Dioxane-d8(INT)	2.575	96	44277	40.00 ng	-0.03
21) 1,4-Dichlorobenzene-d4	5.819	152	76151	40.00 ng	0.00
31) Naphthalene-d8	6.829	136	282861	40.00 ng	0.00
50) Acenaphthene-d10	8.257	164	168990	40.00 ng	0.00
77) Phenanthrene-d10	9.714	188	315685	40.00 ng	0.01
91) Chrysene-d12	12.764	240	339169	40.00 ng	0.01
103) Perylene-d12	14.391	264	334376	40.00 ng	0.03
System Monitoring Compounds					
11) 2-Fluorophenol	4.638	112	140058	56.40 ng	0.01
Spiked Amount 100.000			Recovery = 56.40%		
16) Phenol-d5	5.513	99	223352	69.16 ng	0.01
Spiked Amount 100.000			Recovery = 69.16%		
32) Nitrobenzene-d5	6.265	128	45012	36.76 ng	0.00
Spiked Amount 50.000			Recovery = 73.52%		
55) 2-Fluorobiphenyl	7.670	172	234176	41.91 ng	0.00
Spiked Amount 50.000			Recovery = 83.82%		
80) 2,4,6-Tribromophenol	8.997	330	75001	91.43 ng	0.01
Spiked Amount 100.000			Recovery = 91.43%		
94) Terphenyl-d14	11.518	244	273160	49.66 ng	0.01
Spiked Amount 50.000			Recovery = 99.32%		
Target Compounds					Qvalue
Library Search Internal Standards TIC Results					
1) 1,4-Dichlorobenzene-d4	5.819		497436	40.00 ng	--
2) Naphthalene-d8	6.829		628808	40.00 ng	--
3) Acenaphthene-d10	8.257		725067	40.00 ng	--
4) Phenanthrene-d10	9.714		809508	40.00 ng	--
5) Chrysene-d12	12.764		983525	40.00 ng	--
6) Perylene-d12	14.391		944445	40.00 ng	--
Library Search Compounds					
1) 141-79-7	3.780		285135	22.93 ng	91
2) 123-42-2	4.290		3102960	249.52 ng	50

(#) = qualifier out of range (m) = manual integration (+) = signals summed

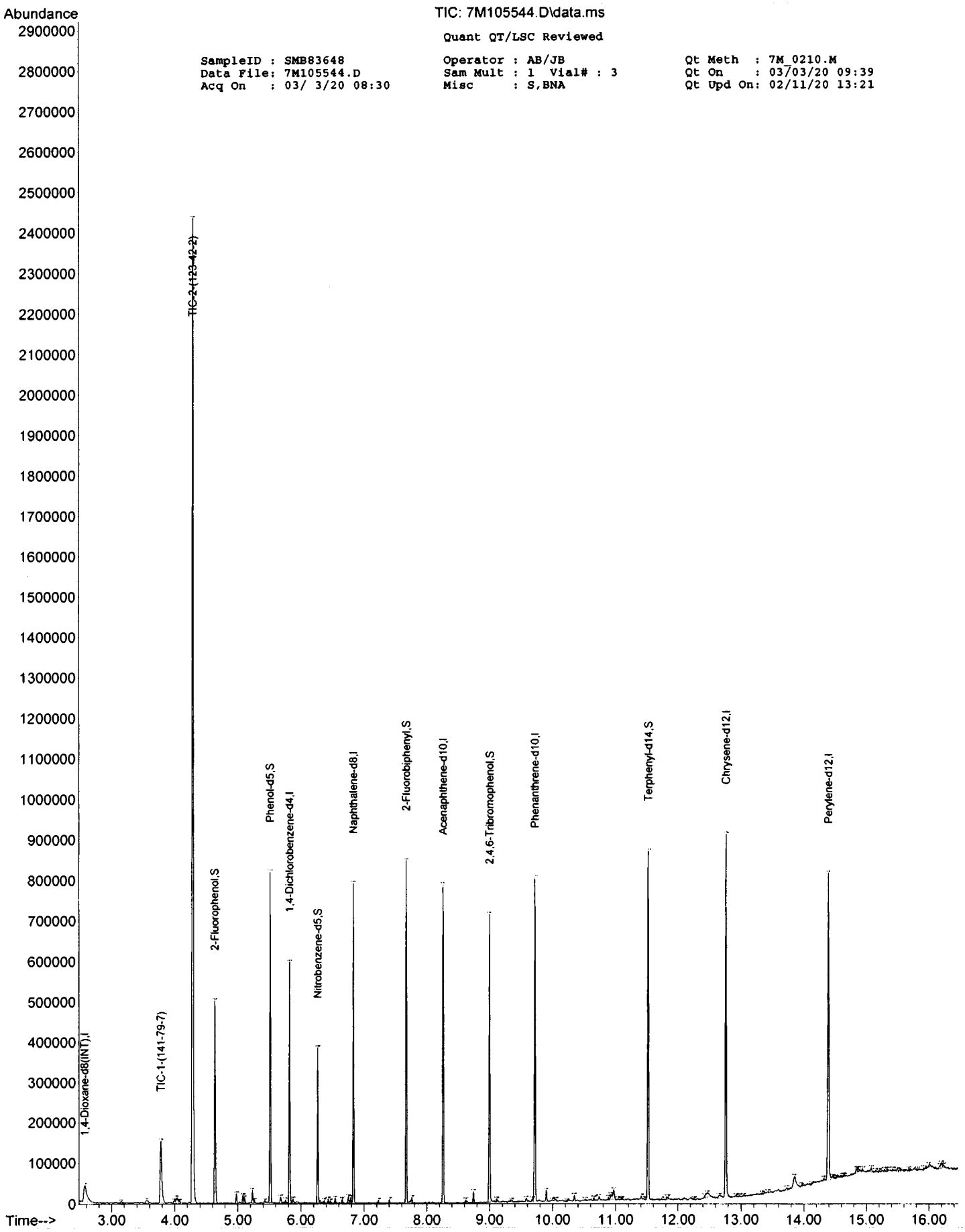
TIC: 7M105544.D\data.ms

Quant QT/LSC Reviewed

SampleID : SMB83648
Data File: 7M105544.D
Acq On : 03/ 3/20 08:30

Operator : AB/JB
Sam Mult : 1 Vial# : 3
Misc : S,BNA

Qt Meth : 7M_0210.M
Qt On : 03/03/20 09:39
Qt Upd On: 02/11/20 13:21



FORM2

Surrogate Recovery

Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
7M105544.D	SMB83648	S	03/03/20 08:30	1		56	69	74	84	91	99
7M105559.D	AD15946-001	S	03/03/20 14:18	1		52	66	68	78	100	101
10M79591.D	SMB83648(MS)	S	03/03/20 08:33	1		49	61	78	89	101	107
7M105554.D	AD15985-001(5X)	S	03/03/20 12:23	15	~~SD~~	0*	50	83	76	9.2*	96
7M105564.D	AD15985-001(5X)(MS)	S	03/03/20 16:14	15	~~SD~~ JR	0*	18*	74	77	0*	97
7M105565.D	AD15985-001(5X)(MSD)	S	03/03/20 16:38	15	~~SD~~ 3/6	0*	24*	72	82	0*	80

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8270D

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	43-128
S2=Phenol-d5	100	49-129
S3=Nitrobenzene-d5	50	52-129
S4=2-Fluorobiphenyl	50	58-125
S5=2,4,6-Tribromophenol	100	54-145
S6=Terphenyl-d14	50	58-148

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83648

	Data File	Sample ID:	Analysis Date
Spike or Dup:	10M79591.D	SMB83648(MS)	3/3/2020 8:33:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	39.1757	0	50	78	1	150
N-Nitrosodimethylamine	1	30.2862	0	50	61	50	130
Benzaldehyde	1	39.6868	0	50	79	20	220
Aniline	1	19.3067	0	50	39	20	150
Pentachloroethane	1	39.1744	0	50	78	50	130
bis(2-Chloroethyl)ether	1	33.4106	0	50	67	50	130
Phenol	1	62.9866	0	100	63	20	150
2-Chlorophenol	1	64.1653	0	100	64	50	130
N-Decane	1	33.0661	0	50	66	20	130
1,3-Dichlorobenzene	1	27.7194	0	50	55*	60	130
1,4-Dichlorobenzene	1	33.7767	0	50	68	60	130
1,2-Dichlorobenzene	1	33.5604	0	50	67	50	130
Benzyl alcohol	1	35.3116	0	50	71	20	130
bis(2-chloroisopropyl)ether	1	35.4469	0	50	71	40	130
2-Methylphenol	1	76.107	0	100	76	50	130
Acetophenone	1	46.7398	0	50	93	50	130
Hexachloroethane	1	32.4391	0	50	65	50	130
N-Nitroso-di-n-propylamine	1	35.2643	0	50	71	40	130
3&4-Methylphenol	1	80.9508	0	100	81	70	130
Nitrobenzene	1	39.3709	0	50	79	70	130
Isophorone	1	35.5762	0	50	71	60	130
2-Nitrophenol	1	81.0788	0	100	81	70	130
2,4-Dimethylphenol	1	80.6835	0	100	81	40	130
Benzoic Acid	1	74.4395	0	100	74	20	130
bis(2-Chloroethoxy)methane	1	37.9752	0	50	76	60	130
2,4-Dichlorophenol	1	78.5991	0	100	79	70	130
1,2,4-Trichlorobenzene	1	34.6189	0	50	69	50	130
Naphthalene	1	34.9354	0	50	70	50	130
4-Chloroaniline	1	26.3264	0	50	53	10	150
Hexachlorobutadiene	1	33.8508	0	50	68	60	130
Caprolactam	1	52.9838	0	50	106	50	130
4-Chloro-3-methylphenol	1	86.2252	0	100	86	50	130
2-Methylnaphthalene	1	36.6082	0	50	73	70	130
1-Methylnaphthalene	1	48.9799	0	50	98	70	130
1,1'-Biphenyl	1	48.4508	0	50	97	60	130
1,2,4,5-Tetrachlorobenzene	1	45.6188	0	50	91	70	130
Hexachlorocyclopentadiene	1	35.2768	0	50	71	20	160
2,4,6-Trichlorophenol	1	81.8881	0	100	82	70	130
2,4,5-Trichlorophenol	1	86.9953	0	100	87	70	130
2-Chloronaphthalene	1	37.5584	0	50	75	70	130
1,4-Dimethylnaphthalene	1	50.3946	0	50	101	70	130
Diphenyl Ether	1	49.848	0	50	100	70	130
2-Nitroaniline	1	45.5166	0	50	91	50	130
Coumarin	1	50.7255	0	50	101	70	130
Acenaphthylene	1	38.8735	0	50	78	70	130
Dimethylphthalate	1	37.8518	0	50	76	70	130
2,6-Dinitrotoluene	1	37.8936	0	50	76	70	130
Acenaphthene	1	38.6669	0	50	77	50	130
3-Nitroaniline	1	34.1134	0	50	68	10	130
2,4-Dinitrophenol	1	87.5981	0	100	88	20	150
Dibenzofuran	1	37.9151	0	50	76	70	130
2,4-Dinitrotoluene	1	40.7029	0	50	81	40	130
4-Nitrophenol	1	98.0611	0	100	98	20	150
2,3,4,6-Tetrachlorophenol	1	82.5346	0	100	83	70	130
Fluorene	1	38.7729	0	50	78	50	130
4-Chlorophenyl-phenylether	1	36.2815	0	50	73	70	130
Diethylphthalate	1	38.191	0	50	76	70	130
4-Nitroaniline	1	38.3129	0	50	77	50	130
Atrazine	1	43.9476	0	50	88	50	130
4,6-Dinitro-2-methylphenol	1	89.788	0	100	90	40	130
n-Nitrosodiphenylamine	1	32.6388	0	50	65	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83648

Method: 8270D | Matrix: Soil | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	41.7071	0	50	83	70	130
4-Bromophenyl-phenylether	1	37.1753	0	50	74	70	130
Hexachlorobenzene	1	36.1785	0	50	72	70	130
N-Octadecane	1	63.3098	0	50	127	70	130
Pentachlorophenol	1	100.4905	0	100	100	40	130
Phenanthrene	1	39.4207	0	50	79	70	130
Anthracene	1	38.581	0	50	77	70	130
Carbazole	1	52.1641	0	50	104	70	130
Di-n-butylphthalate	1	42.1841	0	50	84	70	130
Fluoranthene	1	39.9338	0	50	80	70	130
Pyrene	1	41.7732	0	50	84	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	43.4031	0	50	87	50	130
3,3'-Dichlorobenzidine	1	29.0389	0	50	58	10	130
Benzo[a]anthracene	1	39.5846	0	50	79	70	130
Chrysene	1	35.4383	0	50	71	60	130
bis(2-Ethylhexyl)phthalate	1	44.5736	0	50	89	70	130
Di-n-octylphthalate	1	42.6225	0	50	85	70	130
Benzo[b]fluoranthene	1	39.6932	0	50	79	70	130
Benzo[k]fluoranthene	1	40.2801	0	50	81	70	130
Benzo[a]pyrene	1	39.6344	0	50	79	70	130
Indeno[1,2,3-cd]pyrene	1	37.0969	0	50	74	70	130
Dibenzo[a,h]anthracene	1	37.2206	0	50	74	60	130
Benzo[g,h,i]perylene	1	37.6131	0	50	75	70	130

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Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83648

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M105564.D	AD15985-001(5X)(MS)	3/3/2020 4:14:00 PM
Non Spike(If applicable):	7M105554.D	AD15985-001(5X)	3/3/2020 12:23:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	30.174	0	50	60	1	150
N-Nitrosodimethylamine	1	0	0	50	0*	50	130
Benzaldehyde	1	80.8275	0	50	162	20	220
Aniline	1	40.767	8.271	50	65	20	150
Pentachloroethane	1	0	0	50	0*	50	130
bis(2-Chloroethyl)ether	1	36.039	0	50	72	50	130
Phenol	1	0	0	100	0*	20	150
2-Chlorophenol	1	0	0	100	0*	50	130
N-Decane	1	0	0	50	0*	20	130
1,3-Dichlorobenzene	1	31.9035	0	50	64	60	130
1,4-Dichlorobenzene	1	35.8425	0	50	72	60	130
1,2-Dichlorobenzene	1	35.1795	0	50	70	50	130
Benzyl alcohol	1	33.711	0	50	67	20	130
bis(2-chloroisopropyl)ether	1	0	0	50	0*	40	130
2-Methylphenol	1	42.696	0	100	43*	50	130
Acetophenone	1	42.171	0	50	84	50	130
Hexachloroethane	1	0	0	50	0*	50	130
N-Nitroso-di-n-propylamine	1	32.625	0	50	65	40	130
3&4-Methylphenol	1	36.708	0	100	37*	70	130
Nitrobenzene	1	36.6015	0	50	73	70	130
Isophorone	1	45.7725	0	50	92	60	130
2-Nitrophenol	1	0	0	100	0*	70	130
2,4-Dimethylphenol	1	59.7165	0	100	60	40	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	36.6345	0	50	73	60	130
2,4-Dichlorophenol	1	0	0	100	0*	70	130
1,2,4-Trichlorobenzene	1	42.2265	0	50	84	50	130
Naphthalene	1	36.396	0	50	73	50	130
4-Chloroaniline	1	33.195	0	50	66	10	150
Hexachlorobutadiene	1	43.5765	0	50	87	60	130
Caprolactam	1	46.8555	0	50	94	50	130
4-Chloro-3-methylphenol	1	0	0	100	0*	50	130
2-Methylnaphthalene	1	38.952	0	50	78	70	130
1-Methylnaphthalene	1	52.5075	0	50	105	70	130
1,1'-Biphenyl	1	52.5195	0	50	105	60	130
1,2,4,5-Tetrachlorobenzene	1	48.2265	0	50	96	70	130
Hexachlorocyclopentadiene	1	0	0	50	0*	20	160
2,4,6-Trichlorophenol	1	0	0	100	0*	70	130
2,4,5-Trichlorophenol	1	0	0	100	0*	70	130
2-Chloronaphthalene	1	39.156	0	50	78	70	130
1,4-Dimethylnaphthalene	1	49.7835	0	50	100	70	130
Diphenyl Ether	1	51.9465	0	50	104	70	130
2-Nitroaniline	1	37.647	0	50	75	50	130
Coumarin	1	43.404	0	50	87	70	130
Acenaphthylene	1	40.9605	0	50	82	70	130
Dimethylphthalate	1	40.6845	0	50	81	70	130
2,6-Dinitrotoluene	1	0	0	50	0*	70	130
Acenaphthene	1	40.089	0	50	80	50	130
3-Nitroaniline	1	40.7955	0	50	82	70	130
2,4-Dinitrophenol	1	0	0	100	0*	20	150
Dibenzofuran	1	39.783	0	50	80	70	130
2,4-Dinitrotoluene	1	0	0	50	0*	40	130
4-Nitrophenol	1	0	0	100	0*	20	150
2,3,4,6-Tetrachlorophenol	1	0	0	100	0*	70	130
Fluorene	1	36.8595	0	50	74	50	130
4-Chlorophenyl-phenylether	1	37.3485	0	50	75	70	130
Diethylphthalate	1	37.2765	0	50	75	70	130
4-Nitroaniline	1	32.736	0	50	65	50	130
Atrazine	1	44.8515	0	50	90	50	130
4,6-Dinitro-2-methylphenol	1	0	0	100	0*	40	130
n-Nitrosodiphenylamine	1	32.5485	0	50	65	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83648

Method: 8270D | Matrix: Soil | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	34.152	0	50	68*	70	130
4-Bromophenyl-phenylether	1	46.2675	0	50	93	70	130
Hexachlorobenzene	1	41.3055	0	50	83	70	130
N-Octadecane	1	43.632	0	50	87	70	130
Pentachlorophenol	1	0	0	100	0*	40	130
Phenanthrene	1	40.8645	0	50	82	70	130
Anthracene	1	37.3305	0	50	75	70	130
Carbazole	1	50.166	0	50	100	70	130
Di-n-butylphthalate	1	37.992	0	50	76	70	130
Fluoranthene	1	43.257	0	50	87	70	130
Pyrene	1	46.0545	0	50	92	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	40.1955	0	50	80	50	130
3,3'-Dichlorobenzidine	1	51.6345	0	50	103	10	130
Benzo[a]anthracene	1	45.3855	0	50	91	70	130
Chrysene	1	34.9905	0	50	70	60	130
bis(2-Ethylhexyl)phthalate	1	55.4745	0	50	111	70	130
Di-n-octylphthalate	1	44.154	0	50	88	70	130
Benzo[b]fluoranthene	1	44.814	0	50	90	70	130
Benzo[k]fluoranthene	1	39.114	0	50	78	70	130
Benzo[a]pyrene	1	44.859	0	50	90	70	130
Indeno[1,2,3-cd]pyrene	1	31.041	0	50	62*	70	130
Dibenzo[a,h]anthracene	1	32.4765	0	50	65	60	130
Benzo[g,h,i]perylene	1	34.1805	0	50	68*	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83648

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M105565.D	AD15985-001(5X)(MSD)	3/3/2020 4:38:00 PM
Non Spike(If applicable):	7M105554.D	AD15985-001(5X)	3/3/2020 12:23:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Pyridine	1	30.6165	0	50	61	1	150
N-Nitrosodimethylamine	1	0	0	50	0*	50	130
Benzaldehyde	1	33.8085	0	50	68	20	220
Aniline	1	35.943	8.271	50	55	20	150
Pentachloroethane	1	0	0	50	0*	50	130
bis(2-Chloroethyl)ether	1	34.5465	0	50	69	50	130
Phenol	1	38.9145	0	100	39	20	150
2-Chlorophenol	1	0	0	100	0*	50	130
N-Decane	1	0	0	50	0*	20	130
1,3-Dichlorobenzene	1	34.665	0	50	69	60	130
1,4-Dichlorobenzene	1	37.5165	0	50	75	60	130
1,2-Dichlorobenzene	1	39.2025	0	50	78	50	130
Benzyl alcohol	1	38.364	0	50	77	20	130
bis(2-chloroisopropyl)ether	1	0	0	50	0*	40	130
2-Methylphenol	1	57.309	0	100	57	50	130
Acetophenone	1	43.065	0	50	86	50	130
Hexachloroethane	1	0	0	50	0*	50	130
N-Nitroso-di-n-propylamine	1	31.638	0	50	63	40	130
3&4-Methylphenol	1	55.233	0	100	55*	70	130
Nitrobenzene	1	39.975	0	50	80	70	130
Isophorone	1	44.3325	0	50	89	60	130
2-Nitrophenol	1	0	0	100	0*	70	130
2,4-Dimethylphenol	1	69.504	0	100	70	40	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	35.3835	0	50	71	60	130
2,4-Dichlorophenol	1	10.2375	0	100	10*	70	130
1,2,4-Trichlorobenzene	1	43.218	0	50	86	50	130
Naphthalene	1	38.6865	0	50	77	50	130
4-Chloroaniline	1	40.9215	0	50	82	10	150
Hexachlorobutadiene	1	45.741	0	50	91	60	130
Caprolactam	1	42.384	0	50	85	50	130
4-Chloro-3-methylphenol	1	35.574	0	100	36*	50	130
2-Methylnaphthalene	1	39.5115	0	50	79	70	130
1-Methylnaphthalene	1	46.9035	0	50	94	70	130
1,1'-Biphenyl	1	50.583	0	50	101	60	130
1,2,4,5-Tetrachlorobenzene	1	50.2815	0	50	101	70	130
Hexachlorocyclopentadiene	1	0	0	50	0*	20	160
2,4,6-Trichlorophenol	1	0	0	100	0*	70	130
2,4,5-Trichlorophenol	1	0	0	100	0*	70	130
2-Chloronaphthalene	1	37.755	0	50	76	70	130
1,4-Dimethylnaphthalene	1	47.9505	0	50	96	70	130
Diphenyl Ether	1	52.3095	0	50	105	70	130
2-Nitroaniline	1	35.3145	0	50	71	50	130
Coumarin	1	42.9525	0	50	86	70	130
Acenaphthylene	1	42.7635	0	50	86	70	130
Dimethylphthalate	1	40.9995	0	50	82	70	130
2,6-Dinitrotoluene	1	0	0	50	0*	70	130
Acenaphthene	1	41.919	0	50	84	50	130
3-Nitroaniline	1	40.473	0	50	81	70	130
2,4-Dinitrophenol	1	0	0	100	0*	20	150
Dibenzofuran	1	40.1025	0	50	80	70	130
2,4-Dinitrotoluene	1	0	0	50	0*	40	130
4-Nitrophenol	1	0	0	100	0*	20	150
2,3,4,6-Tetrachlorophenol	1	0	0	100	0*	70	130
Fluorene	1	38.5635	0	50	77	50	130
4-Chlorophenyl-phenylether	1	38.6415	0	50	77	70	130
Diethylphthalate	1	40.065	0	50	80	70	130
4-Nitroaniline	1	35.5485	0	50	71	50	130
Atrazine	1	42.021	0	50	84	50	130
4,6-Dinitro-2-methylphenol	1	0	0	100	0*	40	130
n-Nitrosodiphenylamine	1	33.8325	0	50	68	50	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83648

Method: 8270D | Matrix: Soil | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,2-Diphenylhydrazine	1	34.8675	0	50	70	70	130
4-Bromophenyl-phenylether	1	44.919	0	50	90	70	130
Hexachlorobenzene	1	47.616	0	50	95	70	130
N-Octadecane	1	46.2615	0	50	93	70	130
Pentachlorophenol	1	0	0	100	0*	40	130
Phenanthrene	1	44.1705	0	50	88	70	130
Anthracene	1	40.407	0	50	81	70	130
Carbazole	1	46.608	0	50	93	70	130
Di-n-butylphthalate	1	40.1595	0	50	80	70	130
Fluoranthene	1	44.0715	0	50	88	70	130
Pyrene	1	38.82	0	50	78	50	130
Benzidine	1	0	0	50	0*	1	130
Butylbenzylphthalate	1	44.4615	0	50	89	50	130
3,3'-Dichlorobenzidine	1	53.9055	0	50	108	10	130
Benzo[a]anthracene	1	45.4155	0	50	91	70	130
Chrysene	1	36.0375	0	50	72	60	130
bis(2-Ethylhexyl)phthalate	1	46.482	0	50	93	70	130
Di-n-octylphthalate	1	50.085	0	50	100	70	130
Benzo[b]fluoranthene	1	50.337	0	50	101	70	130
Benzo[k]fluoranthene	1	42.108	0	50	84	70	130
Benzo[a]pyrene	1	44.88	0	50	90	70	130
Indeno[1,2,3-cd]pyrene	1	30.525	0	50	61*	70	130
Dibenzo[a,h]anthracene	1	35.7975	0	50	72	60	130
Benzo[g,h,i]perylene	1	34.107	0	50	68*	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB83648

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M105565.D	AD15985-001(5X)(MSD)	3/3/2020 4:38:00 PM
Duplicate(If applicable):	7M105564.D	AD15985-001(5X)(MS)	3/3/2020 4:14:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Pyridine	1	30.6165	30.174	1.5	30
N-Nitrosodimethylamine	1	0	0	NA	30
Benzaldehyde	1	33.8085	80.8275	82*	30
Aniline	1	35.943	40.767	13	30
Pentachloroethane	1	0	0	NA	30
bis(2-Chloroethyl)ether	1	34.5465	36.039	4.2	30
Phenol	1	38.9145	0	200*	40
2-Chlorophenol	1	0	0	NA	40
N-Decane	1	0	0	NA	30
1,3-Dichlorobenzene	1	34.665	31.9035	8.3	30
1,4-Dichlorobenzene	1	37.5165	35.8425	4.6	40
1,2-Dichlorobenzene	1	39.2025	35.1795	11	30
Benzyl alcohol	1	38.364	33.711	13	30
bis(2-chloroisopropyl)ether	1	0	0	NA	30
2-Methylphenol	1	57.309	42.696	29	40
Acetophenone	1	43.065	42.171	2.1	30
Hexachloroethane	1	0	0	NA	30
N-Nitroso-di-n-propylamine	1	31.638	32.625	3.1	40
3&4-Methylphenol	1	55.233	36.708	40*	30
Nitrobenzene	1	39.975	36.6015	8.8	30
Isophorone	1	44.3325	45.7725	3.2	30
2-Nitrophenol	1	0	0	NA	30
2,4-Dimethylphenol	1	69.504	59.7165	15	40
Benzoic Acid	1	0	0	NA	30
bis(2-Chloroethoxy)methane	1	35.3835	36.6345	3.5	30
2,4-Dichlorophenol	1	10.2375	0	200*	30
1,2,4-Trichlorobenzene	1	43.218	42.2265	2.3	40
Naphthalene	1	38.6865	36.396	6.1	40
4-Chloroaniline	1	40.9215	33.195	21	30
Hexachlorobutadiene	1	45.741	43.5765	4.8	30
Caprolactam	1	42.384	46.8555	10	30
4-Chloro-3-methylphenol	1	35.574	0	200*	40
2-Methylnaphthalene	1	39.5115	38.952	1.4	30
1-Methylnaphthalene	1	46.9035	52.5075	11	30
1,1'-Biphenyl	1	50.583	52.5195	3.8	30
1,2,4,5-Tetrachlorobenzene	1	50.2815	48.2265	4.2	30
Hexachlorocyclopentadiene	1	0	0	NA	30
2,4,6-Trichlorophenol	1	0	0	NA	30
2,4,5-Trichlorophenol	1	0	0	NA	30
2-Chloronaphthalene	1	37.755	39.156	3.6	30
1,4-Dimethylnaphthalene	1	47.9505	49.7835	3.8	30
Diphenyl Ether	1	52.3095	51.9465	0.7	30
2-Nitroaniline	1	35.3145	37.647	6.4	30
Coumarin	1	42.9525	43.404	1	30
Acenaphthylene	1	42.7635	40.9605	4.3	30
Dimethylphthalate	1	40.9995	40.6845	0.77	30
2,6-Dinitrotoluene	1	0	0	NA	30
Acenaphthene	1	41.919	40.089	4.5	40
3-Nitroaniline	1	40.473	40.7955	0.79	30
2,4-Dinitrophenol	1	0	0	NA	30
Dibenzofuran	1	40.1025	39.783	0.8	30
2,4-Dinitrotoluene	1	0	0	NA	40
4-Nitrophenol	1	0	0	NA	40
2,3,4,6-Tetrachlorophenol	1	0	0	NA	30
Fluorene	1	38.5635	36.8595	4.5	40
4-Chlorophenyl-phenylether	1	38.6415	37.3485	3.4	30
Diethylphthalate	1	40.065	37.2765	7.2	30
4-Nitroaniline	1	35.5485	32.736	8.2	30
Atrazine	1	42.021	44.8515	6.5	30
4,6-Dinitro-2-methylphenol	1	0	0	NA	30
n-Nitrosodiphenylamine	1	33.8325	32.5485	3.9	30

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB83648

Method: 8270D | Matrix: Soil | QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,2-Diphenylhydrazine	1	34.8675	34.152	2.1	30
4-Bromophenyl-phenylether	**1**	**44.919**	**46.2675**	**3**	**30**
Hexachlorobenzene	**1**	**47.616**	**41.3055**	**14**	**30**
N-Octadecane	1	46.2615	43.632	5.9	30
Pentachlorophenol	**1**	**0**	**0**	**NA**	**40**
Phenanthrene	**1**	**44.1705**	**40.8645**	**7.8**	**30**
Anthracene	**1**	**40.407**	**37.3305**	**7.9**	**30**
Carbazole	**1**	**46.608**	**50.166**	**7.4**	**30**
Di-n-butylphthalate	**1**	**40.1595**	**37.992**	**5.5**	**30**
Fluoranthene	**1**	**44.0715**	**43.257**	**1.9**	**30**
Pyrene	**1**	**38.82**	**46.0545**	**17**	**40**
Benzidine	1	0	0	NA	30
Butylbenzylphthalate	**1**	**44.4615**	**40.1955**	**10**	**40**
3,3'-Dichlorobenzidine	**1**	**53.9055**	**51.6345**	**4.3**	**30**
Benzo[a]anthracene	**1**	**45.4155**	**45.3855**	**0.07**	**30**
Chrysene	**1**	**36.0375**	**34.9905**	**2.9**	**30**
bis(2-Ethylhexyl)phthalate	**1**	**46.482**	**55.4745**	**18**	**30**
Di-n-octylphthalate	**1**	**50.085**	**44.154**	**13**	**30**
Benzo[b]fluoranthene	**1**	**50.337**	**44.814**	**12**	**30**
Benzo[k]fluoranthene	**1**	**42.108**	**39.114**	**7.4**	**30**
Benzo[a]pyrene	**1**	**44.88**	**44.859**	**0.05**	**30**
Indeno[1,2,3-cd]pyrene	**1**	**30.525**	**31.041**	**1.7**	**30**
Dibenzo[a,h]anthracene	**1**	**35.7975**	**32.4765**	**9.7**	**30**
Benzo[g,h,i]perylene	**1**	**34.107**	**34.1805**	**0.22**	**30**

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB83648
Blank Data File: 7M105544.D
Matrix: Soil

Blank Analysis Date: 03/03/20 08:30
Blank Extraction Date: 03/02/20
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD15946-001	7M105559.D	03/03/20 14:18
AD15985-001(5X)(	7M105565.D	03/03/20 16:38
AD15985-001(5X)(	7M105564.D	03/03/20 16:14
AD15985-001(5X)	7M105554.D	03/03/20 12:23
SMB83648(MS)	10M79591.D	03/03/20 08:33

Form 5

Tune Name: CAL DFTPP **Data File:** 10M79165.D
Instrument: GCMS 10 **Analysis Date:** 02/10/20 09:38
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.964 to 9.969 min

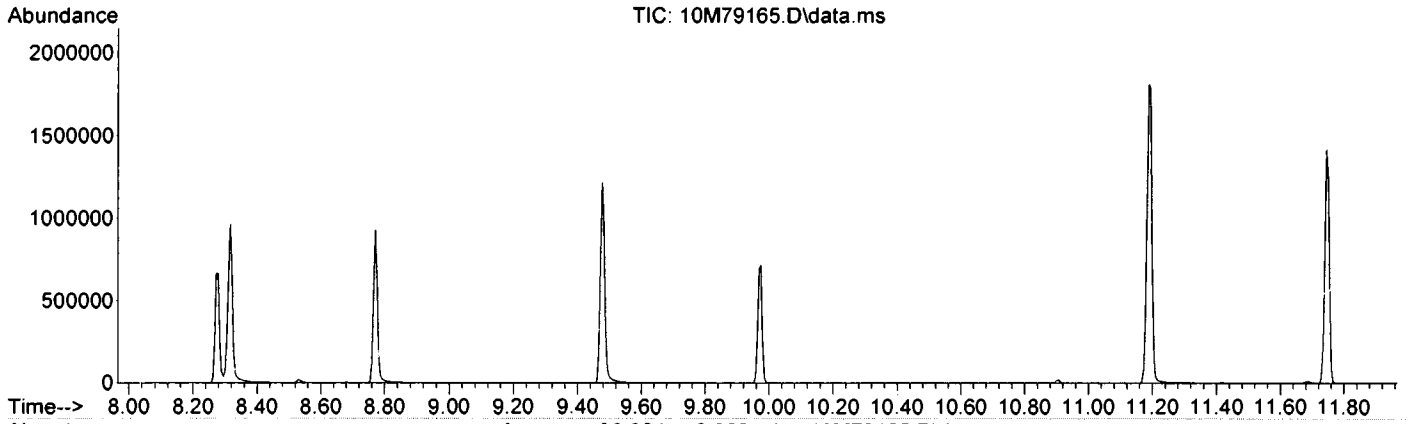
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.7	25508	PASS
68	69	0.00	2	1.0	270	PASS
69	198	0.00	100	48.5	25912	PASS
70	69	0.00	2	0.4	112	PASS
127	198	40	60	57.0	30452	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53464	PASS
199	198	5	9	6.9	3682	PASS
275	198	10	30	24.4	13037	PASS
365	198	1	100	3.1	1677	PASS
441	443	0.01	100	73.5	5664	PASS
442	198	40	100	72.0	38508	PASS
443	442	17	23	20.0	7711	PASS

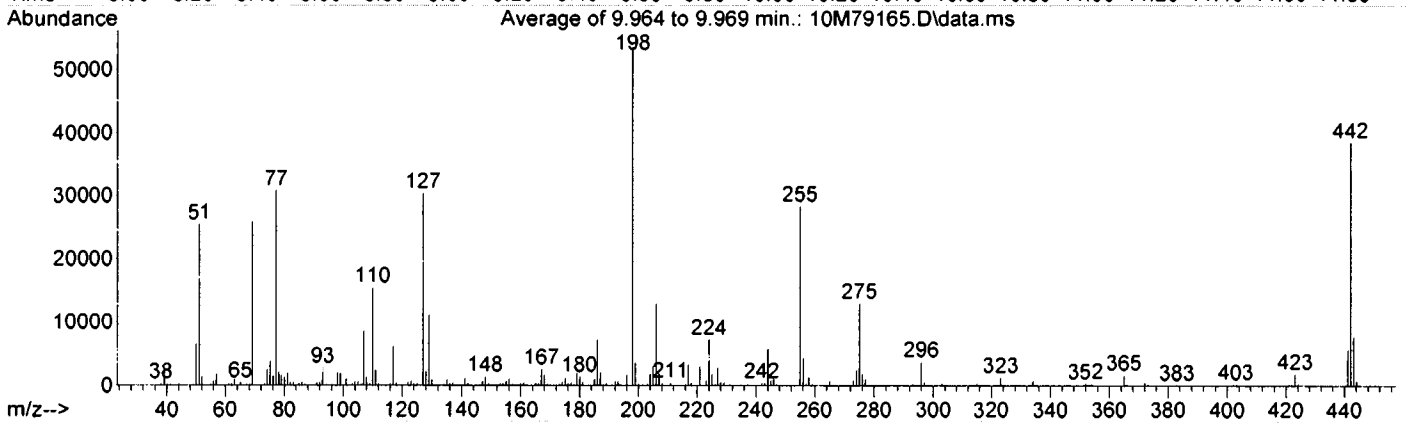
Data File	Sample Number	Analysis Date:
10M79166.D	CAL BNA@10PPM	02/10/20 10:05
10M79167.D	CAL BNA@2PPM	02/10/20 10:27
10M79168.D	CAL BNA@196PP	02/10/20 11:26
10M79169.D	CAL BNA@160PP	02/10/20 11:48
10M79170.D	CAL BNA@2PPM	02/10/20 12:10
10M79171.D	CAL BNA@120PP	02/10/20 12:33
10M79172.D	CAL BNA@80PPM	02/10/20 12:55
10M79173.D	CAL BNA@20PPM	02/10/20 13:18
10M79174.D	CAL BNA@0.5PP	02/10/20 13:41
10M79175.D	CAL BNA@50PPM	02/10/20 14:03
10M79176.D	ICV BNA@50PPM	02/10/20 14:25
10M79177.D	WMB82078	02/10/20 14:48
10M79178.D	SMB82066(MS)	02/10/20 15:10
10M79179.D	SMB82067(MS)	02/10/20 15:33
10M79180.D	MBS-1	02/10/20 15:55
10M79181.D	MBS-2	02/10/20 16:18
10M79182.D	MBS-3	02/10/20 16:40
10M79183.D	MBS-4	02/10/20 17:03
10M79184.D	MBS-5	02/10/20 17:25
10M79185.D	MB	02/10/20 17:48

Data Path : G:\GcMsData\2020\GCMS_10\Data\02-10-20\
Data File : 10M79165.D
Acq On : 10 Feb 2020 9:38
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_10\METHODQT\10M_0108.M
Title : @GCMS_10,mg,625,8270
Last Update : Wed Jan 08 11:54:25 2020





Spectrum Information: Average of 9.964 to 9.969 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.7	25508	PASS
68	69	0.00	2	1.0	270	PASS
69	198	0.00	100	48.5	25912	PASS
70	69	0.00	2	0.4	112	PASS
127	198	40	60	57.0	30452	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53464	PASS
199	198	5	9	6.9	3682	PASS
275	198	10	30	24.4	13037	PASS
365	198	1	100	3.1	1677	PASS
441	443	0.01	100	73.5	5664	PASS
442	198	40	100	72.0	38508	PASS
443	442	17	23	20.0	7711	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M105107.D
Instrument: GCMS 7 **Analysis Date:** 02/10/20 10:59
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.008 to 10.014 min

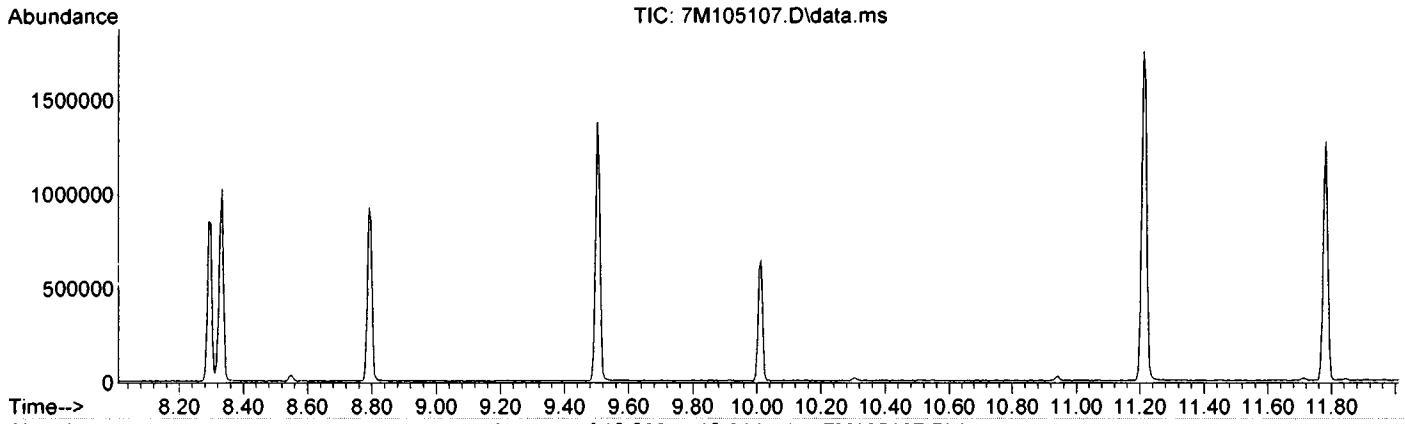
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	46.2	31352	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	33540	PASS
70	69	0.00	2	1.0	329	PASS
127	198	40	60	53.0	35964	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	67864	PASS
199	198	5	9	7.1	4798	PASS
275	198	10	30	24.5	16616	PASS
365	198	1	100	2.8	1872	PASS
441	443	0.01	100	70.2	5732	PASS
442	198	40	100	59.9	40680	PASS
443	442	17	23	20.1	8165	PASS

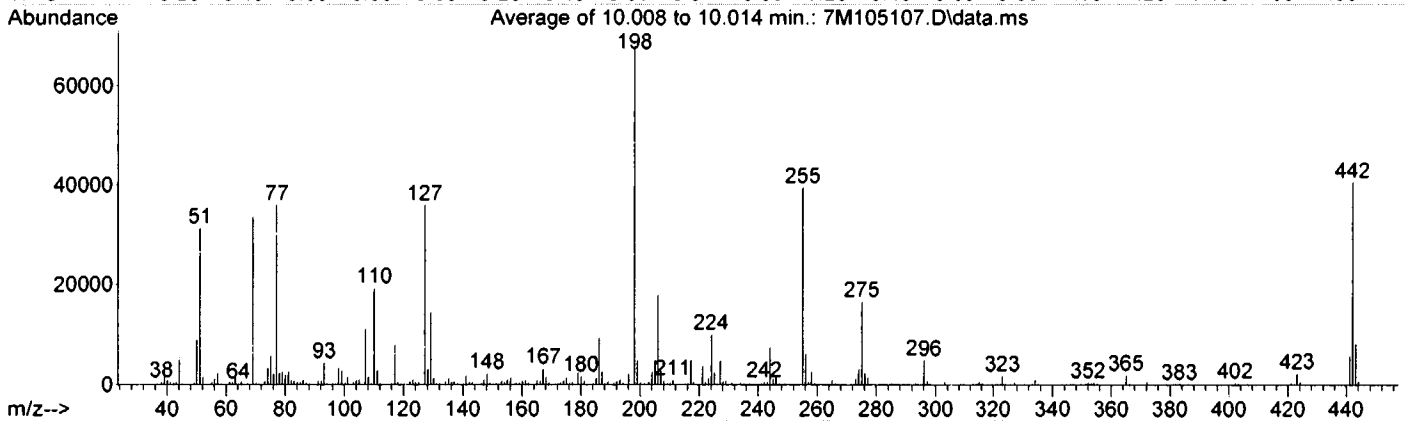
Data File	Sample Number	Analysis Date:
7M105108.D	CAL BNA@2PPM	02/10/20 11:23
7M105109.D	CAL BNA@10PPM	02/10/20 11:46
7M105110.D	CAL BNA@196PP	02/10/20 12:09
7M105111.D	CAL BNA@160PP	02/10/20 12:32
7M105112.D	CAL BNA@120PP	02/10/20 12:55
7M105113.D	CAL BNA@80PPM	02/10/20 13:21
7M105114.D	CAL BNA@20PPM	02/10/20 13:44
7M105115.D	CAL BNA@0.5PP	02/10/20 14:07
7M105116.D	CAL BNA@50PPM	02/10/20 14:31
7M105117.D	ICV BNA@50PPM	02/10/20 14:57

Data Path : G:\GcMsData\2020\GCMS_7\Data\02-10-20\
Data File : 7M105107.D
Acq On : 10 Feb 2020 10:59
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0113.M
Title : @GCMS_7,mg,625,8270
Last Update : Tue Jan 14 11:13:26 2020





Spectrum Information: Average of 10.008 to 10.014 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.2	31352	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	33540	PASS
70	69	0.00	2	1.0	329	PASS
127	198	40	60	53.0	35964	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	67864	PASS
199	198	5	9	7.1	4798	PASS
275	198	10	30	24.5	16616	PASS
365	198	1	100	2.8	1872	PASS
441	443	0.01	100	70.2	5732	PASS
442	198	40	100	59.9	40680	PASS
443	442	17	23	20.1	8165	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 10M79589.D
Instrument: GCMS 10 **Analysis Date:** 03/03/20 07:34
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.964 to 9.964 min

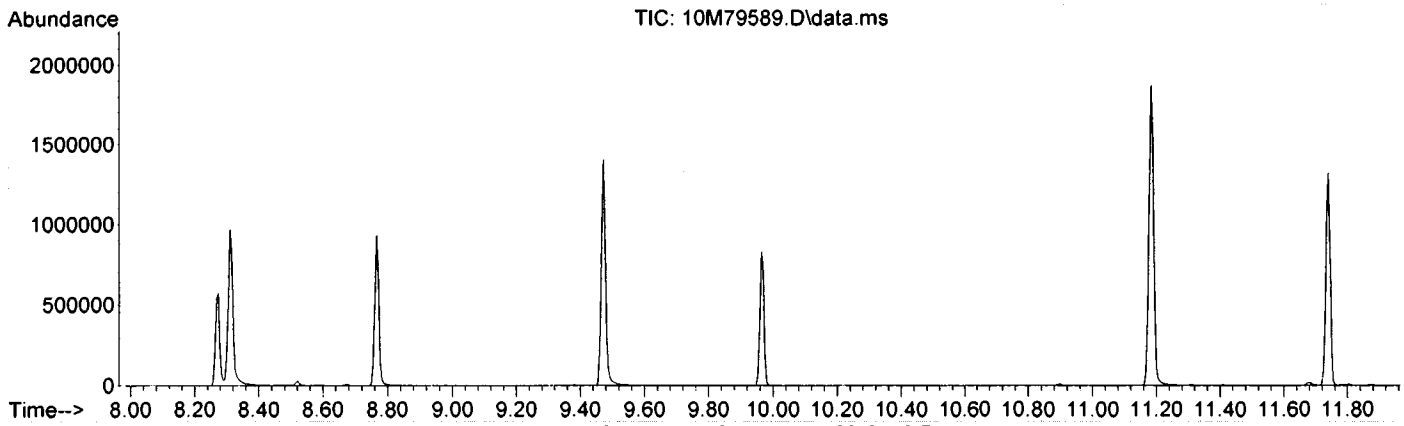
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	47.5	43168	PASS
68	69	0.00	2	1.6	682	PASS
69	198	0.00	100	46.4	42176	PASS
70	69	0.00	2	0.5	223	PASS
127	198	40	60	55.3	50264	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	90848	PASS
199	198	5	9	6.4	5793	PASS
275	198	10	30	25.2	22912	PASS
365	198	1	100	3.4	3118	PASS
441	443	0.01	100	77.8	11491	PASS
442	198	40	100	82.7	75112	PASS
443	442	17	23	19.7	14767	PASS

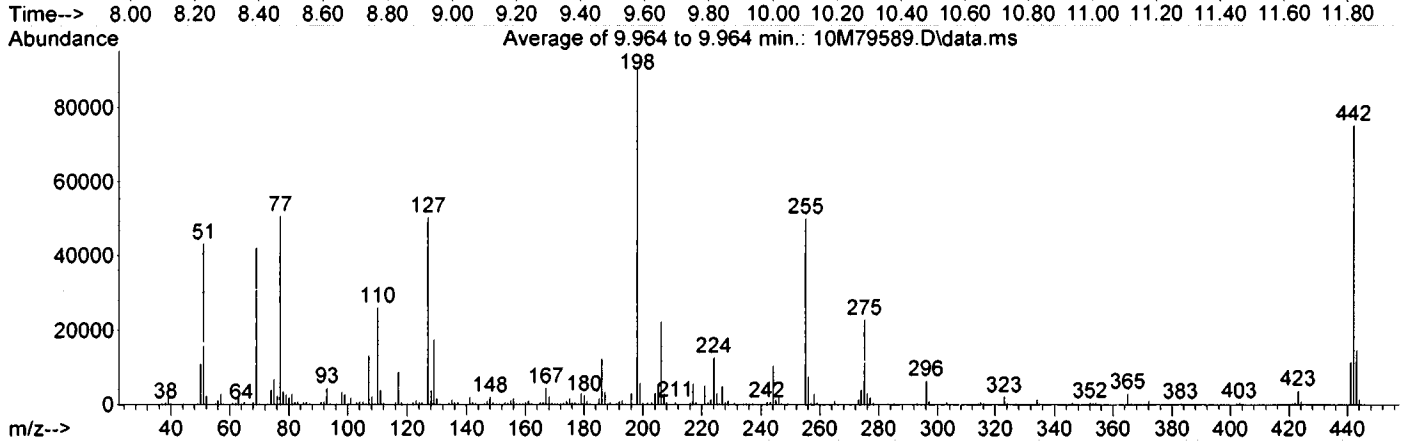
Data File	Sample Number	Analysis Date:
10M79590.D	CAL BNA@50PPM	03/03/20 07:56
10M79591.D	SMB83648(MS)	03/03/20 08:33
10M79592.D	WMB83700	03/03/20 08:56
10M79593.D	AD15923-008	03/03/20 09:19
10M79594.D	AD15937-001	03/03/20 09:41
10M79595.D	AD15937-003	03/03/20 10:03
10M79596.D	AD15937-007	03/03/20 10:26
10M79597.D	AD15937-008	03/03/20 10:48
10M79598.D	SMB83648	03/03/20 11:11
10M79599.D	AD15927-004	03/03/20 11:33
10M79600.D	AD15926-001	03/03/20 11:56
10M79601.D	WMB83719(MS)	03/03/20 13:55
10M79602.D	AD15785-002(T)(M	03/03/20 14:23
10M79603.D	AD15785-002(T)(M	03/03/20 14:45
10M79604.D	AD15785-002(T)	03/03/20 15:08
10M79605.D	WMB83719	03/03/20 15:30
10M79606.D	EF-SPLP V-322442	03/03/20 15:53
10M79607.D	AD15970-001	03/03/20 16:15
10M79608.D	AD15970-002	03/03/20 16:38
10M79609.D	AD15970-004	03/03/20 17:00
10M79610.D	AD15970-005	03/03/20 17:23
10M79611.D	AD15970-006	03/03/20 17:45
10M79612.D	AD15937-008(R)	03/03/20 18:08

Data Path : G:\GcMsData\2020\GCMS_10\Data\03-03-20\
Data File : 10M79589.D
Acq On : 3 Mar 2020 7:34
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_10\METHODQT\10M_0210.M
Title : @GCMS_10,mg,625,8270
Last Update : Mon Feb 10 14:26:59 2020





Spectrum Information: Average of 9.964 to 9.964 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.5	43168	PASS
68	69	0.00	2	1.6	682	PASS
69	198	0.00	100	46.4	42176	PASS
70	69	0.00	2	0.5	223	PASS
127	198	40	60	55.3	50264	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	90848	PASS
199	198	5	9	6.4	5793	PASS
275	198	10	30	25.2	22912	PASS
365	198	1	100	3.4	3118	PASS
441	443	0.01	100	77.8	11491	PASS
442	198	40	100	82.7	75112	PASS
443	442	17	23	19.7	14767	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M105542.D
Instrument: GCMS 7 **Analysis Date:** 03/03/20 07:34
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.996 to 10.002 min

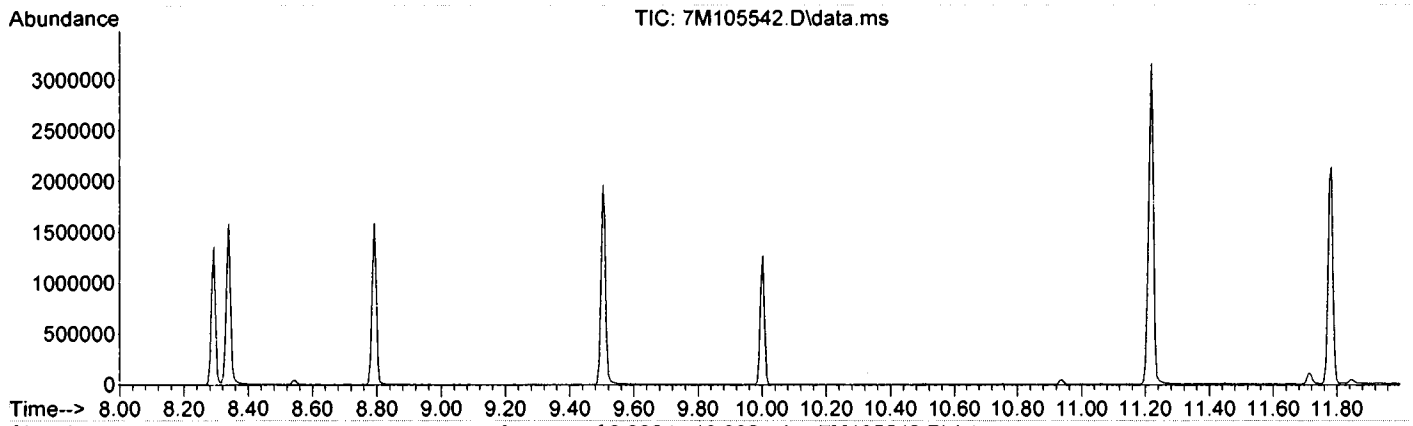
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	41.5	53268	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.4	58240	PASS
70	69	0.00	2	0.6	326	PASS
127	198	40	60	50.4	64716	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	128344	PASS
199	198	5	9	6.7	8572	PASS
275	198	10	30	24.8	31844	PASS
365	198	1	100	2.8	3611	PASS
441	443	0.01	100	79.6	10988	PASS
442	198	40	100	56.2	72128	PASS
443	442	17	23	19.1	13812	PASS

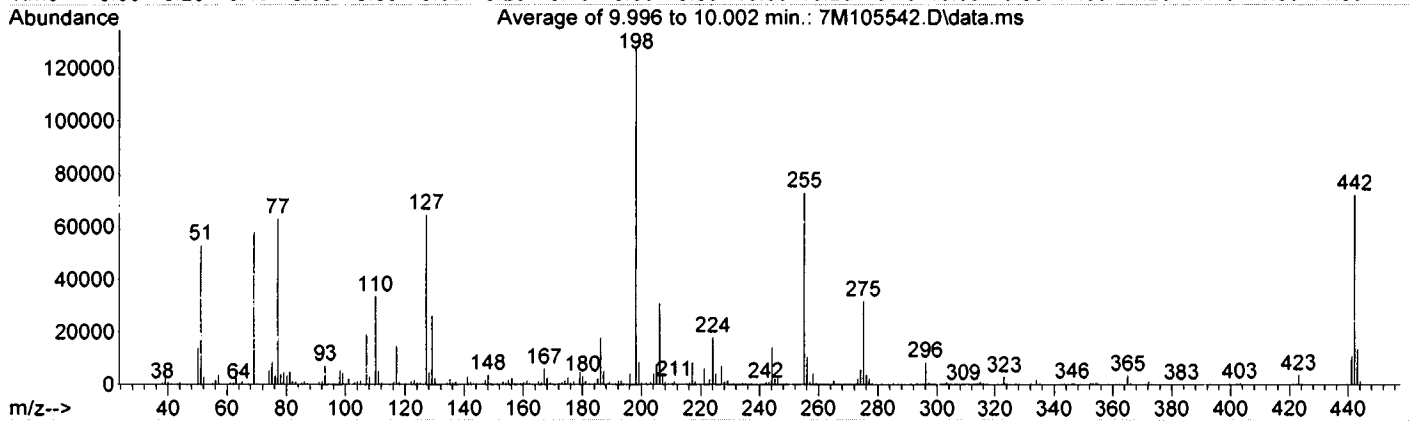
Data File	Sample Number	Analysis Date:
7M105543.D	CAL BNA@50PPM	03/03/20 08:00
7M105544.D	SMB83648	03/03/20 08:30
7M105545.D	AD15914-004	03/03/20 08:53
7M105546.D	AD15914-005	03/03/20 09:17
7M105547.D	AD15914-006	03/03/20 09:40
7M105548.D	AD15914-007	03/03/20 10:03
7M105549.D	AD15955-020(R)	03/03/20 10:26
7M105550.D	AD15927-002	03/03/20 10:50
7M105551.D	AD15927-003	03/03/20 11:13
7M105552.D	AD15927-001(3X)	03/03/20 11:36
7M105553.D	AD15945-002(5X)	03/03/20 11:59
7M105554.D	AD15985-001(5X)	03/03/20 12:23
7M105555.D	AD15985-002(5X)	03/03/20 12:46
7M105556.D	AD15964-001(5X)	03/03/20 13:09
7M105557.D	AD15872-002	03/03/20 13:32
7M105558.D	AD15915-001	03/03/20 13:55
7M105559.D	AD15946-001	03/03/20 14:18
7M105560.D	AD15957-001	03/03/20 14:41
7M105561.D	AD15985-003(5X)	03/03/20 15:05
7M105562.D	AD15985-004(5X)	03/03/20 15:28
7M105563.D	AD15945-002(3X)	03/03/20 15:51
7M105564.D	AD15985-001(5X)(	03/03/20 16:14
7M105565.D	AD15985-001(5X)(	03/03/20 16:38

Data Path : G:\GcMsData\2020\GCMS_7\Data\03-03-20\
Data File : 7M105542.D
Acq On : 3 Mar 2020 7:34
Operator : AB/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2020\GCMS_7\METHODQT\7M_0210.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon Feb 10 14:56:43 2020





Spectrum Information: Average of 9.996 to 10.002 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.5	53268	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.4	58240	PASS
70	69	0.00	2	0.6	326	PASS
127	198	40	60	50.4	64716	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	128344	PASS
199	198	5	9	6.7	8572	PASS
275	198	10	30	24.8	31844	PASS
365	198	1	100	2.8	3611	PASS
441	443	0.01	100	79.6	10988	PASS
442	198	40	100	56.2	72128	PASS
443	442	17	23	19.1	13812	PASS

0022703 0072

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M79175.D	CAL BNA@50PPM	02/10/20 14:03	2	10M79170.D	CAL BNA@2PPM	02/10/20 12:10
3	10M79166.D	CAL BNA@10PPM	02/10/20 10:05	4	10M79173.D	CAL BNA@20PPM	02/10/20 13:18
5	10M79172.D	CAL BNA@80PPM	02/10/20 12:55	6	10M79171.D	CAL BNA@120PPM	02/10/20 12:33
7	10M79169.D	CAL BNA@160PPM	02/10/20 11:48	8	10M79168.D	CAL BNA@196PPM	02/10/20 11:26
9	10M79174.D	CAL BNA@0.5PPM	02/10/20 13:41				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	0.9664	1.6038	1.0570	0.9957	0.9973	0.9742	0.9593	1.0400	2.1894	1.20	2.67	0.997	0.998	35		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Qua	1.6944	0.7587	1.4116	1.5320	1.9136	1.8905	1.9158	2.1193	-----	1.65	3.13	0.995	0.999	26		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.4786	1.7686	1.4220	1.4647	1.5659	1.5289	1.5306	1.6626	-----	1.55	3.06	0.997	0.998	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.0882	2.5246	2.0658	2.0260	2.2212	2.1800	2.1783	2.3791	-----	2.21	4.63	0.997	0.999	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	1.9336	2.4339	1.9248	1.9263	2.0190	1.9512	1.8993	2.0299	-----	2.01	5.44	0.998	0.998	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Avg	3.4723	3.8929	3.3266	3.4220	3.6222	3.5165	3.4802	3.7664	3.5706	3.56	5.54	0.999	0.999	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7908	1.0141	0.7861	0.7783	0.8385	0.8265	0.8219	0.8863	-----	0.843	5.58	0.997	0.999	9.2	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.3420	3.3156	2.5701	2.4443	2.4775	2.4214	2.3851	2.6021	4.1155	2.74	5.59	0.997	0.998	22	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.7353	3.4757	2.6929	2.6853	2.8817	2.8157	2.7589	2.9807	-----	2.88	5.50	0.997	0.998	9.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.2548	4.2460	3.2072	3.2346	3.4498	3.3923	3.3383	3.5474	-----	3.46	5.51	0.998	0.999	9.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.4382	3.0113	2.4293	2.4106	2.5629	2.5038	2.4944	2.6734	-----	2.57	5.64	0.998	0.999	7.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.5519	3.1780	2.6017	2.5077	2.6290	2.5447	2.4608	2.5761	-----	2.63	5.68	0.999	0.999	8.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.6395	3.3747	2.6470	2.5876	2.7409	2.6722	2.6402	2.8362	-----	2.77	5.77	0.998	0.999	9.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4998	1.9003	1.5029	1.5053	1.5828	1.5152	1.5270	1.6224	-----	1.58	5.83	0.998	0.999	8.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4143	1.7623	1.4028	1.4190	1.4849	1.4325	1.4486	1.5521	-----	1.49	5.95	0.997	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9051	1.0469	0.8559	0.9012	0.9686	0.9397	0.9517	1.0330	-----	0.950	5.93	0.997	0.999	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.8046	2.2964	1.8561	1.8502	1.8823	1.7973	1.7820	1.8925	-----	1.90	6.04	0.999	0.999	8.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2751	1.4982	1.2313	1.2623	1.3367	1.2937	1.3127	1.4088	1.5291	1.35	6.02	0.997	0.999	7.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	1.9023	2.3065	1.8158	1.8858	1.9473	1.7585	1.6490	1.6432	-----	1.86	6.14	0.995	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5695	0.7182	0.5650	0.5679	0.6078	0.5819	0.5944	0.6365	-----	0.605	6.23	0.997	0.999	8.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	0.9877	1.1716	0.9658	0.9925	1.0013	0.9077	0.8525	0.8529	1.1918	0.992	6.14	0.995	0.999	12	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3753	1.5933	1.3000	1.3640	1.4023	1.2691	1.1839	1.1559	1.6187	1.36	6.14	0.993	0.999	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1645	0.1907	0.1561	0.1571	0.1756	0.1716	0.1786	0.1879	-----	0.173	6.26	0.997	1.00	7.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3659	0.4503	0.3607	0.3620	0.3814	0.3692	0.3755	0.3955	-----	0.383	6.28	0.998	0.999	7.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6838	0.7926	0.6598	0.6782	0.7084	0.6797	0.6922	0.7238	-----	0.702	6.46	0.999	0.999	5.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1871	0.1960	0.1742	0.1789	0.1996	0.1979	0.2054	0.2177	-----	0.195	6.52	0.997	1.00	7.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3489	0.4219	0.3353	0.3477	0.3684	0.3576	0.3636	0.3779	0.4184	0.371	6.55	0.999	1.00	8.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.1951	-----	0.0825	0.1269	0.2479	0.2607	0.2801	0.2979	-----	0.213	6.63	0.993	0.999	38		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4162	0.5065	0.4076	0.4120	0.4303	0.4158	0.4223	0.4411	-----	0.432	6.63	0.999	0.999	7.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2883	0.3263	0.2763	0.2832	0.3041	0.2985	0.3045	0.3213	0.3024	0.301	6.71	0.998	0.999	5.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3136	0.3950	0.3095	0.3026	0.3281	0.3208	0.3274	0.3460	-----	0.330	6.77	0.998	0.999	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.1064	1.3985	1.0801	1.0994	1.1267	1.0799	1.0673	1.0737	1.5890	1.18	6.83	1.00	1.00	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3993	0.4835	0.3955	0.4100	0.4102	0.3745	0.3596	0.3260	0.5102	0.408	6.87	0.990	0.999	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1748	0.2064	0.1683	0.1653	0.1836	0.1798	0.1870	0.1986	-----	0.183	6.93	0.997	0.999	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1130	0.1072	0.1005	0.1097	0.1191	0.1145	0.1162	0.1153	-----	0.112	7.14	1.00	1.00	5.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.2971	0.3451	0.2804	0.2921	0.3152	0.3058	0.3138	0.3316	-----	0.310	7.23	0.998	0.999	6.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7228	0.8892	0.7239	0.7119	0.7426	0.7052	0.6937	0.7099	-----	0.737	7.36	0.999	0.999	8.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6821	0.8551	0.6895	0.6832	0.6983	0.6772	0.6680	0.6851	-----	0.705	7.44	1.00	1.00	8.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.7035	0.8708	0.7040	0.6936	0.7224	0.6881	0.6783	0.6970	-----	0.720	7.36	0.999	0.999	8.7		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8029	0.9987	0.8012	0.7988	0.8271	0.7836	0.7800	0.8033	-----	0.824	7.74	0.999	0.999	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5535	0.6818	0.5450	0.5458	0.5928	0.5828	0.5979	0.6222	-----	0.590	7.50	0.998	1.00	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.968
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0022703 0073

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M79175.D	CAL BNA@50PPM	02/10/20 14:03	2	10M79170.D	CAL BNA@2PPM	02/10/20 12:10
3	10M79166.D	CAL BNA@10PPM	02/10/20 10:05	4	10M79173.D	CAL BNA@20PPM	02/10/20 13:18
5	10M79172.D	CAL BNA@80PPM	02/10/20 12:55	6	10M79171.D	CAL BNA@120PPM	02/10/20 12:33
7	10M79169.D	CAL BNA@160PPM	02/10/20 11:48	8	10M79168.D	CAL BNA@196PPM	02/10/20 11:26
9	10M79174.D	CAL BNA@0.5PPM	02/10/20 13:41				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Qua	0.3109	0.2270	0.2702	0.2742	0.3517	0.3510	0.3701	0.4023	-----	0.320	7.49	0.993	0.999	19	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3602	0.3701	0.3350	0.3632	0.3912	0.3840	0.3966	0.4200	-----	0.378	7.58	0.997	0.999	6.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3841	0.4115	0.3539	0.3697	0.4195	0.3888	0.4077	0.4436	-----	0.397	7.62	0.995	0.998	7.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2708	1.5881	1.2920	1.2546	1.3431	1.3119	1.3358	1.4018	-----	1.35	7.65	0.999	1.00	7.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1263	1.3920	1.1017	1.0997	1.1929	1.1563	1.1548	1.2079	-----	1.18	7.76	0.999	0.999	8.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.9192	1.1049	0.9082	0.9133	0.9748	0.9275	0.8979	0.8678	-----	0.939	8.04	0.998	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9192	1.1049	0.9082	0.9133	0.9748	0.9275	0.8979	0.8678	-----	0.939	8.04	0.998	0.999	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7956	0.9794	0.7741	0.7773	0.8400	0.8296	0.8260	0.8537	-----	0.835	7.82	0.999	1.00	7.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.4150	0.4490	0.3939	0.4076	0.4427	0.4260	0.4250	0.4422	-----	0.425	7.83	0.999	0.999	4.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4661	0.5602	0.4566	0.4584	0.5038	0.4933	0.4917	0.4834	-----	0.489	8.02	0.999	1.00	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7629	2.1281	1.7355	1.7564	1.8538	1.7654	1.7591	1.7830	-----	1.82	8.11	1.00	1.00	7.2	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2574	1.5267	1.2498	1.2557	1.3312	1.2862	1.2967	1.3382	-----	1.32	7.98	0.999	1.00	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2989	0.3153	0.2869	0.2924	0.3298	0.3146	0.3062	0.2978	-----	0.305	8.04	0.999	0.999	4.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1644	1.4568	1.1575	1.1625	1.2126	1.1706	1.1453	1.1641	-----	1.20	8.27	1.00	1.00	8.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3276	0.3828	0.3127	0.3253	0.3473	0.3243	0.3131	0.3164	-----	0.331	8.18	0.998	0.999	7.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1277	-----	0.0965	0.1097	0.1572	0.1599	0.1695	0.1759	-----	0.142	8.27	0.997	0.999	22	0.20	a 50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6122	2.0085	1.6078	1.6070	1.6985	1.6337	1.6212	1.6660	2.2730	1.75	8.42	1.00	1.00	13	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.3775	0.3525	0.3418	0.3680	0.4123	0.4034	0.4136	0.4410	-----	0.389	8.39	0.997	0.999	8.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.2591	0.2608	0.2261	0.2324	0.2687	0.2609	0.2783	0.2815	-----	0.259	8.31	0.998	0.999	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3220	0.3286	0.3064	0.3101	0.3498	0.3469	0.3551	0.3870	-----	0.338	8.52	0.996	0.999	7.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3417	1.5745	1.2994	1.3199	1.4149	1.3338	1.3202	1.3442	-----	1.37	8.74	0.999	0.999	6.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6486	0.7584	0.6036	0.6190	0.6876	0.6735	0.6859	0.7136	-----	0.674	8.73	0.999	1.00	7.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2427	1.4355	1.1978	1.2281	1.3173	1.2908	1.3021	1.3542	-----	1.30	8.61	0.999	1.00	5.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3840	0.4605	0.3459	0.3840	0.4141	0.3975	0.3983	0.4168	-----	0.400	8.74	0.999	0.999	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3703	0.4078	0.3434	0.3492	0.4004	0.3905	0.4026	0.4277	-----	0.387	9.36	0.997	0.999	7.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1133	-----	0.0867	0.0963	0.1283	0.1301	0.1377	0.1462	-----	0.120	8.77	0.996	1.00	18	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6365	0.7350	0.6207	0.6163	0.6669	0.6475	0.6540	0.6770	-----	0.657	8.84	0.999	1.00	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1253	0.1102	0.1127	0.1138	0.1387	0.1402	0.1509	0.1648	-----	0.132	8.97	0.991	1.00	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.8367	0.8844	0.7414	0.7544	0.8012	0.7714	0.7824	0.8794	-----	0.806	8.88	0.996	0.997	6.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2167	0.2452	0.2075	0.2055	0.2306	0.2296	0.2400	0.2564	-----	0.229	9.21	0.996	0.999	7.9	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2569	0.3015	0.2401	0.2397	0.2729	0.2731	0.2854	0.3062	-----	0.272	9.28	0.991	0.999	9.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4523	0.4731	0.4353	0.4361	0.4726	0.4506	0.4437	0.4373	-----	0.450	9.55	0.999	1.00	3.4	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1189	-----	0.0891	0.0910	0.1420	0.1473	0.1646	0.1799	-----	0.133	9.48	0.988	0.999	26	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0695	1.3318	1.0561	1.0412	1.1009	1.0515	1.0640	1.0972	-----	1.10	9.71	0.999	0.999	8.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1065	1.2602	1.0689	1.0668	1.1556	1.1081	1.1076	1.1484	-----	1.13	9.77	0.999	0.999	5.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0210	1.2347	0.9917	0.9998	1.0624	1.0205	1.0235	1.0645	-----	1.05	9.93	0.999	0.999	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.1988	1.2210	1.1063	1.1371	1.2737	1.2234	1.2309	1.2713	1.1944	1.21	10.31	0.999	0.999	4.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1446	1.2893	1.0925	1.1171	1.1935	1.1535	1.1596	1.1982	-----	1.17	11.03	0.999	1.00	5.2	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1179	1.3932	1.1436	1.1205	1.1218	1.0826	1.1062	1.1435	-----	1.15	11.30	0.999	1.00	8.6	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.5899	0.6474	0.5934	0.5954	0.5919	0.5463	0.5337	0.5331	-----	0.579	11.18	0.998	1.00	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.5762	0.7272	0.5725	0.5578	0.5901	0.5825	0.6051	0.6618	-----	0.609	11.48	0.996	0.999	9.4		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.968
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M79175.D	CAL BNA@50PPM	02/10/20 14:03	2	10M79170.D	CAL BNA@2PPM	02/10/20 12:10
3	10M79166.D	CAL BNA@10PPM	02/10/20 10:05	4	10M79173.D	CAL BNA@20PPM	02/10/20 13:18
5	10M79172.D	CAL BNA@80PPM	02/10/20 12:55	6	10M79171.D	CAL BNA@120PPM	02/10/20 12:33
7	10M79169.D	CAL BNA@160PPM	02/10/20 11:48	8	10M79168.D	CAL BNA@196PPM	02/10/20 11:26
9	10M79174.D	CAL BNA@0.5PPM	02/10/20 13:41				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2616	0.2936	0.2431	0.2443	0.2788	0.2826	0.3037	0.3275	----	0.279	11.41	0.993	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3501	0.3595	0.3251	0.3288	0.3627	0.3583	0.3673	0.3905	----	0.355	11.81	0.998	1.00	5.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.4873	0.4838	0.4615	0.4626	0.5172	0.5079	0.5279	0.5469	----	0.499	12.07	0.998	1.00	6.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4497	0.3910	0.4091	0.4116	0.4762	0.4613	0.4580	0.4557	----	0.439	12.17	1.00	1.00	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.3776	0.4890	0.3719	0.3884	0.3892	0.3597	0.3598	0.3490	----	0.386	12.68	0.998	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0800	1.3708	1.0925	1.0680	1.1192	1.0752	1.1146	1.1572	----	1.13	12.71	0.998	0.999	8.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0895	1.2956	1.0562	1.0376	1.1210	1.0827	1.0692	1.0741	----	1.10	12.75	1.00	1.00	7.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7363	0.6699	0.6639	0.6862	0.7830	0.7412	0.7209	0.6989	----	0.713	12.76	0.998	0.999	5.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.1289	1.0508	1.0029	1.0569	1.2041	1.1895	1.2310	1.2679	----	1.14	13.50	0.998	1.00	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0742	1.2426	0.9814	0.9947	1.0667	1.1015	1.0910	1.2029	----	1.09	13.92	0.997	0.999	8.3	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.1066	1.2969	1.0315	1.0124	1.0093	1.0593	1.1550	1.1854	----	1.11	13.94	0.995	0.999	9.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	0.9652	1.0849	0.9001	0.8852	1.0010	1.0003	1.0484	1.1113	----	1.00	14.26	0.997	1.00	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.2212	1.4050	1.1423	1.1263	1.2797	1.2976	1.3663	1.4557	----	1.29	15.62	0.995	1.00	9.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	1.0468	1.1485	0.9734	0.9664	1.0975	1.1164	1.1737	1.2295	----	1.09	15.63	0.997	1.00	8.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	1.0051	1.2171	0.9798	0.9676	1.0584	1.0590	1.1080	1.1777	----	1.07	15.98	0.996	1.00	8.5	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags	*Note:* Avg Rsd: 8.968
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
	Corr 2 = Correlation Coefficient for quad Eq.
c - failed the minimum correlation coeff criteria(if applicable)	*Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.*

0022703 0075

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105116.D	CAL BNA@50PPM	02/10/20 14:31	2	7M105108.D	CAL BNA@2PPM	02/10/20 11:23
3	7M105109.D	CAL BNA@10PPM	02/10/20 11:46	4	7M105114.D	CAL BNA@20PPM	02/10/20 13:44
5	7M105113.D	CAL BNA@80PPM	02/10/20 13:21	6	7M105112.D	CAL BNA@120PPM	02/10/20 12:55
7	7M105111.D	CAL BNA@160PPM	02/10/20 12:32	8	7M105110.D	CAL BNA@196PPM	02/10/20 12:09
9	7M105115.D	CAL BNA@0.5PPM	02/10/20 14:07				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	1.0727	1.3447	1.0030	0.9710	0.9972	0.9495	0.9626	1.0400	1.4687	1.09	2.64	0.997	0.997	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	1.8569	2.1867	1.8023	1.8364	2.0547	1.9575	2.0233	2.1326	-----	1.98	3.09	0.998	0.999	7.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.5769	1.9042	1.6295	1.6340	1.7116	1.5979	1.6159	1.7618	-----	1.68	3.03	0.996	0.997	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	1.9642	2.6438	2.1619	2.1876	2.2558	2.1697	2.1865	2.3767	-----	2.24	4.63	0.996	0.998	8.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	2.0817	2.8955	2.3527	2.3260	2.3270	2.2093	2.1730	2.3019	-----	2.33	5.44	0.999	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Qua	3.2946	4.4347	3.6595	3.6955	3.7391	3.5041	3.4625	3.6806	5.1119	3.84	5.54	0.998	0.998	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7438	1.1680	0.8182	0.7778	0.8370	0.8197	0.8159	0.8637	-----	0.856	5.58	0.998	0.999	15	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Qua	2.3192	3.2545	2.4842	2.5062	2.5754	2.4161	2.4284	2.5762	3.8473	2.71	5.60	0.998	0.999	19	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	2.5525	3.4968	2.7262	2.8381	2.9572	2.8257	2.8700	3.0731	-----	2.92	5.50	0.996	0.998	9.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.1382	4.3383	3.4635	3.4773	3.6053	3.4390	3.4268	3.6431	-----	3.57	5.51	0.997	0.998	9.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.2007	2.8195	2.4362	2.3744	2.4880	2.4127	2.4064	2.5800	-----	2.46	5.64	0.998	0.999	7.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.7948	3.6725	2.9788	3.0229	3.0283	2.8602	2.7800	2.9107	-----	3.01	5.60	0.999	0.999	9.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.3155	3.1119	2.5873	2.5196	2.6490	2.5064	2.5253	2.6955	-----	2.61	5.77	0.997	0.998	8.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4797	1.9645	1.4618	1.5059	1.5346	1.4925	1.5202	1.6588	-----	1.58	5.84	0.995	0.998	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.4130	1.7925	1.3844	1.4194	1.4562	1.4286	1.4395	1.5504	-----	1.49	5.96	0.997	0.999	9.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9458	1.1667	0.9836	0.9395	1.0030	0.9836	0.9714	1.0732	-----	1.01	5.93	0.997	0.999	7.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	2.2187	2.7619	2.1898	2.2030	2.1768	2.0324	2.0161	2.1395	-----	2.22	6.05	0.998	0.998	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2975	1.5775	1.3215	1.2959	1.3258	1.3178	1.3117	1.4243	1.9710	1.43	6.02	0.997	0.999	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.0989	2.6378	2.1782	2.0857	2.1661	2.1056	2.1056	2.2736	-----	2.21	6.14	0.997	0.998	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.6200	0.8630	0.6162	0.6312	0.6483	0.6315	0.6284	0.6761	-----	0.664	6.24	0.997	0.999	12	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	1.1858	1.5261	1.1672	1.2042	1.2153	1.1649	1.1400	1.2322	1.7731	1.29	6.15	0.999	0.999	17	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3709	1.7620	1.3730	1.3876	1.4490	1.4095	1.4138	1.5353	2.0194	1.52	6.14	0.998	0.999	15		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1636	0.2055	0.1617	0.1684	0.1699	0.1687	0.1680	0.1792	-----	0.173	6.27	0.998	0.999	8.1		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.4608	0.6177	0.4551	0.4509	0.4582	0.4457	0.4470	0.4708	-----	0.476	6.28	0.999	0.999	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.8093	1.0210	0.8055	0.7942	0.8262	0.8020	0.8017	0.8480	-----	0.839	6.47	0.998	0.999	9.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1966	0.2234	0.1934	0.1842	0.2058	0.2016	0.2055	0.2190	-----	0.204	6.53	0.998	0.999	6.4	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3968	0.5200	0.3763	0.3858	0.4001	0.3907	0.3966	0.4194	0.5720	0.429	6.56	0.998	0.999	16	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Avg	0.3290	-----	0.2337	0.2907	0.3606	0.3382	0.3509	0.3755	-----	0.326	6.61	0.998	0.998	15		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4529	0.5602	0.4525	0.4595	0.4662	0.4519	0.4559	0.4835	-----	0.473	6.63	0.998	0.999	7.8	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2837	0.3656	0.2883	0.2842	0.2954	0.2915	0.3000	0.3174	0.3438	0.308	6.71	0.998	1.00	9.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3157	0.4104	0.3105	0.3148	0.3223	0.3246	0.3284	0.3501	-----	0.335	6.78	0.997	0.999	9.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Avg	1.0615	1.3763	1.0707	1.0526	1.1014	1.0721	1.0874	1.1502	1.6140	1.18	6.85	0.998	0.999	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.4058	0.5000	0.4334	0.4185	0.4072	0.3783	0.3440	0.3126	0.5805	0.420	6.88	0.985	1.00	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1775	0.2067	0.1770	0.1776	0.1879	0.1843	0.1877	0.1995	-----	0.187	6.94	0.998	0.999	5.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1102	0.1376	0.1130	0.1066	0.1199	0.1177	0.1208	0.1258	-----	0.119	7.14	0.998	1.00	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3317	0.3984	0.3406	0.3351	0.3492	0.3453	0.3500	0.3769	-----	0.353	7.24	0.997	0.999	6.5	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.7233	0.8639	0.7021	0.7168	0.7493	0.7377	0.7499	0.8004	-----	0.755	7.38	0.997	0.999	7.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6676	0.8199	0.6792	0.6629	0.7006	0.6910	0.7043	0.7544	-----	0.710	7.46	0.997	0.999	7.4	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (T	1	0	Avg	0.6951	0.8417	0.6907	0.6898	0.7249	0.7145	0.7270	0.7774	-----	0.733	7.38	0.997	0.999	7.2		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8188	1.0035	0.8416	0.8159	0.8509	0.8316	0.8568	0.9247	-----	0.868	7.75	0.996	0.999	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5641	0.6238	0.5518	0.5332	0.5834	0.5644	0.5800	0.6063	-----	0.576	7.51	0.998	0.999	5.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.53
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

0022703 0076

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105116.D	CAL BNA@50PPM	02/10/20 14:31	2	7M105108.D	CAL BNA@2PPM	02/10/20 11:23
3	7M105109.D	CAL BNA@10PPM	02/10/20 11:46	4	7M105114.D	CAL BNA@20PPM	02/10/20 13:44
5	7M105113.D	CAL BNA@80PPM	02/10/20 13:21	6	7M105112.D	CAL BNA@120PPM	02/10/20 12:55
7	7M105111.D	CAL BNA@160PPM	02/10/20 12:32	8	7M105110.D	CAL BNA@196PPM	02/10/20 12:09
9	7M105115.D	CAL BNA@0.5PPM	02/10/20 14:07				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Avg	0.3622	0.3913	0.3622	0.3456	0.3772	0.3648	0.3893	0.4127	-----	0.376	7.51	0.997	0.999	5.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.4205	0.4243	0.3806	0.3811	0.4651	0.4187	0.3984	0.4128	-----	0.413	7.59	0.997	0.997	6.6	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3970	0.4960	0.3929	0.3826	0.4053	0.3947	0.4034	0.4295	-----	0.413	7.62	0.998	0.999	8.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2812	1.5514	1.2778	1.2665	1.2970	1.2431	1.2957	1.3674	-----	1.32	7.66	0.998	0.999	7.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1545	1.4409	1.1571	1.1254	1.1657	1.1134	1.1581	1.2314	-----	1.19	7.78	0.997	0.999	8.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.9244	1.1245	0.9066	0.9128	0.9242	0.8969	0.9261	0.9982	-----	0.952	8.05	0.998	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.9244	1.1245	0.9066	0.9128	0.9242	0.8969	0.9261	0.9982	-----	0.952	8.05	0.998	0.999	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7929	0.9021	0.8031	0.7846	0.8128	0.7791	0.8108	0.8525	-----	0.817	7.83	0.998	0.999	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.5445	0.6461	0.5396	0.5389	0.5498	0.5195	0.5224	0.5419	-----	0.550	7.84	0.999	0.999	7.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4635	0.5695	0.4594	0.4530	0.4626	0.4496	0.4673	0.4961	-----	0.478	8.03	0.997	0.999	8.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7129	2.1034	1.7086	1.6595	1.7611	1.7027	1.7321	1.8470	-----	1.78	8.13	0.998	0.999	8.0	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.3322	1.6084	1.3243	1.2942	1.3597	1.3066	1.3505	1.4298	-----	1.38	7.99	0.997	0.999	7.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.3166	0.3648	0.2970	0.3056	0.3293	0.3169	0.3418	0.3497	-----	0.328	8.05	0.998	0.999	7.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1917	1.5528	1.1745	1.1520	1.2206	1.1544	1.2100	1.2948	-----	1.24	8.28	0.996	0.998	11	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3248	0.3757	0.3273	0.3195	0.3313	0.2945	0.3001	0.3005	-----	0.322	8.19	0.998	0.999	8.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Avg	0.1664	-----	0.1652	0.1546	0.1565	0.1535	0.1757	0.2086	-----	0.169	8.28	0.979	0.994	11	0.20 a	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.6266	2.0153	1.6638	1.6117	1.6867	1.5946	1.6490	1.7718	2.4052	1.78	8.43	0.997	0.999	15	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.4206	0.4208	0.4119	0.4120	0.4332	0.4215	0.4405	0.4686	-----	0.429	8.40	0.997	0.999	4.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Avg	0.3613	0.4577	0.3775	0.3481	0.3361	0.3353	0.3439	0.3685	-----	0.366	8.32	0.998	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3430	0.4021	0.3291	0.3178	0.3493	0.3382	0.3608	0.3839	-----	0.353	8.54	0.996	0.999	8.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.3846	1.6678	1.3631	1.3324	1.4166	1.3585	1.3994	1.4995	-----	1.43	8.76	0.997	0.999	7.7	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6494	0.8125	0.6273	0.6276	0.6723	0.6412	0.6730	0.7184	-----	0.678	8.74	0.996	0.999	9.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.4099	1.7389	1.4035	1.3694	1.4468	1.3731	1.4191	1.5183	-----	1.46	8.63	0.997	0.999	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3756	0.4011	0.3683	0.3567	0.3900	0.3749	0.3836	0.4057	-----	0.382	8.75	0.998	0.999	4.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3987	0.4659	0.3856	0.3854	0.4267	0.4103	0.4247	0.4549	-----	0.419	9.39	0.996	0.999	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Avg	0.1244	-----	0.1259	0.1195	0.1299	0.1267	0.1265	0.1403	-----	0.128	8.79	0.994	0.997	5.0	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6380	0.7542	0.6255	0.6243	0.6663	0.6347	0.6459	0.6973	-----	0.661	8.86	0.998	0.999	6.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Avg	0.1011	0.0994	0.0977	0.0914	0.1073	0.1050	0.1087	0.1206	-----	0.104	8.99	0.995	0.999	8.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	1.0250	1.0792	0.8661	0.9040	1.0171	0.9511	0.9488	1.0126	-----	0.976	8.90	0.998	0.998	7.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2064	0.2520	0.2042	0.2001	0.2192	0.2112	0.2130	0.2360	-----	0.218	9.23	0.994	0.998	8.1	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2154	0.2555	0.2062	0.2170	0.2256	0.2192	0.2255	0.2448	-----	0.226	9.30	0.996	0.999	7.2	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.5869	0.6822	0.5387	0.5488	0.5730	0.5373	0.5343	0.5628	-----	0.571	9.58	0.998	0.998	8.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Avg	0.1330	-----	0.1344	0.1227	0.1455	0.1321	0.1279	0.1130	-----	0.130	9.50	0.989	0.997	7.8	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0719	1.3335	1.0748	1.0541	1.0966	1.0551	1.0709	1.1597	-----	1.11	9.73	0.998	0.999	8.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1077	1.3503	1.1198	1.0822	1.1549	1.1066	1.1157	1.2201	-----	1.16	9.78	0.996	0.998	7.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.9932	1.1868	0.9836	0.9867	1.0451	0.9891	1.0179	1.1004	-----	1.04	9.95	0.996	0.998	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.3090	1.5725	1.2479	1.2459	1.3782	1.3039	1.3081	1.4247	1.6241	1.38	10.34	0.998	0.999	9.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1639	1.3414	1.1419	1.1321	1.2241	1.1548	1.1996	1.2931	-----	1.21	11.05	0.996	0.998	6.3	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.2425	1.5534	1.2389	1.2177	1.2711	1.2573	1.2956	1.3558	-----	1.30	11.32	0.998	1.00	8.4	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Avg	0.6117	0.7193	0.6277	0.5745	0.6175	0.5804	0.5535	0.5181	-----	0.600	11.21	0.996	0.999	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6086	0.7704	0.6108	0.5990	0.6330	0.6234	0.6492	0.6947	-----	0.649	11.51	0.996	0.999	8.9		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.53
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M105116.D	CAL BNA@50PPM	02/10/20 14:31	2	7M105108.D	CAL BNA@2PPM	02/10/20 11:23
3	7M105109.D	CAL BNA@10PPM	02/10/20 11:46	4	7M105114.D	CAL BNA@20PPM	02/10/20 13:44
5	7M105113.D	CAL BNA@80PPM	02/10/20 13:21	6	7M105112.D	CAL BNA@120PPM	02/10/20 12:55
7	7M105111.D	CAL BNA@160PPM	02/10/20 12:32	8	7M105110.D	CAL BNA@196PPM	02/10/20 12:09
9	7M105115.D	CAL BNA@0.5PPM	02/10/20 14:07				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2789	0.3154	0.2723	0.2785	0.2918	0.2900	0.3071	0.3260	-----	0.295	11.44	0.996	1.00	6.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.3940	0.4859	0.3908	0.3795	0.4086	0.4039	0.4160	0.4345	-----	0.414	11.84	0.998	1.00	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Avg	0.5956	0.7066	0.5740	0.5707	0.6026	0.6080	0.6297	0.6563	-----	0.618	12.10	0.998	1.00	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.4844	0.5379	0.4523	0.4564	0.5023	0.4983	0.5124	0.5408	-----	0.498	12.20	0.998	1.00	6.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Avg	0.4070	0.4939	0.4050	0.3943	0.4017	0.3769	0.3650	0.3528	-----	0.400	12.71	0.997	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.1663	1.5369	1.1533	1.1309	1.1903	1.1706	1.2341	1.2697	-----	1.23	12.73	0.998	1.00	11	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.1216	1.4292	1.1335	1.1194	1.1326	1.1287	1.1681	1.2297	-----	1.18	12.78	0.997	1.00	9.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.8397	0.9869	0.8097	0.8063	0.8461	0.8404	0.8787	0.9178	-----	0.866	12.80	0.998	1.00	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Avg	1.3844	1.5779	1.3126	1.2937	1.4571	1.4567	1.5127	1.5998	-----	1.45	13.55	0.997	1.00	7.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1832	1.2773	1.0305	1.0061	1.1377	1.1374	1.1583	1.2276	-----	1.14	13.95	0.998	0.999	8.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.1190	1.2590	1.1035	1.0651	1.1263	1.1478	1.1700	1.2510	-----	1.16	13.98	0.997	0.999	6.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0168	1.1789	0.9745	0.9673	1.0372	1.0502	1.0779	1.1481	-----	1.06	14.30	0.997	1.00	7.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1486	1.3270	1.1346	1.0991	1.2031	1.2183	1.2610	1.3394	-----	1.22	15.65	0.997	1.00	7.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9409	1.0914	0.9011	0.8655	0.9802	1.0013	1.0315	1.1037	-----	0.989	15.68	0.996	1.00	8.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9782	1.1308	0.9734	0.9254	1.0087	1.0168	1.0495	1.1131	-----	1.02	16.02	0.997	1.00	6.9	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.53
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M79590.D **Instrument:** GCMS 10

Cont Calibration Date/Time 3/3/2020 7:56:00 AM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.62	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.66	54.07	50	**		1.198	1.023	8.14	
Pyridine	1	0		3.13	50.94	50	**		1.655	1.727	1.88	
N-Nitrosodimethylamine	1	0		3.05	52.12	50	**		1.553	1.619	4.25	
2-Fluorophenol	1	0	S	4.62	47.22	50	**		2.208	2.085	5.56	
Benzaldehyde	1	0		5.44	45.03	50	20	0.01	2.015	1.814	9.95	
Aniline	1	0		5.53	49.04	50	**		3.563	3.495	1.91	
Pentachloroethane	1	0		5.57	46.80	50	**	0.05	0.843	0.789	6.40	
bis(2-Chloroethyl)ether	1	0		5.59	54.94	50	20	0.7	2.742	2.558	9.87	
Phenol-d5	1	0	S	5.50	48.73	50	**		2.878	2.805	2.53	
Phenol	1	0		5.51	49.10	50	20	0.8	3.459	3.396	1.81	
2-Chlorophenol	1	0		5.63	46.81	50	20	0.8	2.566	2.402	6.37	
N-Decane	1	0		5.68	54.22	50	**	0.05	2.631	2.854	8.45	
1,3-Dichlorobenzene	1	0		5.76	45.68	50	**		2.767	2.528	8.64	
1,4-Dichlorobenzene-d4	1	0	I	5.81	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.82	49.22	50	20		1.582	1.557	1.55	
1,2-Dichlorobenzene	1	0		5.95	49.92	50	**		1.490	1.487	0.16	
Benzyl alcohol	1	0		5.93	52.13	50	**		0.950	0.991	4.27	
bis(2-chloroisopropyl)ether	1	0		6.03	60.99	50	20	0.01	1.895	2.312	21.97	C1
2-Methylphenol	1	0		6.02	52.07	50	20	0.7	1.350	1.406	4.13	
Acetophenone	1	0		6.14	54.30	50	20	0.01	1.864	2.024	8.59	
Hexachloroethane	1	0		6.23	50.31	50	20	0.3	0.605	0.609	0.63	
N-Nitroso-di-n-propylamine	1	0		6.14	55.99	50	20	0.5	0.992	1.110	11.98	
3&4-Methylphenol	1	0		6.14	53.38	50	20		1.363	1.455	6.76	
Naphthalene-d8	1	0	I	6.81	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.26	24.71	25	**		0.173	0.171	1.15	
Nitrobenzene	1	0		6.27	52.41	50	20	0.2	0.383	0.401	4.82	
Isophorone	1	0		6.46	53.66	50	20	0.4	0.702	0.754	7.33	
2-Nitrophenol	1	0		6.52	49.64	50	20	0.1	0.195	0.193	0.72	
2,4-Dimethylphenol	1	0		6.55	49.72	50	20	0.2	0.371	0.369	0.56	
Benzoic Acid	1	0		6.60	26.82	50	**		0.213	0.097	46.36	
bis(2-Chloroethoxy)methane	1	0		6.62	52.85	50	20	0.3	0.432	0.456	5.70	
2,4-Dichlorophenol	1	0		6.71	48.11	50	20	0.2	0.301	0.289	3.78	
1,2,4-Trichlorobenzene	1	0		6.77	47.00	50	**		0.330	0.311	5.99	
Naphthalene	1	0		6.83	48.09	50	20	0.7	1.180	1.135	3.82	
4-Chloroaniline	1	0		6.87	49.25	50	20	0.01	0.408	0.415	1.50	
Hexachlorobutadiene	1	0		6.92	46.13	50	20	0.01	0.183	0.169	7.73	
Caprolactam	1	0		7.14	51.78	50	20	0.01	0.112	0.116	3.56	
4-Chloro-3-methylphenol	1	0		7.23	51.01	50	20	0.2	0.310	0.316	2.01	
2-Methylnaphthalene	1	0		7.36	49.91	50	**	0.4	0.737	0.736	0.18	
1-Methylnaphthalene	1	0		7.44	49.97	50	**	0.4	0.705	0.704	0.07	
Methylnaphthalenes	1	0		7.44	99.74	50	**			1.436	99.49	
1,1'-Biphenyl	1	0		7.73	49.57	50	20	0.01	0.824	0.817	0.87	
Acenaphthene-d10	1	0	I	8.23	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.49	46.57	50	20	0.01	0.590	0.550	6.86	
Hexachlorocyclopentadiene	1	0		7.48	41.82	50	20	0.05	0.320	0.257	16.37	
2,4,6-Trichlorophenol	1	0		7.58	47.08	50	20	0.2	0.378	0.355	5.85	
2,4,5-Trichlorophenol	1	0		7.62	47.53	50	20	0.2	0.397	0.378	4.94	
2-Fluorobiphenyl	1	0	S	7.65	24.39	25	**		1.350	1.317	2.45	
2-Chloronaphthalene	1	0		7.75	48.70	50	20	0.8	1.179	1.148	2.59	
1,4-Dimethylnaphthalene	1	0		8.03	50.81	50	**		0.939	0.954	1.61	
Dimethylnaphthalenes	1	0		8.03	50.81	50	20			0.954	1.61	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M79590.D **Instrument:** GCMS 10

Cont Calibration Date/Time 3/3/2020 7:56:00 AM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.81	48.87	50	**		0.835	0.816	2.25	
2-Nitroaniline	1	0		7.83	53.95	50	20	0.01	0.425	0.459	7.89	
Coumarin	1	0		8.02	49.31		**		0.489			
Acenaphthylene	1	0		8.11	50.10	50	20	0.9	1.818	1.822	0.21	
Dimethylphthalate	1	0		7.97	49.03	50	20	0.01	1.318	1.292	1.94	
2,6-Dinitrotoluene	1	0		8.03	50.22	50	20	0.2	0.305	0.307	0.45	
Acenaphthene	1	0		8.26	49.61	50	20	0.9	1.204	1.195	0.77	
3-Nitroaniline	1	0		8.18	51.16	50	20	0.01	0.331	0.339	2.33	
2,4-Dinitrophenol	1	0		8.27	41.46	50	20	0.2	0.142	0.116	17.09	
Dibenzofuran	1	0		8.41	47.84	50	20	0.8	1.748	1.672	4.31	
2,4-Dinitrotoluene	1	0		8.39	51.40	50	20	0.2	0.389	0.400	2.81	
4-Nitrophenol	1	0		8.31	48.27	50	20	0.01	0.259	0.250	3.45	
2,3,4,6-Tetrachlorophenol	1	0		8.52	48.71	50	20	0.01	0.338	0.330	2.57	
Fluorene	1	0		8.73	49.30	50	20	0.9	1.369	1.349	1.40	
4-Chlorophenyl-phenylether	1	0		8.72	47.48	50	20	0.4	0.674	0.640	5.04	
Diethylphthalate	1	0		8.60	49.30	50	20	0.01	1.296	1.278	1.41	
4-Nitroaniline	1	0		8.74	48.50	50	20	0.01	0.400	0.388	3.00	
Atrazine	1	0		9.36	47.16	50	20	0.01	0.387	0.365	5.67	
Phenanthrene-d10	1	0	I	9.68	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.77	48.55	50	20	0.01	0.120	0.113	2.90	
n-Nitrosodiphenylamine	1	0		8.84	49.95	50	20	0.01	0.657	0.656	0.09	
2,4,6-Tribromophenol	1	0	S	8.96	47.69	50	**		0.132	0.126	4.62	
1,2-Diphenylhydrazine	1	0		8.88	59.21	50	**		0.806	0.955	18.42	
4-Bromophenyl-phenylether	1	0		9.20	48.09	50	20	0.1	0.229	0.220	3.81	
Hexachlorobenzene	1	0		9.27	46.98	50	20	0.1	0.272	0.256	6.04	
N-Octadecane	1	0		9.54	61.73	50	**	0.05	0.450	0.556	23.46	
Pentachlorophenol	1	0		9.47	57.42	50	20	0.05	0.133	0.140	14.85	
Phenanthrene	1	0		9.71	49.66	50	20	0.7	1.102	1.094	0.67	
Anthracene	1	0		9.76	50.53	50	20	0.7	1.128	1.140	1.06	
Carbazole	1	0		9.93	50.10	50	20	0.01	1.052	1.054	0.20	
Di-n-butylphthalate	1	0		10.31	51.31	50	20	0.01	1.206	1.238	2.62	
Fluoranthene	1	0		11.03	49.92	50	20	0.6	1.169	1.167	0.16	
Chrysene-d12	1	0	I	12.72	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.29	51.28	50	20	0.6	1.154	1.183	2.55	
Benzidine	1	0		11.18	33.88	50	**		0.579	0.392	32.25	
Terphenyl-d14	1	0	S	11.47	25.16	25	**		0.609	0.613	0.65	
4,4'-DDE	1	0		11.41	48.23		**		0.279			
4,4'-DDD	1	0		11.80	51.50		**		0.355			
Butylbenzylphthalate	1	0		12.06	52.42	50	20	0.01	0.499	0.524	4.84	
4,4'-DDT	1	0		12.16	52.72		**		0.439			
3,3'-Dichlorobenzidine	1	0		12.68	50.56	50	20	0.01	0.386	0.390	1.13	
Benzo[a]anthracene	1	0		12.71	49.77	50	20	0.8	1.135	1.129	0.46	
Chrysene	1	0		12.75	50.13	50	20	0.7	1.103	1.106	0.26	
bis(2-Ethylhexyl)phthalate	1	0		12.75	54.06	50	20	0.01	0.713	0.770	8.12	
Perylene-d12	1	0	I	14.32	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.49	52.06	50	20	0.01	1.142	1.189	4.12	
Benzo[b]fluoranthene	1	0		13.91	49.02	50	20	0.7	1.094	1.073	1.97	
Benzo[k]fluoranthene	1	0		13.94	51.07	50	20	0.7	1.107	1.131	2.13	
Benzo[a]pyrene	1	0		14.26	49.93	50	20	0.7	1.000	0.998	0.14	
Indeno[1,2,3-cd]pyrene	1	0		15.61	48.28	50	20	0.5	1.287	1.243	3.44	
Dibenzo[a,h]anthracene	1	0		15.63	48.27	50	20	0.4	1.094	1.056	3.46	
Benzo[g,h,i]perylene	1	0		15.98	48.15	50	20	0.5	1.072	1.032	3.70	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M79590.D **Instrument:** GCMS 10

Cont Calibration Date/Time 3/3/2020 7:56:00 AM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.720	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.939	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105543.D **Instrument:** GCMS 7

Cont Calibration Date/Time 3/3/2020 8:00:00 AM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.60	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.64	49.24	50	**		1.090	0.938	1.52	
Pyridine	1	0		3.10	42.43	50	**		1.981	1.681	15.15	
N-Nitrosodimethylamine	1	0		3.02	43.54	50	**		1.679	1.462	12.91	
2-Fluorophenol	1	0	S	4.64	47.83	50	**		2.243	2.146	4.34	
Benzaldehyde	1	0		5.44	41.91	50	20	0.01	2.333	1.956	16.17	
Aniline	1	0		5.54	50.08	50	**		3.843	3.465	0.15	
Pentachloroethane	1	0		5.58	48.74	50	**	0.05	0.856	0.834	2.52	
bis(2-Chloroethyl)ether	1	0		5.60	51.69	50	20	0.7	2.712	2.465	3.37	
Phenol-d5	1	0	S	5.51	48.89	50	**		2.918	2.853	2.22	
Phenol	1	0		5.53	48.38	50	20	0.8	3.566	3.451	3.24	
2-Chlorophenol	1	0		5.64	51.61	50	20	0.8	2.465	2.544	3.21	
N-Decane	1	0		5.69	44.77	50	**	0.05	3.006	2.692	10.46	
1,3-Dichlorobenzene	1	0		5.77	52.24	50	**		2.614	2.731	4.48	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.84	47.34	50	20		1.577	1.493	5.33	
1,2-Dichlorobenzene	1	0		5.96	48.03	50	**		1.486	1.427	3.95	
Benzyl alcohol	1	0		5.93	47.06	50	**		1.008	0.949	5.87	
bis(2-chloroisopropyl)ether	1	0		6.04	39.68	50	20	0.01	2.217	1.760	20.64	C1
2-Methylphenol	1	0		6.03	44.39	50	20	0.7	1.427	1.267	11.22	
Acetophenone	1	0		6.15	46.77	50	20	0.01	2.206	2.064	6.45	
Hexachloroethane	1	0		6.24	45.44	50	20	0.3	0.664	0.604	9.13	
N-Nitroso-di-n-propylamine	1	0		6.15	41.62	50	20	0.5	1.290	1.074	16.76	
3&4-Methylphenol	1	0		6.15	45.18	50	20		1.525	1.378	9.63	
Naphthalene-d8	1	0	I	6.83	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	23.57	25	**		0.173	0.163	5.71	
Nitrobenzene	1	0		6.28	42.58	50	20	0.2	0.476	0.405	14.84	
Isophorone	1	0		6.47	43.78	50	20	0.4	0.839	0.734	12.45	
2-Nitrophenol	1	0		6.53	49.40	50	20	0.1	0.204	0.201	1.20	
2,4-Dimethylphenol	1	0		6.57	44.24	50	20	0.2	0.429	0.379	11.52	
Benzoic Acid	1	0		6.62	28.53	50	**		0.326	0.186	42.94	
bis(2-Chloroethoxy)methane	1	0		6.63	44.08	50	20	0.3	0.473	0.417	11.84	
2,4-Dichlorophenol	1	0		6.72	48.89	50	20	0.2	0.308	0.301	2.22	
1,2,4-Trichlorobenzene	1	0		6.78	50.57	50	**		0.335	0.338	1.13	
Naphthalene	1	0		6.85	46.70	50	20	0.7	1.176	1.099	6.60	
4-Chloroaniline	1	0		6.88	46.85	50	20	0.01	0.420	0.402	6.30	
Hexachlorobutadiene	1	0		6.94	52.59	50	20	0.01	0.187	0.197	5.17	
Caprolactam	1	0		7.15	49.57	50	20	0.01	0.119	0.118	0.86	
4-Chloro-3-methylphenol	1	0		7.25	50.03	50	20	0.2	0.353	0.354	0.05	
2-Methylnaphthalene	1	0		7.38	49.79	50	**	0.4	0.755	0.752	0.41	
1-Methylnaphthalene	1	0		7.46	50.75	50	**	0.4	0.710	0.721	1.50	
Methylnaphthalenes	1	0		7.46	100.52	50	**			1.473	101.04	
1,1'-Biphenyl	1	0		7.75	53.04	50	20	0.01	0.868	0.921	6.08	
Acenaphthene-d10	1	0	I	8.25	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	48.76	50	20	0.01	0.576	0.562	2.48	
Hexachlorocyclopentadiene	1	0		7.50	28.61	50	20	0.05	0.376	0.215	42.78	C1
2,4,6-Trichlorophenol	1	0		7.60	45.39	50	20	0.2	0.413	0.375	9.21	
2,4,5-Trichlorophenol	1	0		7.63	46.22	50	20	0.2	0.413	0.381	7.56	
2-Fluorobiphenyl	1	0	S	7.66	24.06	25	**		1.323	1.273	3.75	
2-Chloronaphthalene	1	0		7.78	48.07	50	20	0.8	1.193	1.147	3.85	
1,4-Dimethylnaphthalene	1	0		8.06	47.31	50	**		0.952	0.901	5.38	
Dimethylnaphthalenes	1	0		8.06	47.31	50	20			0.901	5.38	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105543.D **Instrument:** GCMS 7

Cont Calibration Date/Time 3/3/2020 8:00:00 AM **Method:** EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	48.90	50	**		0.817	0.799	2.21	
2-Nitroaniline	1	0		7.85	42.25	50	20	0.01	0.550	0.465	15.49	
Coumarin	1	0		8.03	47.26		**		0.478			
Acenaphthylene	1	0		8.13	48.09	50	20	0.9	1.778	1.711	3.81	
Dimethylphthalate	1	0		7.99	48.83	50	20	0.01	1.376	1.344	2.33	
2,6-Dinitrotoluene	1	0		8.05	48.94	50	20	0.2	0.328	0.321	2.11	
Acenaphthene	1	0		8.28	46.48	50	20	0.9	1.244	1.156	7.04	
3-Nitroaniline	1	0		8.20	49.93	50	20	0.01	0.322	0.321	0.14	
2,4-Dinitrophenol	1	0		8.29	45.00	50	20	0.2	0.169	0.152	10.00	
Dibenzofuran	1	0		8.44	46.44	50	20	0.8	1.781	1.654	7.13	
2,4-Dinitrotoluene	1	0		8.41	49.39	50	20	0.2	0.429	0.423	1.22	
4-Nitrophenol	1	0		8.34	38.20	50	20	0.01	0.366	0.280	23.60	C1
2,3,4,6-Tetrachlorophenol	1	0		8.55	48.67	50	20	0.01	0.353	0.344	2.66	
Fluorene	1	0		8.76	47.32	50	20	0.9	1.428	1.351	5.36	
4-Chlorophenyl-phenylether	1	0		8.75	48.98	50	20	0.4	0.678	0.664	2.04	
Diethylphthalate	1	0		8.63	46.39	50	20	0.01	1.460	1.354	7.22	
4-Nitroaniline	1	0		8.76	48.24	50	20	0.01	0.382	0.369	3.52	
Atrazine	1	0		9.39	48.84	50	20	0.01	0.419	0.409	2.33	
Phenanthrene-d10	1	0	I	9.71	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	50.25	50	20	0.01	0.128	0.128	0.50	
n-Nitrosodiphenylamine	1	0		8.86	48.62	50	20	0.01	0.661	0.643	2.77	
2,4,6-Tribromophenol	1	0	S	8.99	51.38	50	**		0.104	0.107	2.76	
1,2-Diphenylhydrazine	1	0		8.90	39.56	50	**		0.976	0.772	20.89	
4-Bromophenyl-phenylether	1	0		9.23	49.66	50	20	0.1	0.218	0.216	0.69	
Hexachlorobenzene	1	0		9.31	49.89	50	20	0.1	0.226	0.226	0.23	
N-Octadecane	1	0		9.57	39.75	50	**	0.05	0.571	0.454	20.51	
Pentachlorophenol	1	0		9.51	42.63	50	20	0.05	0.130	0.111	14.74	
Phenanthrene	1	0		9.74	47.46	50	20	0.7	1.115	1.058	5.07	
Anthracene	1	0		9.79	47.81	50	20	0.7	1.157	1.107	4.38	
Carbazole	1	0		9.96	48.42	50	20	0.01	1.038	1.005	3.16	
Di-n-butylphthalate	1	0		10.34	46.08	50	20	0.01	1.379	1.271	7.85	
Fluoranthene	1	0		11.07	49.79	50	20	0.6	1.206	1.201	0.41	
Chrysene-d12	1	0	I	12.76	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.33	48.87	50	20	0.6	1.304	1.275	2.26	
Benzidine	1	0		11.21	39.30	50	**		0.600	0.472	21.41	
Terphenyl-d14	1	0	S	11.51	24.92	25	**		0.649	0.647	0.32	
4,4'-DDE	1	0		11.45	49.12		**		0.295			
4,4'-DDD	1	0		11.85	50.72		**		0.414			
Butylbenzylphthalate	1	0		12.10	47.27	50	20	0.01	0.618	0.584	5.47	
4,4'-DDT	1	0		12.21	50.27		**		0.498			
3,3'-Dichlorobenzidine	1	0		12.72	55.04	50	20	0.01	0.400	0.440	10.09	
Benzo[a]anthracene	1	0		12.75	48.20	50	20	0.8	1.232	1.187	3.61	
Chrysene	1	0		12.79	49.12	50	20	0.7	1.183	1.162	1.76	
bis(2-Ethylhexyl)phthalate	1	0		12.80	48.20	50	20	0.01	0.866	0.835	3.60	
Perylene-d12	1	0	I	14.39	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.55	49.19	50	20	0.01	1.449	1.426	1.61	
Benzo[b]fluoranthene	1	0		13.97	51.24	50	20	0.7	1.145	1.173	2.48	
Benzo[k]fluoranthene	1	0		14.00	47.98	50	20	0.7	1.155	1.109	4.04	
Benzo[a]pyrene	1	0		14.32	49.65	50	20	0.7	1.056	1.049	0.71	
Indeno[1,2,3-cd]pyrene	1	0		15.70	50.85	50	20	0.5	1.216	1.237	1.70	
Dibenzo[a,h]anthracene	1	0		15.71	52.25	50	20	0.4	0.990	1.034	4.50	
Benzo[g,h,i]perylene	1	0		16.07	51.28	50	20	0.5	1.025	1.051	2.57	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M105543.D **Instrument:** GCMS 7

Cont Calibration Date/Time 3/3/2020 8:00:00 AM Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	100	**		0.733	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.952	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

0022703 0084

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M79175.D Method: EPA 8270D

Analysis Date/Time: 02/10/20 14:03

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	58043	2.63	103778	5.82	389125	6.82	218392	8.24	385037	9.69	409994	12.72	422521	14.33
Eval File Area Limit:	29022-116086		51889-207556		194562-778250		109196-436784		192518-770074		204997-819988		211260-845042	
Eval File Rt Limit:	2.13-3.13		5.32-6.32		6.32-7.32		7.74-8.74		9.19-10.19		12.22-13.22		13.83-14.83	
Data File Sample#														
10M79166.D CAL BNA@10PPM	48988	2.63	88631	5.81	330862	6.82	185246	8.24	326358	9.69	333334	12.72	351264	14.33
10M79168.D CAL BNA@196PPM	56432	2.63	100403	5.82	383482	6.82	217553	8.24	379302	9.69	413280	12.73	406239	14.33
10M79169.D CAL BNA@160PPM	58643	2.63	103617	5.82	386843	6.82	216473	8.24	378205	9.69	410617	12.73	407373	14.33
10M79170.D CAL BNA@2PPM	52063	2.63	94792	5.81	357219	6.81	200278	8.23	357409	9.68	360174	12.72	383519	14.32
10M79171.D CAL BNA@120PPM	57130	2.63	103112	5.82	387397	6.82	214345	8.24	377986	9.69	414039	12.72	422408	14.33
10M79172.D CAL BNA@80PPM	58957	2.63	104494	5.81	395425	6.82	218860	8.24	387598	9.69	424333	12.72	435009	14.33
10M79173.D CAL BNA@20PPM	59981	2.63	106485	5.81	404043	6.82	225124	8.24	401567	9.69	419131	12.72	436075	14.33
10M79174.D CAL BNA@0.5PPM	56819	2.63	102696	5.81	387711	6.82	218355	8.24	393093	9.69	404329	12.72	433127	14.32
10M79175.D CAL BNA@50PPM	58043	2.63	103778	5.82	389125	6.82	218392	8.24	385037	9.69	409994	12.72	422521	14.33
10M79176.D ICV BNA@50PPM	61164	2.63	112985	5.81	421659	6.82	238481	8.24	421630	9.69	437393	12.72	445151	14.33
10M79177.D WMB82078	56893	2.63	101551	5.81	382953	6.82	217022	8.24	385616	9.68	380753	12.72	398691	14.32
10M79178.D SMB82066(MS)	52068	2.61	93496	5.81	352611	6.82	199045	8.24	355087	9.69	366354	12.72	381984	14.32
10M79179.D SMB82067(MS)	51716	2.60	94715	5.81	355988	6.82	200445	8.24	358467	9.69	370662	12.72	383261	14.32
10M79180.D MBS-1	53085	2.63	94717	5.81	359194	6.82	199086	8.24	357313	9.69	377079	12.72	387281	14.33
10M79181.D MBS-2	56939	2.63	101916	5.81	380773	6.82	216324	8.24	381535	9.69	400643	12.72	405125	14.33
10M79182.D MBS-3	54741	2.64	98656	5.82	369390	6.82	208793	8.24	367432	9.69	386256	12.72	395065	14.33
10M79183.D MBS-4	53489	2.63	97388	5.82	365986	6.82	204869	8.24	359787	9.69	382250	12.72	387111	14.33
10M79184.D MBS-5	50514	2.64	90129	5.82	339468	6.82	187328	8.24	329535	9.69	351103	12.72	352192	14.33
10M79185.D MB	57033	2.63	101167	5.81	382510	6.82	213332	8.24	385053	9.69	379234	12.72	400110	14.32

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0022703 0085

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105116.D Method: EPA 8270D

Analysis Date/Time: 02/10/20 14:31

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT	46860	2.60	74032	5.82	281116	6.83	157414	8.25	286801	9.70	275094	12.75	275089	14.36
Eval File Area Limit	23430-93720		37016-148064		140558-562232		78707-314828		143400-573602		137547-550188		137544-550178	
Eval File Rt Limit	2.1-3.1		5.32-6.32		6.33-7.33		7.75-8.75		9.2-10.2		12.25-13.25		13.86-14.86	
Data File Sample#														
7M105108.D CAL BNA@2PPM	36318	2.60	61043	5.82	237199	6.82	138142	8.25	248681	9.70	231087	12.75	233172	14.36
7M105109.D CAL BNA@10PPM	42607	2.60	73557	5.82	285330	6.82	161313	8.25	295932	9.70	275909	12.75	277806	14.36
7M105110.D CAL BNA@196PPM	40528	2.60	67269	5.82	262034	6.83	155719	8.26	287474	9.71	279156	12.76	274131	14.36
7M105111.D CAL BNA@160PPM	43504	2.60	73490	5.82	278839	6.83	163142	8.25	304804	9.71	283965	12.76	283684	14.37
7M105112.D CAL BNA@120PPM	43146	2.60	73278	5.82	281471	6.83	166267	8.26	304747	9.71	289321	12.75	283379	14.37
7M105113.D CAL BNA@80PPM	43367	2.60	75556	5.82	289331	6.83	165895	8.26	301162	9.71	296254	12.75	293268	14.37
7M105114.D CAL BNA@20PPM	42820	2.60	75293	5.82	291482	6.83	166029	8.25	300152	9.71	283760	12.75	285867	14.36
7M105115.D CAL BNA@0.5PPM	41941	2.60	71150	5.82	272007	6.83	157822	8.25	288009	9.70	274158	12.75	278443	14.37
7M105116.D CAL BNA@50PPM	46860	2.60	74032	5.82	281116	6.83	157414	8.25	286801	9.70	275094	12.75	275089	14.36
7M105117.D ICV BNA@50PPM	44341	2.60	75985	5.82	291879	6.83	166521	8.25	305519	9.71	291260	12.75	278624	14.36

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0022703 0086

FORM8

Internal Standard Areas

Evaluation Std Data File: 10M79590.D Method: EPA 8270D

Analysis Date/Time: 03/03/20 07:56

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	59223	2.62	97815	5.81	377503	6.81	209237	8.23	363870	9.68	369909	12.72	373188	14.32
Eval File Area Limit:	29612-118446		48908-195630		188752-755006		104618-418474		181935-727740		184954-739818		186594-746376	
Eval File Rt Limit:	2.12-3.12		5.31-6.31		6.31-7.31		7.73-8.73		9.18-10.18		12.22-13.22		13.82-14.82	

Data File	Sample#														
10M79591.D	SMB83648(MS)	73349	2.59	109946	5.81	388707	6.81	206648	8.23	360350	9.68	360376	12.72	367406	14.32
10M79592.D	WMB83700	58565	2.62	95459	5.81	364700	6.81	203624	8.23	357316	9.68	336361	12.71	348497	14.32
10M79593.D	AD15923-008	56976	2.62	93210	5.81	361131	6.81	198291	8.23	345920	9.68	329000	12.71	337460	14.32
10M79594.D	AD15937-001	63168	2.62	105265	5.81	399198	6.81	221817	8.23	388536	9.68	366278	12.71	375817	14.32
10M79595.D	AD15937-003	58440	2.62	97948	5.81	374618	6.81	206547	8.23	363941	9.68	343813	12.71	351245	14.32
10M79596.D	AD15937-007	57733	2.62	96550	5.81	369501	6.81	204654	8.23	361194	9.68	336922	12.71	344666	14.32
10M79597.D	AD15937-008	60126	2.62	100257	5.81	383195	6.81	212097	8.23	373169	9.68	355048	12.71	359282	14.32
10M79598.D	SMB83648	65278	2.60	100040	5.81	359957	6.81	187899	8.23	336138	9.68	318230	12.71	325779	14.32
10M79599.D	AD15927-004	67438	2.60	108674	5.81	384013	6.81	200642	8.23	352537	9.68	334947	12.71	346005	14.32
10M79600.D	AD15926-001	54869	2.60	92884	5.81	350389	6.81	193928	8.23	343101	9.68	324647	12.71	333257	14.32
10M79601.D	WMB83719(MS)	62571	2.63	99151	5.81	369733	6.81	199193	8.23	345172	9.68	349691	12.72	353762	14.32
10M79602.D	AD15785-002(T)(MS)	60307	2.63	97777	5.81	360300	6.81	190830	8.23	328543	9.68	333858	12.72	336503	14.33
10M79603.D	AD15785-002(T)(MSD	60433	2.63	96193	5.81	356962	6.81	190743	8.23	329619	9.68	336785	12.72	339961	14.32
10M79604.D	AD15785-002(T)	49229	2.62	82039	5.81	313944	6.81	174859	8.23	305444	9.68	289223	12.71	298756	14.32
10M79605.D	WMB83719	56469	2.63	90430	5.81	337372	6.81	177124	8.23	307494	9.68	297491	12.71	313554	14.32
10M79606.D	EF-SPLP V-322442(0	47598	2.63	80343	5.81	316051	6.81	173279	8.23	305080	9.68	288710	12.71	296307	14.32
10M79607.D	AD15970-001	49259	2.63	83761	5.81	320145	6.81	176778	8.23	308643	9.68	292871	12.71	301415	14.32
10M79608.D	AD15970-002	50572	2.63	84902	5.81	328026	6.81	178665	8.23	312182	9.68	294680	12.71	303619	14.32
10M79609.D	AD15970-004	50776	2.62	82858	5.81	320132	6.81	175440	8.23	306098	9.68	287553	12.71	298476	14.32
10M79610.D	AD15970-005	52051	2.63	85358	5.81	331946	6.81	181599	8.23	319350	9.68	302104	12.71	308320	14.32
10M79611.D	AD15970-006	51044	2.63	86132	5.81	333386	6.81	183869	8.23	318880	9.68	303516	12.71	308766	14.32
10M79612.D	AD15937-008(R)	59377	2.63	95133	5.81	351455	6.81	186114	8.23	318436	9.68	304294	12.71	321076	14.32

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

0022703 0087

FORM8

Internal Standard Areas

Evaluation Std Data File: 7M105543.D Method: EPA 8270D

Analysis Date/Time: 03/03/20 08:00

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	47305	2.60	85572	5.82	337567	6.83	216399	8.25	401021	9.71	386523	12.76	388553	14.39
Eval File Area Limit:	23652-94610		42786-171144		168784-675134		108200-432798		200510-802042		193262-773046		194276-777106	
Eval File Rt Limit:	2.1-3.1		5.32-6.32		6.33-7.33		7.75-8.75		9.21-10.21		12.26-13.26		13.89-14.89	
Data File Sample#														
7M105544.D SMB83648	44277	2.58	76151	5.82	282861	6.83	168990	8.26	315685	9.71	339169	12.76	334376	14.39
7M105545.D AD15914-004	42641	2.59	80788	5.82	295315	6.82	174685	8.25	334117	9.71	353435	12.76	349478	14.39
7M105546.D AD15914-005	38152	2.59	71868	5.82	285012	6.83	157908	8.25	296654	9.71	281518	12.76	284107	14.39
7M105547.D AD15914-006	39758	2.60	83155	5.82	316257	6.83	185160	8.25	328165	9.71	302061	12.76	275238	14.39
7M105548.D AD15914-007	38308	2.60	70276	5.82	266837	6.83	155469	8.26	314126	9.71	272787	12.76	297399	14.40
7M105549.D AD15955-020(R)	36983	2.60	67624	5.83	260796	6.83	154539	8.25	279204	9.71	288355	12.76	298210	14.39
7M105550.D AD15927-002	42820	2.60	84488	5.82	310484	6.83	204712	8.25	337988	9.71	313209	12.76	320381	14.40
7M105551.D AD15927-003	39332	2.59	74201	5.82	280154	6.83	163027	8.25	293215	9.71	253991	12.76	254518	14.40
7M105552.D AD15927-001(3X)	38534	2.61	69362	5.82	258583	6.83	152881	8.25	274813	9.71	239765	12.76	239786	14.39
7M105553.D AD15945-002(5X)	40566	2.62	78290	5.82	291859	6.83	171943	8.26	308041	9.71	299406	12.76	299458	14.38
7M105554.D AD15985-001(5X)	38373	2.63	74020	5.84	273181	6.84	188958	8.25	322903	9.71	296245	12.76	285870	14.39
7M105555.D AD15985-002(5X)	40547	2.62	76968	5.82	310185	6.83	180360	8.25	326108	9.71	297035	12.76	293023	14.39
7M105556.D AD15964-001(5X)	40263	2.61	76529	5.82	288298	6.83	166162	8.26	297677	9.71	267036	12.76	266002	14.39
7M105557.D AD15872-002	75129	2.59	144667	5.82	607386	6.84	409709	8.28	631836	9.75	596133	12.80	585330	14.43
7M105558.D AD15915-001	37864	2.59	76401	5.82	288631	6.83	169853	8.25	290593	9.71	278770	12.76	262705	14.39
7M105559.D AD15946-001	45438	2.60	77111	5.82	292179	6.83	176508	8.25	309259	9.71	277000	12.76	271821	14.39
7M105560.D AD15957-001	48020	2.60	72789	5.82	306788	6.83	182517	8.25	337615	9.71	284815	12.76	274554	14.38
7M105561.D AD15985-003(5X)	43460	2.62	80310	5.82	313272	6.83	180449	8.25	311136	9.71	276006	12.76	251937	14.40
7M105562.D AD15985-004(5X)	47070	2.61	88874	5.82	320219	6.83	193613	8.26	294138	9.71	307238	12.76	235166	14.39
7M105563.D AD15945-002(3X)	44230	2.60	73006	5.82	268394	6.83	158511	8.25	323851	9.71	288351	12.76	214429	14.38
7M105564.D AD15985-001(5X)(MS)	40615	2.61	69207	5.84	259247	6.83	154048	8.25	274859	9.71	237387	12.76	240896	14.38
7M105565.D AD15985-001(5X)(MS	41671	2.61	66659	5.83	252095	6.83	153387	8.25	271030	9.71	276742	12.76	236146	14.38

I1 = 1,4-Dioxane-d8(INT)
I2 = 1,4-Dichlorobenzene-d4
I3 = Naphthalene-d8
I4 = Acenaphthene-d10
I5 = Phenanthrene-d10
I6 = Chrysene-d12
I7 = Perylene-d12

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

PCB Data

Form1

ORGANICS PCB REPORT

Sample Number: AD15946-001
Client Id: TB-110-1 COMP
Data File: 2G144706.D
Analysis Date: 03/02/20 10:03
Date Rec/Extracted: 02/27/20-02/28/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 66

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.038	U	11097-69-1	Aroclor-1254	0.038	U
11104-28-2	Aroclor-1221	0.038	U	11096-82-5	Aroclor-1260	0.038	U
11141-16-5	Aroclor-1232	0.038	U	37324-23-5	Aroclor-1262	0.038	U
53469-21-9	Aroclor-1242	0.038	U	11100-14-4	Aroclor-1268	0.038	U
12672-29-6	Aroclor-1248	0.038	U	1336-36-3	Aroclor (Total)	0.038	U

Worksheet #: 547503

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\03-02-20\
Data File : 2G144706.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Mar 2020 10:03
Operator : MS/MLC
Sample : AD15946-001
Misc : S,PCB
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 02 12:55:30 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

	Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
	Target Compounds						
1)	TCMX-Surrogate	3.902	3.963	540498	1361443	98.734m	86.733
45)	DCB-Surrogate	10.279	10.966	486599	1000360	74.406	69.365

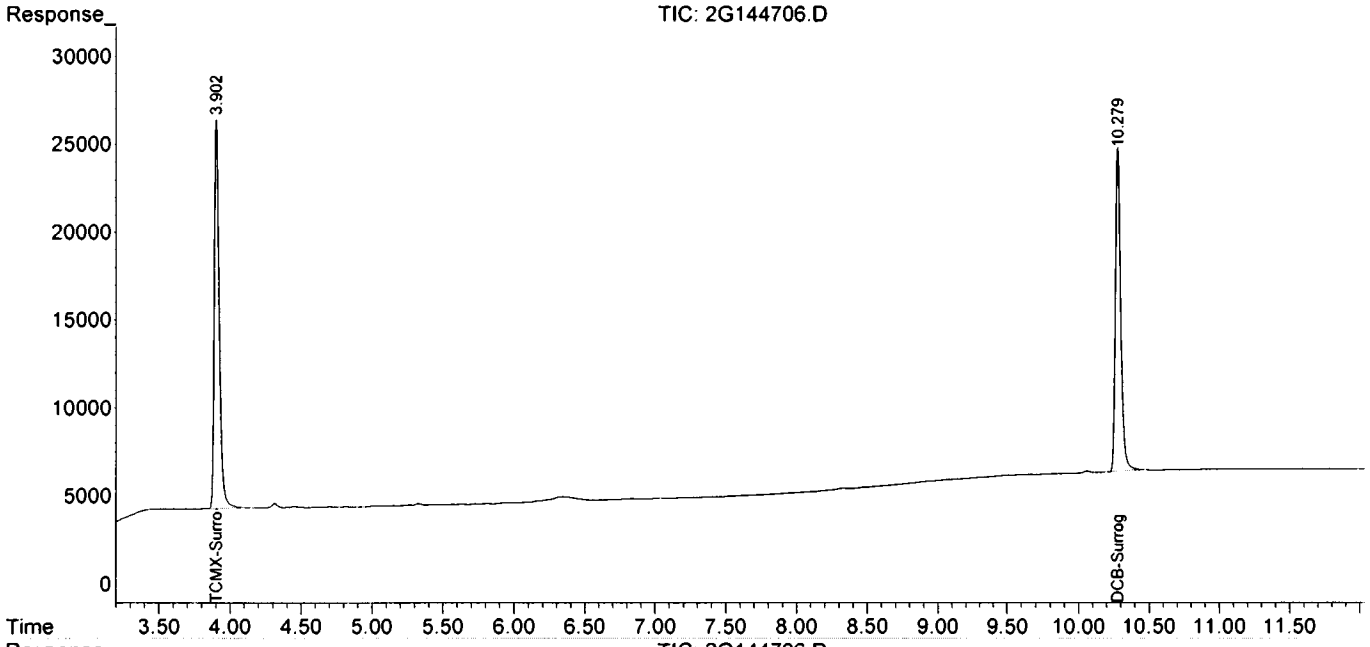
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

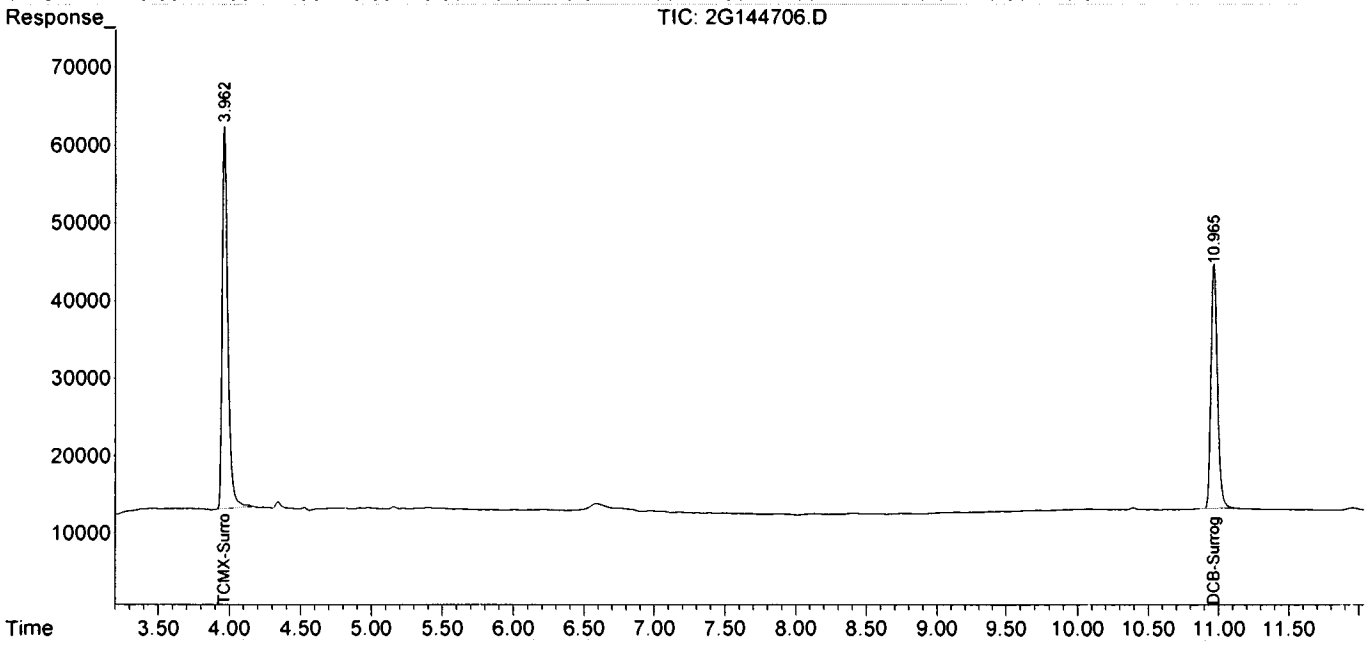
3

Data Path : G:\Gcdata\2020\GC_2\Data\03-02-20\
Data File : 2G144706.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Mar 2020 10:03
Operator : MS/MLC
Sample : AD15946-001
Misc : S,PCB
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 02 12:55:30 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PCB REPORT

Sample Number: SMB83689
Client Id:
Data File: 2G144701.D
Analysis Date: 03/02/20 08:42
Date Rec/Extracted: NA-02/28/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8082A
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
12674-11-2	Aroclor-1016	0.025	U	11097-69-1	Aroclor-1254	0.025	U
11104-28-2	Aroclor-1221	0.025	U	11096-82-5	Aroclor-1260	0.025	U
11141-16-5	Aroclor-1232	0.025	U	37324-23-5	Aroclor-1262	0.025	U
53469-21-9	Aroclor-1242	0.025	U	11100-14-4	Aroclor-1268	0.025	U
12672-29-6	Aroclor-1248	0.025	U				

Worksheet #: 547503

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_2\Data\03-02-20\
Data File : 2G144701.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Mar 2020 8:42
Operator : MS/MLC
Sample : SMB83689
Misc : S,PCB
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 02 12:54:30 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

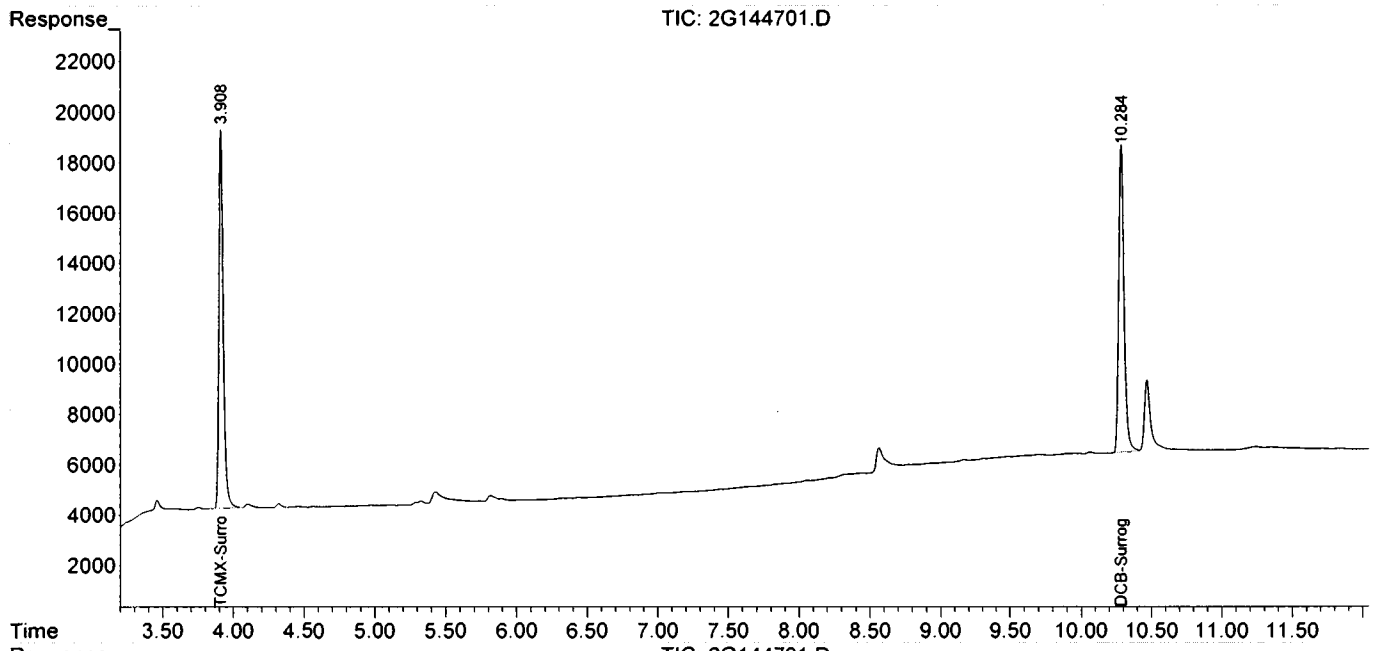
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	3.909	3.966	320398	817874	58.528	52.104
45)DCB-Surrogate	10.284	10.967	318571	666819	48.713	46.237

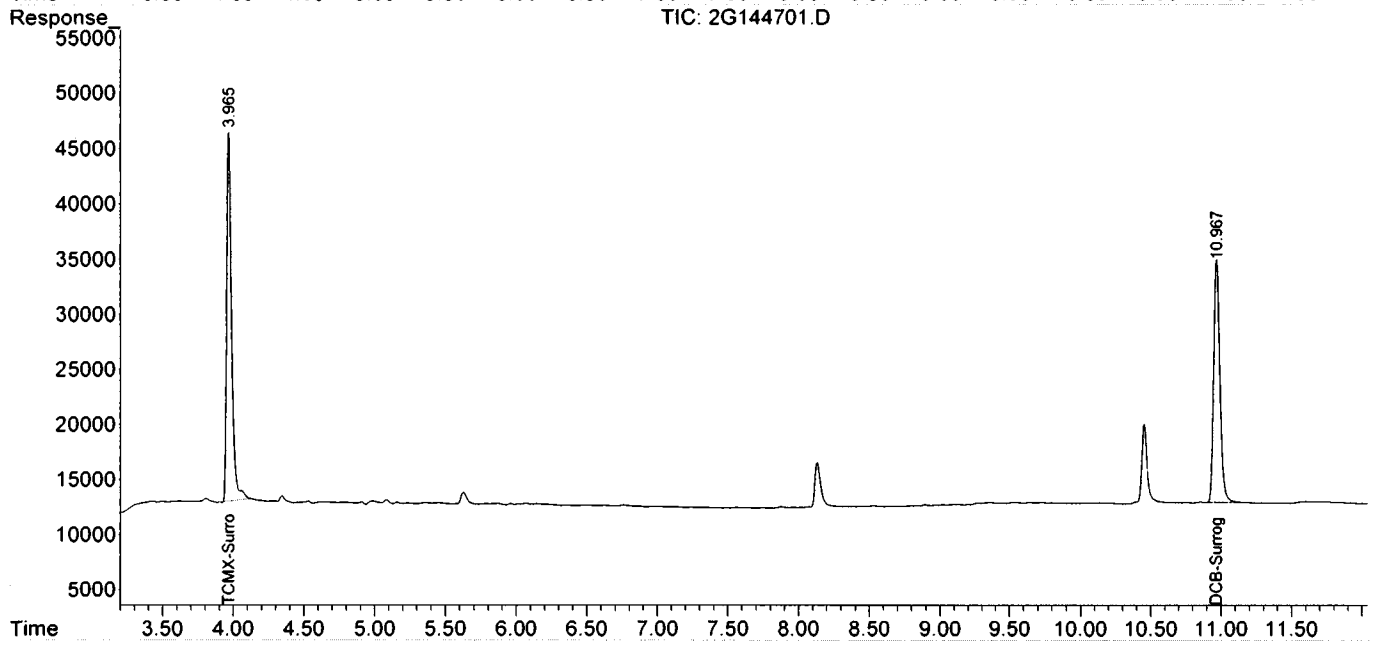
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_2\Data\03-02-20\
Data File : 2G144701.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Mar 2020 8:42
Operator : MS/MLC
Sample : SMB83689
Misc : S,PCB
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: AUTOINT1.E
Integration File signal 2: AUTOINT2.E
Quant Time: Mar 02 12:54:30 2020
Quant Method : G:\GCDATA\2020\GC_2\MethodQt\2G_C0206.M
Quant Title : @GC_2,ug,608,8082
QLast Update : Thu Feb 06 12:55:28 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8082A

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
2G144701.D	SMB83689	S	03/02/20 08:42	1		59	52	49	46		
2G144706.D	AD15946-001	S	03/02/20 10:03	1		99	87	74	69		
2G144702.D	SMB83689(MS)	S	03/02/20 08:59	1		101	90	79	74		
2G144707.D	AD15955-007(MS)	S	03/02/20 10:18	1		102	90	79	76		
2G144708.D	AD15955-007(MSD)	S	03/02/20 10:36	1		102	89	77	72		
2G144709.D	AD15955-007	S	03/02/20 10:51	1		92	83	73	69		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8082A

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	34-146
S4=DCB-Surrogate	100	34-146

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83689

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144702.D	SMB83689(MS)	3/2/2020 8:59:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	998.878	0	1000	100	30	163
Aroclor-1260 -Total	1	892.194	0	1000	89	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83689

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144707.D	AD15955-007(MS)	3/2/2020 10:18:00 AM
Non Spike(If applicable):	2G144709.D	AD15955-007	3/2/2020 10:51:00 AM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	1007.042	0	1000	101	30	163
Aroclor-1260 -Total	1	921.478	0	1000	92	25	166

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144708.D	AD15955-007(MSD)	3/2/2020 10:36:00 AM
Non Spike(If applicable):	2G144709.D	AD15955-007	3/2/2020 10:51:00 AM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
Aroclor-1016 -Total	1	999.216	0	1000	100	30	163
Aroclor-1260 -Total	1	915.398	0	1000	92	25	166

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB83689

	Data File	Sample ID:	Analysis Date
Spike or Dup:	2G144708.D	AD15955-007(MSD)	3/2/2020 10:36:00 AM
Duplicate(If applicable):	2G144707.D	AD15955-007(MS)	3/2/2020 10:18:00 AM
Inst Blank(If applicable):			

Method: 8082 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
Aroclor-1016 -Total	1	999.216	1007.042	0.78	40
Aroclor-1260 -Total	1	915.398	921.478	0.66	37

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB83689
Blank Data File: 2G144701.D
Matrix: Soil

Blank Analysis Date: 03/02/20 08:42
Blank Extraction Date: 02/28/20
(If Applicable)
Method: EPA 8082A

Sample Number	Data File	Analysis Date
AD15946-001	2G144706.D	03/02/20 10:03
AD15955-007	2G144709.D	03/02/20 10:51
AD15955-007(MSD	2G144708.D	03/02/20 10:36
AD15955-007(MS)	2G144707.D	03/02/20 10:18
SMB83689(MS)	2G144702.D	03/02/20 08:59

Form 5

Method: EPA 8082A

Instrument: GC_2

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G144203.D	CAL 2154@500PPB	02/06/20 09:19	Soil	2G14420	10.2896	0.0622	10.9676	0.0109
2G144204.D	CAL 3268@500PPB	02/06/20 09:53	Soil	2G14420	10.2912	0.0778	10.9683	0.0173
2G144205.D	CAL 1242@500PPB	02/06/20 10:10	Soil	2G14420	10.2866	0.0331	10.9672	0.0073
2G144206.D	CAL 1248@500PPB	02/06/20 10:26	Soil	2G14420	10.2833	0.001	10.9662	0.0018
2G144207.D	CAL 1262@500PPB	02/06/20 10:43	Soil	2G14420	10.2864	0.0311	10.9696	0.0292
2G144208.D	CAL 1660@50PPB	02/06/20 10:58	Soil	2G14420	10.2832	0	10.9664	0
2G144209.D	CAL 1660@200PPB	02/06/20 11:14	Soil	2G14420	10.2855	0.0224	10.9692	0.0255
2G144210.D	CAL 1660@500PPB	02/06/20 11:29	Soil	2G14420	10.2849	0.0165	10.9687	0.021
2G144211.D	CAL 1660@1000PPB	02/06/20 11:44	Soil	2G14420	10.2856	0.0233	10.9709	0.041
2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	Soil	2G14420	10.2869	0.036	10.9706	0.0383
2G144213.D	CAL 1660@4000PPB	02/06/20 12:18	Soil	2G14420	10.2853	0.0204	10.9709	0.041
2G144214.D	ICV	02/06/20 12:33	Soil	2G14420	10.2852	0.0194	10.9698	0.031
2G144215.D	PEST WS	02/06/20 12:48	Soil	2G14420	0.0000	200*	0.0000	200*

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8082A
Instrument: GC_2 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
2G144700.D	CAL 1660@1000PPB	03/02/20 08:06	Soil	2G14470	10.2837	0	10.9657	0
2G144701.D	SMB83689	03/02/20 08:42	Soil	2G14470	10.2843	0.0058	10.9675	0.0164
2G144702.D	SMB83689(MS)	03/02/20 08:59	Soil	2G14470	10.2799	0.037	10.9660	0.0027
2G144703.D	SMB83691(MS)	03/02/20 09:14	Soil	2G14470	10.2780	0.0554	10.9655	0.0018
2G144704.D	SMB83691	03/02/20 09:31	Soil	2G14470	10.2791	0.0447	10.9654	0.0027
2G144705.D	AD15945-002	03/02/20 09:46	Soil	2G14470	10.2761	0.0739	10.9644	0.0119
2G144706.D	AD15946-001	03/02/20 10:03	Soil	2G14470	10.2794	0.0418	10.9658	0.0009
2G144707.D	AD15955-007(MS)	03/02/20 10:18	Soil	2G14470	10.2791	0.0447	10.9686	0.0264
2G144708.D	AD15955-007(MSD)	03/02/20 10:36	Soil	2G14470	10.2811	0.0253	10.9683	0.0237
2G144709.D	AD15955-007	03/02/20 10:51	Soil	2G14470	10.2782	0.0535	10.9660	0.0027
2G144710.D	AD15955-001	03/02/20 11:08	Soil	2G14470	10.2796	0.0399	10.9659	0.0018
2G144711.D	AD15955-002	03/02/20 11:24	Soil	2G14470	10.2769	0.0661	10.9641	0.0146
2G144712.D	AD15941-001	03/02/20 12:13	Soil	2G14470	10.2858	0.0204	10.9670	0.0119
2G144713.D	AD15942-001	03/02/20 12:28	Soil	2G14470	10.2769	0.0661	10.9653	0.0037
2G144714.D	AD15955-005	03/02/20 12:45	Soil	2G14470	10.2797	0.0389	10.9657	0
2G144715.D	CAL 1660@2000PPB	03/02/20 13:01	Soil	2G14470	10.2791	0.0447	10.9676	0.0173
2G144716.D	AD15955-006	03/02/20 13:18	Soil	2G14471	10.2803	0.0117	10.9648	0.0255
2G144717.D	AD15955-008	03/02/20 13:36	Soil	2G14471	10.2808	0.0165	10.9683	0.0064
2G144718.D	AD15955-009	03/02/20 13:53	Soil	2G14471	10.2820	0.0282	10.9671	0.0046
2G144719.D	AD15955-003	03/02/20 14:08	Soil	2G14471	10.2775	0.0156	10.9651	0.0228
2G144720.D	AD15955-004	03/02/20 14:26	Soil	2G14471	10.2845	0.0525	10.9697	0.0191
2G144721.D	CAL 1660@2000PPB	03/02/20 14:41	Soil	2G14471	10.2792	0.001	10.9678	0.0018

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G144208.D	CAL 1660@50PPB	02/06/20 10:58	2	2G144209.D	CAL 1660@200PPB	02/06/20 11:14
3	2G144210.D	CAL 1660@500PPB	02/06/20 11:29	4	2G144211.D	CAL 1660@1000PPB	02/06/20 11:44
5	2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	6	2G144213.D	CAL 1660@4000PPB	02/06/20 12:18
7	2G144204.D	CAL 3268@500PPB	02/06/20 09:53	8	2G144205.D	CAL 1242@500PPB	02/06/20 10:10
9	2G144206.D	CAL 1248@500PPB	02/06/20 10:26	10	2G144203.D	CAL 2154@500PPB	02/06/20 09:19
11	2G144207.D	CAL 1262@500PPB	02/06/20 10:43				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.5421	0.5381	0.5593	0.5649	0.5531	0.5268	----	----	0.547	3.90	0.999	1.00	2.6	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	1	1	Avg	0.0166	0.0157	0.0149	0.0140	0.0126	0.0114	----	----	0.0143	4.43	0.996	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	2	Avg	0.0343	0.0311	0.0294	0.0272	0.0245	0.0210	----	----	0.0280	4.80	0.991	1.00	17	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	3	Avg	0.0645	0.0569	0.0550	0.0521	0.0481	0.0433	----	----	0.0534	5.27	0.996	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	4	Avg	0.0193	0.0171	0.0174	0.0168	0.0161	0.0149	----	----	0.0170	5.52	0.998	1.00	8.6	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	1	5	Avg	0.0474	0.0408	0.0398	0.0373	0.0344	0.0308	----	----	0.0384	5.64	0.996	1.00	15	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	1	Avg	0.0431	0.0359	0.0355	0.0332	0.0303	0.0271	----	----	0.0342	7.17	0.996	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	2	Avg	0.0498	0.0415	0.0408	0.0382	0.0351	0.0316	----	----	0.0395	7.42	0.996	1.00	16	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	3	Avg	0.0276	0.0209	0.0212	0.0209	0.0202	0.0193	----	----	0.0217	7.62	0.999	1.00	14	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	4	Avg	0.0328	0.0307	0.0280	0.0269	0.0253	0.0233	----	----	0.0279	8.22	0.998	1.00	12	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	1	5	Avg	0.0492	0.0396	0.0464	0.0440	0.0417	0.0397	----	----	0.0435	8.95	0.999	1.00	8.8	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	1	1	Avg	----	----	----	----	----	----	----	----	0.00692	4.22	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	2	Avg	----	----	----	----	----	----	----	----	0.00448	4.37	-1	-1	Lvl=10	500.0							
Aroclor-1221	1	3	Avg	----	----	----	----	----	----	----	----	0.0186	4.44	-1	-1	Lvl=10	500.0							
Aroclor-1232	1	1	Avg	----	----	----	----	----	----	----	----	0.0135	4.44	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	2	Avg	----	----	----	----	----	----	----	----	0.0123	4.81	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	3	Avg	----	----	----	----	----	----	----	----	0.0219	5.28	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	4	Avg	----	----	----	----	----	----	----	----	0.00990	5.42	-1	-1	Lvl=7	500.0							
Aroclor-1232	1	5	Avg	----	----	----	----	----	----	----	----	0.0104	5.90	-1	-1	Lvl=7	500.0							
Aroclor-1242	1	1	Avg	----	----	----	----	----	----	----	----	0.0221	4.43	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	2	Avg	----	----	----	----	----	----	----	----	0.0404	4.80	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	3	Avg	----	----	----	----	----	----	----	----	0.0771	5.28	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	4	Avg	----	----	----	----	----	----	----	----	0.0251	5.64	-1	-1	Lvl=8	500.0							
Aroclor-1242	1	5	Avg	----	----	----	----	----	----	----	----	0.0351	5.89	-1	-1	Lvl=8	500.0							
Aroclor-1248	1	1	Avg	----	----	----	----	----	----	----	----	0.0114	4.81	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	2	Avg	----	----	----	----	----	----	----	----	0.0280	5.28	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	3	Avg	----	----	----	----	----	----	----	----	0.0486	5.63	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	4	Avg	----	----	----	----	----	----	----	----	0.0262	6.00	-1	-1	Lvl=9	500.0							
Aroclor-1248	1	5	Avg	----	----	----	----	----	----	----	----	0.0288	6.61	-1	-1	Lvl=9	500.0							
Aroclor-1254	1	1	Avg	----	----	----	----	----	----	----	----	0.0144	6.80	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	2	Avg	----	----	----	----	----	----	----	----	0.0482	7.01	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	3	Avg	----	----	----	----	----	----	----	----	0.0305	7.18	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	4	Avg	----	----	----	----	----	----	----	----	0.0415	7.29	-1	-1	Lvl=10	500.0							
Aroclor-1254	1	5	Avg	----	----	----	----	----	----	----	----	0.0251	7.69	-1	-1	Lvl=10	500.0							
Aroclor-1262	1	1	Avg	----	----	----	----	----	----	----	----	0.0448	7.85	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	2	Avg	----	----	----	----	----	----	----	----	0.0271	8.87	-1	-1	Lvl=11	500.0							

Avg Rsd Col 1: 12.33 Avg Rsd Col 2: 16.61

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pch/chlordane etc..)
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0022703 0102

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G144208.D	CAL 1660@50PPB	02/06/20 10:58	2	2G144209.D	CAL 1660@200PPB	02/06/20 11:14
3	2G144210.D	CAL 1660@500PPB	02/06/20 11:29	4	2G144211.D	CAL 1660@1000PPB	02/06/20 11:44
5	2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	6	2G144213.D	CAL 1660@4000PPB	02/06/20 12:18
7	2G144204.D	CAL 3268@500PPB	02/06/20 09:53	8	2G144205.D	CAL 1242@500PPB	02/06/20 10:10
9	2G144206.D	CAL 1248@500PPB	02/06/20 10:26	10	2G144203.D	CAL 2154@500PPB	02/06/20 09:19
11	2G144207.D	CAL 1262@500PPB	02/06/20 10:43				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1262	1	3	Avg	----	----	----	----	----	----	----	----	0.0545	8.94	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	4	Avg	----	----	----	----	----	----	----	----	0.0242	9.69	-1	-1	Lvl=11	500.0							
Aroclor-1262	1	5	Avg	----	----	----	----	----	----	----	----	0.00980	10.06	-1	-1	Lvl=11	500.0							
Aroclor-1268	1	1	Avg	----	----	----	----	----	----	----	----	0.00719	8.21	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	2	Avg	----	----	----	----	----	----	----	----	0.00739	8.54	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	3	Avg	----	----	----	----	----	----	----	----	0.0624	9.12	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	4	Avg	----	----	----	----	----	----	----	----	0.0199	9.23	-1	-1	Lvl=7	500.0							
Aroclor-1268	1	5	Avg	----	----	----	----	----	----	----	----	0.185	10.07	-1	-1	Lvl=7	500.0							
DCB-Surrogate	1	0	Avg	0.7669	0.6719	0.6738	0.6444	0.6046	0.5621	----	----	0.654	10.28	0.998	1.00	11	5.00	20.00	50.00	100.0	200.0	400.0		
TCMX-Surrogate	2	0	Avg	1.7006	1.4886	1.6088	1.6361	1.5706	1.4131	----	----	1.57	3.96	0.996	1.00	6.6	5.00	20.00	50.00	100.0	200.0	400.0		
Aroclor-1016	2	1	Avg	0.0386	0.0352	0.0380	0.0336	0.0317	0.0276	----	----	0.0342	4.57	0.993	1.00	12	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	2	LinF	0.0927	0.0801	0.0770	0.0674	0.0601	0.0517	----	----	0.0715	4.99	0.992	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	3	Avg	0.1969	0.1643	0.1597	0.1423	0.1301	0.1140	----	----	0.151	5.38	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	4	Avg	0.0807	0.0682	0.0666	0.0592	0.0532	0.0470	----	----	0.0625	5.71	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1016	2	5	Avg	0.0595	0.0487	0.0481	0.0435	0.0397	0.0349	----	----	0.0458	6.08	0.994	1.00	19	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	1	LinF	0.1219	0.0980	0.0920	0.0837	0.0745	0.0655	----	----	0.0893	7.40	0.994	1.00	22	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	2	LinF	0.1315	0.1025	0.1003	0.0888	0.0813	0.0728	----	----	0.0962	7.49	0.996	1.00	21	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	3	LinF	0.0608	0.0472	0.0432	0.0400	0.0369	0.0340	----	----	0.0437	8.12	0.998	1.00	22	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	4	Avg	0.0946	0.0802	0.0799	0.0746	0.0726	0.0636	----	----	0.0776	8.48	0.995	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1260	2	5	Avg	0.0738	0.0704	0.0706	0.0668	0.0624	0.0576	----	----	0.0670	9.20	0.998	1.00	9.0	50.00	200.0	500.0	1000.	2000.	4000.		
Aroclor-1221	2	1	Avg	----	----	----	----	----	----	----	----	0.0166	4.35	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	2	Avg	----	----	----	----	----	----	----	----	0.00977	4.50	-1	-1	Lvl=10	500.0							
Aroclor-1221	2	3	Avg	----	----	----	----	----	----	----	----	0.0333	4.57	-1	-1	Lvl=10	500.0							
Aroclor-1232	2	1	Avg	----	----	----	----	----	----	----	----	0.0259	4.57	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	2	Avg	----	----	----	----	----	----	----	----	0.0296	4.99	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	3	Avg	----	----	----	----	----	----	----	----	0.0570	5.38	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	4	Avg	----	----	----	----	----	----	----	----	0.0255	5.71	-1	-1	Lvl=7	500.0							
Aroclor-1232	2	5	Avg	----	----	----	----	----	----	----	----	0.0169	6.23	-1	-1	Lvl=7	500.0							
Aroclor-1242	2	1	Avg	----	----	----	----	----	----	----	----	0.0510	4.57	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	2	Avg	----	----	----	----	----	----	----	----	0.0962	4.99	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	3	Avg	----	----	----	----	----	----	----	----	0.199	5.38	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	4	Avg	----	----	----	----	----	----	----	----	0.0835	5.71	-1	-1	Lvl=8	500.0							
Aroclor-1242	2	5	Avg	----	----	----	----	----	----	----	----	0.0704	6.08	-1	-1	Lvl=8	500.0							
Aroclor-1248	2	1	Avg	----	----	----	----	----	----	----	----	0.0258	5.00	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	2	Avg	----	----	----	----	----	----	----	----	0.0726	5.38	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	3	Avg	----	----	----	----	----	----	----	----	0.0539	5.71	-1	-1	Lvl=9	500.0							

Avg Rsd Col 1: 12.33 Avg Rsd Col 2: 16.61

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0022703 0103

Form 6

Initial Calibration

Method: EPA 8082A

Instrument: GC_2

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	2G144208.D	CAL 1660@50PPB	02/06/20 10:58	2	2G144209.D	CAL 1660@200PPB	02/06/20 11:14
3	2G144210.D	CAL 1660@500PPB	02/06/20 11:29	4	2G144211.D	CAL 1660@1000PPB	02/06/20 11:44
5	2G144212.D	CAL 1660@2000PPB	02/06/20 12:02	6	2G144213.D	CAL 1660@4000PPB	02/06/20 12:18
7	2G144204.D	CAL 3268@500PPB	02/06/20 09:53	8	2G144205.D	CAL 1242@500PPB	02/06/20 10:10
9	2G144206.D	CAL 1248@500PPB	02/06/20 10:26	10	2G144203.D	CAL 2154@500PPB	02/06/20 09:19
11	2G144207.D	CAL 1262@500PPB	02/06/20 10:43				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aroclor-1248	2	4	Avg	----	----	----	----	----	----	----	----	0.0544	6.23	-1	-1	Lvl=9	500.0							
Aroclor-1248	2	5	Avg	----	----	----	----	----	----	----	----	0.0651	6.36	-1	-1	Lvl=9	500.0							
Aroclor-1254	2	1	Avg	----	----	----	----	----	----	----	----	0.0854	6.59	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	2	Avg	----	----	----	----	----	----	----	----	0.0259	6.93	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	3	Avg	----	----	----	----	----	----	----	----	0.0735	7.33	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	4	Avg	----	----	----	----	----	----	----	----	0.0393	7.85	-1	-1	Lvl=10	500.0							
Aroclor-1254	2	5	Avg	----	----	----	----	----	----	----	----	0.0328	8.55	-1	-1	Lvl=10	500.0							
Aroclor-1262	2	1	Avg	----	----	----	----	----	----	----	----	0.0776	7.91	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	2	Avg	----	----	----	----	----	----	----	----	0.0612	9.08	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	3	Avg	----	----	----	----	----	----	----	----	0.0699	9.20	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	4	Avg	----	----	----	----	----	----	----	----	0.0719	9.82	-1	-1	Lvl=11	500.0							
Aroclor-1262	2	5	Avg	----	----	----	----	----	----	----	----	0.0221	10.39	-1	-1	Lvl=11	500.0							
Aroclor-1268	2	1	Avg	----	----	----	----	----	----	----	----	0.0104	8.58	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	2	Avg	----	----	----	----	----	----	----	----	0.0211	8.62	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	3	Avg	----	----	----	----	----	----	----	----	0.120	9.55	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	4	Avg	----	----	----	----	----	----	----	----	0.0327	9.72	-1	-1	Lvl=7	500.0							
Aroclor-1268	2	5	Avg	----	----	----	----	----	----	----	----	0.373	10.39	-1	-1	Lvl=7	500.0							
DCB-Surrogate	2	0	Avg	1.8060	1.5222	1.4882	1.3780	1.2809	1.1774	----	----	1.44	10.97	0.998	1.00	15	5.00	20.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 12.33 Avg Rsd Col 2: 16.61

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 ; Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0022703 0104

Form7
Continuing Calibration

Method: EPA 8082A

Data File:				2G144700.D			2G144715.D												
Method:				8082			8082												
Calibration Name:				CAL 1660@1000PP			CAL 1660@2000PP												
Calibration Date/Time				03/02/20 08:06			03/02/20 13:01												
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	20	1	0	104.6	100	4.6	209.4	200	4.7									
Aroclor-1016	20	1	1	1007	1000	0.7	1918	2000	4.1									
Aroclor-1016	20	1	2	985.7	1000	1.4	1793	2000	10.3									
Aroclor-1016	20	1	3	878.7	1000	12.1	1832	2000	8.4									
Aroclor-1016	20	1	4	949.7	1000	5.0	1970	2000	1.5									
Aroclor-1016	20	1	5	940.5	1000	5.9	1862	2000	6.9									
Aroclor-1260	20	1	1	901.4	1000	9.9	1796	2000	10.2									
Aroclor-1260	20	1	2	860.1	1000	14.0	1793	2000	10.3									
Aroclor-1260	20	1	3	854.9	1000	14.5	1883	2000	5.9									
Aroclor-1260	20	1	4	835.7	1000	16.4	1778	2000	11.1									
Aroclor-1260	20	1	5	804.7	1000	19.5	1819	2000	9.1									
DCB-Surrogate	20	1	0	79.68	100	20.3	154.4	200	22.8*									
Average Difference	20	1	0			10.4			8.8									
TCMX-Surrogate	20	2	0	89.76	100	10.2	182.8	200	8.6									
Aroclor-1016	20	2	1	938.2	1000	6.2	1826	2000	8.7									
Aroclor-1016	20	2	2	1156	1000	15.6	2169	2000	8.5									
Aroclor-1016	20	2	3	846	1000	15.4	1650	2000	17.5									
Aroclor-1016	20	2	4	885.4	1000	11.5	1692	2000	15.4									
Aroclor-1016	20	2	5	900.1	1000	10.0	1671	2000	16.5									
Aroclor-1260	20	2	1	1081	1000	8.1	2073	2000	3.7									
Aroclor-1260	20	2	2	1039	1000	3.9	2093	2000	4.6									
Aroclor-1260	20	2	3	1013	1000	1.3	2037	2000	1.9									
Aroclor-1260	20	2	4	869.5	1000	13.1	1647	2000	17.6									
Aroclor-1260	20	2	5	826.8	1000	17.3	1721	2000	14.0									
DCB-Surrogate	20	2	0	75.48	100	24.5*	144.1	200	28.0*									
Average Difference	20	2	0			11.4			12.1									

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
RtWindow Summary

Method: EPA 8082A

Data File:			2G144208.D		2G144700.D							
Calibration Name:			CAL 1660@50PPB		CAL 1660@1000PPB							
Calibration Date/Time			2/6/2020 10:58:00 AM		3/2/2020 8:06:00 AM							
Compound	Col	Mr	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit	Cal RT	Limit
TCMX-Surrogate	1	0	3.90	(3.84 - 3.96)	3.90	(3.84 - 3.96)						
Aroclor-1016	1	1	4.43	(4.39 - 4.47)	4.43	(4.39 - 4.47)						
Aroclor-1016	1	2	4.80	(4.76 - 4.84)	4.80	(4.76 - 4.84)						
Aroclor-1016	1	3	5.27	(5.23 - 5.31)	5.27	(5.23 - 5.31)						
Aroclor-1016	1	4	5.53	(5.49 - 5.57)	5.53	(5.49 - 5.57)						
Aroclor-1016	1	5	5.64	(5.60 - 5.68)	5.64	(5.60 - 5.68)						
Aroclor-1260	1	1	7.17	(7.13 - 7.21)	7.17	(7.13 - 7.21)						
Aroclor-1260	1	2	7.42	(7.38 - 7.46)	7.42	(7.38 - 7.46)						
Aroclor-1260	1	3	7.62	(7.58 - 7.66)	7.62	(7.58 - 7.66)						
Aroclor-1260	1	4	8.22	(8.18 - 8.26)	8.22	(8.18 - 8.26)						
Aroclor-1260	1	5	8.95	(8.91 - 8.99)	8.94	(8.90 - 8.98)						
Aroclor-1221	1	1	4.22	(4.18 - 4.26)								
Aroclor-1221	1	2	4.37	(4.33 - 4.41)								
Aroclor-1221	1	3	4.44	(4.40 - 4.48)								
Aroclor-1232	1	1	4.44	(4.40 - 4.48)								
Aroclor-1232	1	2	4.81	(4.77 - 4.85)								
Aroclor-1232	1	3	5.28	(5.24 - 5.32)								
Aroclor-1232	1	4	5.42	(5.38 - 5.46)								
Aroclor-1232	1	5	5.89	(5.85 - 5.93)								
Aroclor-1242	1	1	4.43	(4.39 - 4.47)								
Aroclor-1242	1	2	4.80	(4.76 - 4.84)								
Aroclor-1242	1	3	5.28	(5.24 - 5.32)								
Aroclor-1242	1	4	5.64	(5.60 - 5.68)								
Aroclor-1242	1	5	5.89	(5.85 - 5.93)								
Aroclor-1248	1	1	4.80	(4.76 - 4.84)								
Aroclor-1248	1	2	5.27	(5.23 - 5.31)								
Aroclor-1248	1	3	5.62	(5.58 - 5.66)								
Aroclor-1248	1	4	5.99	(5.95 - 6.03)								
Aroclor-1248	1	5	6.60	(6.56 - 6.64)								
Aroclor-1254	1	1	6.80	(6.76 - 6.84)								
Aroclor-1254	1	2	7.01	(6.97 - 7.05)								
Aroclor-1254	1	3	7.18	(7.14 - 7.22)								
Aroclor-1254	1	4	7.29	(7.25 - 7.33)								
Aroclor-1254	1	5	7.69	(7.65 - 7.73)								
Aroclor-1262	1	1	7.85	(7.81 - 7.89)								
Aroclor-1262	1	2	8.87	(8.83 - 8.91)								
Aroclor-1262	1	3	8.94	(8.90 - 8.98)								
Aroclor-1262	1	4	9.69	(9.65 - 9.73)								
Aroclor-1262	1	5	10.06	(10.02 - 10.10)								
Aroclor-1268	1	1	8.22	(8.18 - 8.26)								
Aroclor-1268	1	2	8.54	(8.50 - 8.58)								
Aroclor-1268	1	3	9.12	(9.08 - 9.16)								
Aroclor-1268	1	4	9.23	(9.19 - 9.27)								
Aroclor-1268	1	5	10.07	(10.03 - 10.11)								
DCB-Surrogate	1	0	10.29	(10.23 - 10.35)	10.28	(10.22 - 10.34)						
TCMX-Surrogate	2	0	3.96	(3.90 - 4.02)	3.96	(3.90 - 4.02)						
Aroclor-1016	2	1	4.57	(4.53 - 4.61)	4.57	(4.53 - 4.61)						
Aroclor-1016	2	2	4.99	(4.95 - 5.03)	4.99	(4.95 - 5.03)						
Aroclor-1016	2	3	5.38	(5.34 - 5.42)	5.38	(5.34 - 5.42)						
Aroclor-1016	2	4	5.71	(5.67 - 5.75)	5.71	(5.67 - 5.75)						
Aroclor-1016	2	5	6.08	(6.04 - 6.12)	6.08	(6.04 - 6.12)						
Aroclor-1260	2	1	7.40	(7.36 - 7.44)	7.40	(7.36 - 7.44)						
Aroclor-1260	2	2	7.49	(7.45 - 7.53)	7.49	(7.45 - 7.53)						
Aroclor-1260	2	3	8.12	(8.08 - 8.16)	8.12	(8.08 - 8.16)						
Aroclor-1260	2	4	8.49	(8.45 - 8.53)	8.48	(8.44 - 8.52)						
Aroclor-1260	2	5	9.20	(9.16 - 9.24)	9.20	(9.16 - 9.24)						
Aroclor-1221	2	1	4.35	(4.31 - 4.39)								
Aroclor-1221	2	2	4.50	(4.46 - 4.54)								
Aroclor-1221	2	3	4.57	(4.53 - 4.61)								
Aroclor-1232	2	1	4.57	(4.53 - 4.61)								
Aroclor-1232	2	2	4.99	(4.95 - 5.03)								
Aroclor-1232	2	3	5.38	(5.34 - 5.42)								
Aroclor-1232	2	4	5.71	(5.67 - 5.75)								
Aroclor-1232	2	5	6.23	(6.19 - 6.27)								
Aroclor-1242	2	1	4.57	(4.53 - 4.61)								
Aroclor-1242	2	2	4.99	(4.95 - 5.03)								
Aroclor-1242	2	3	5.38	(5.34 - 5.42)								
Aroclor-1242	2	4	5.71	(5.67 - 5.75)								
Aroclor-1242	2	5	6.08	(6.04 - 6.12)								
Aroclor-1248	2	1	4.99	(4.95 - 5.03)								
Aroclor-1248	2	2	5.38	(5.34 - 5.42)								
Aroclor-1248	2	3	5.71	(5.67 - 5.75)								
Aroclor-1248	2	4	6.23	(6.19 - 6.27)								
Aroclor-1248	2	5	6.36	(6.32 - 6.40)								
Aroclor-1254	2	1	6.59	(6.55 - 6.63)								
Aroclor-1254	2	2	6.93	(6.89 - 6.97)								
Aroclor-1254	2	3	7.33	(7.29 - 7.37)								
Aroclor-1254	2	4	7.85	(7.81 - 7.89)								
Aroclor-1254	2	5	8.54	(8.50 - 8.58)								
Aroclor-1262	2	1	7.91	(7.87 - 7.95)								
Aroclor-1262	2	2	9.08	(9.04 - 9.12)								
Aroclor-1262	2	3	9.20	(9.16 - 9.24)								
Aroclor-1262	2	4	9.82	(9.78 - 9.86)								
Aroclor-1262	2	5	10.39	(10.35 - 10.43)								
Aroclor-1268	2	1	8.58	(8.54 - 8.62)								
Aroclor-1268	2	2	8.62	(8.58 - 8.66)								
Aroclor-1268	2	3	9.55	(9.51 - 9.59)								
Aroclor-1268	2	4	9.72	(9.68 - 9.76)								
Aroclor-1268	2	5	10.39	(10.35 - 10.43)								
DCB-Surrogate	2	0	10.97	(10.91 - 11.03)	10.97	(10.91 - 11.03)						

Pesticide Data

Form1

ORGANICS PESTICIDE REPORT

Sample Number: AD15946-001
Client Id: TB-110-1 COMP
Data File: 6G107076.D
Analysis Date: 03/03/20 00:30
Date Rec/Extracted: 02/27/20-02/28/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 66

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0076	U	53494-70-5	Endrin Ketone	0.0076	U
309-00-2	Aldrin	0.0076	U	58-89-9	gamma-BHC	0.0015	U
319-84-6	alpha-BHC	0.0015	U	76-44-8	Heptachlor	0.0076	U
319-85-7	beta-BHC	0.0015	U	1024-57-3	Heptachlor Epoxide	0.0076	U
319-86-8	delta-BHC	0.0076	U	72-43-5	Methoxychlor	0.0076	U
60-57-1	Dieldrin	0.0015	U	72-54-8	p,p'-DDD	0.0038	U
959-98-8	Endosulfan I	0.0076	U	72-55-9	p,p'-DDE	0.0038	U
33213-65-9	Endosulfan II	0.0076	U	50-29-3	p,p'-DDT	0.0038	U
1031-07-8	Endosulfan Sulfate	0.0076	U	8001-35-2	Toxaphene	0.038	U
72-20-8	Endrin	0.0076	U	5103-74-2	y-chlordane	0.0076	U
7421-93-4	Endrin Aldehyde	0.0076	U	57-74-9	Chlordane (Total)	0.0076	U

Worksheet #: 547501

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\03-03-20\
Data File : 6G107076.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 3 Mar 2020 00:30
Operator : MS/MLC
Sample : AD15946-001
Misc : S,PEST
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 03 13:03:04 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0227.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Feb 28 10:31:50 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

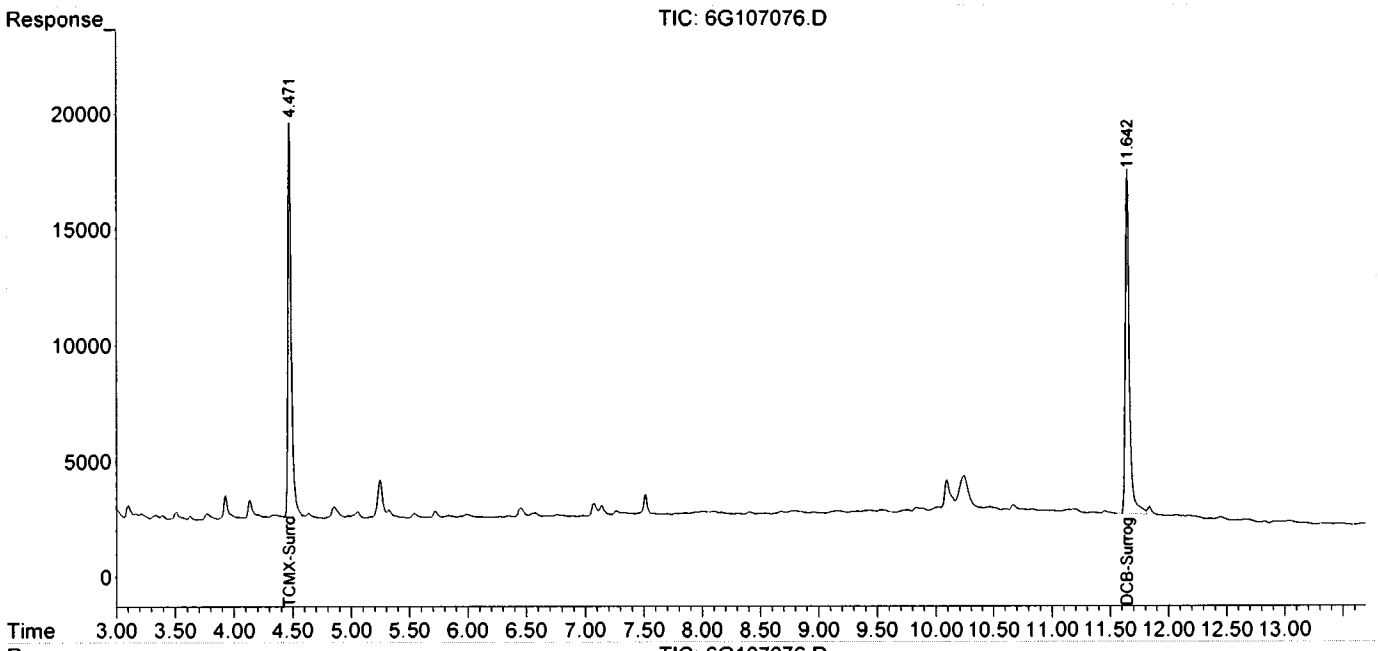
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.472	4.653	338909	977127	87.096	86.644
22)DCB-Surrogate	11.643	12.460	354598	1198819	87.365	107.392

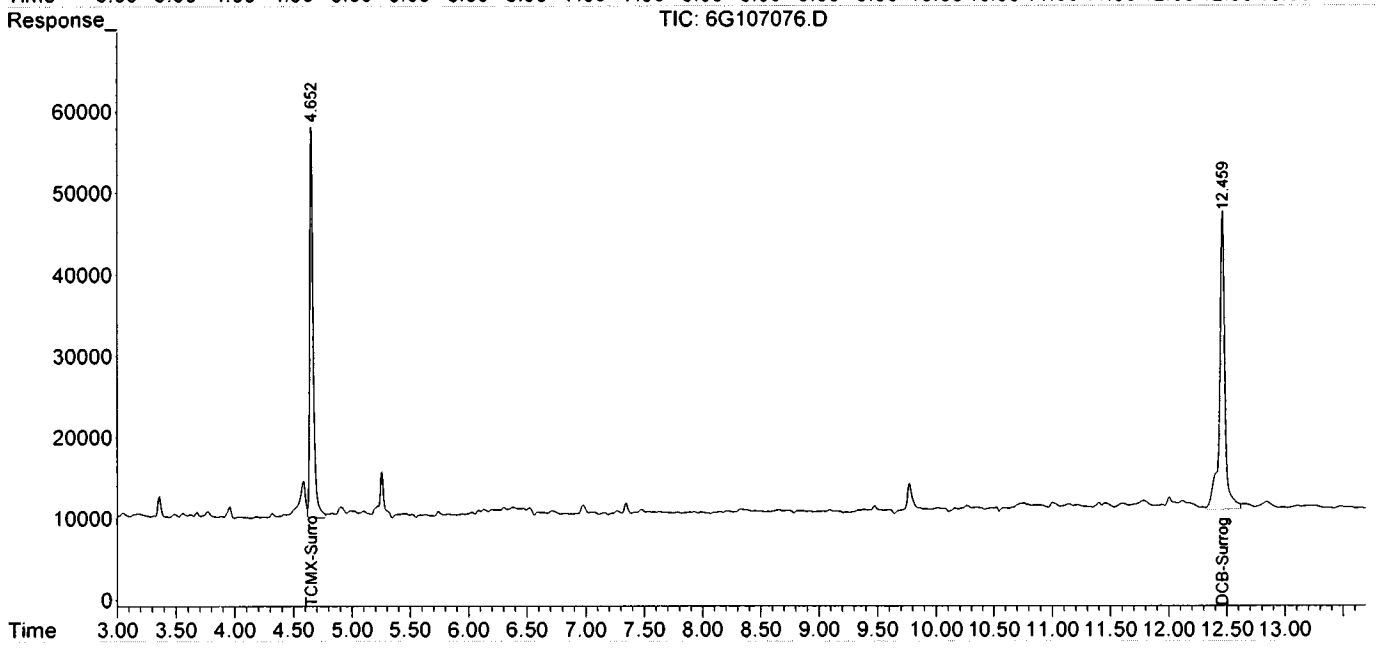
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_6\Data\03-03-20\
Data File : 6G107076.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 3 Mar 2020 00:30
Operator : MS/MLC
Sample : AD15946-001
Misc : S,PEST
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 03 13:03:04 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0227.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Feb 28 10:31:50 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





Form1

ORGANICS PESTICIDE REPORT

Sample Number: SMB83688
Client Id:
Data File: 6G107058.D
Analysis Date: 03/02/20 10:49
Date Rec/Extracted: NA-02/28/20
Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Method: EPA 8081B
Matrix: Soil
Initial Vol: 20g
Final Vol: 10ml
Dilution: 1
Solids: 100

Units: mg/Kg

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
5103-71-9	a-chlordane	0.0050	U	53494-70-5	Endrin Ketone	0.0050	U
309-00-2	Aldrin	0.0050	U	58-89-9	gamma-BHC	0.0010	U
319-84-6	alpha-BHC	0.0010	U	76-44-8	Heptachlor	0.0050	U
319-85-7	beta-BHC	0.0010	U	1024-57-3	Heptachlor Epoxide	0.0050	U
319-86-8	delta-BHC	0.0050	U	72-43-5	Methoxychlor	0.0050	U
60-57-1	Dieldrin	0.0010	U	72-54-8	p,p'-DDD	0.0025	U
959-98-8	Endosulfan I	0.0050	U	72-55-9	p,p'-DDE	0.0025	U
33213-65-9	Endosulfan II	0.0050	U	50-29-3	p,p'-DDT	0.0025	U
1031-07-8	Endosulfan Sulfate	0.0050	U	8001-35-2	Toxaphene	0.025	U
72-20-8	Endrin	0.0050	U	5103-74-2	y-chlordane	0.0050	U
7421-93-4	Endrin Aldehyde	0.0050	U				

Worksheet #: 547501 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

Data Path : G:\Gcdata\2020\GC_6\Data\03-02-20\
Data File : 6G107058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Mar 2020 10:49
Operator : MS/MLC
Sample : SMB83688
Misc : S,PEST
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 03 11:41:27 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0227.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Feb 28 10:31:50 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32

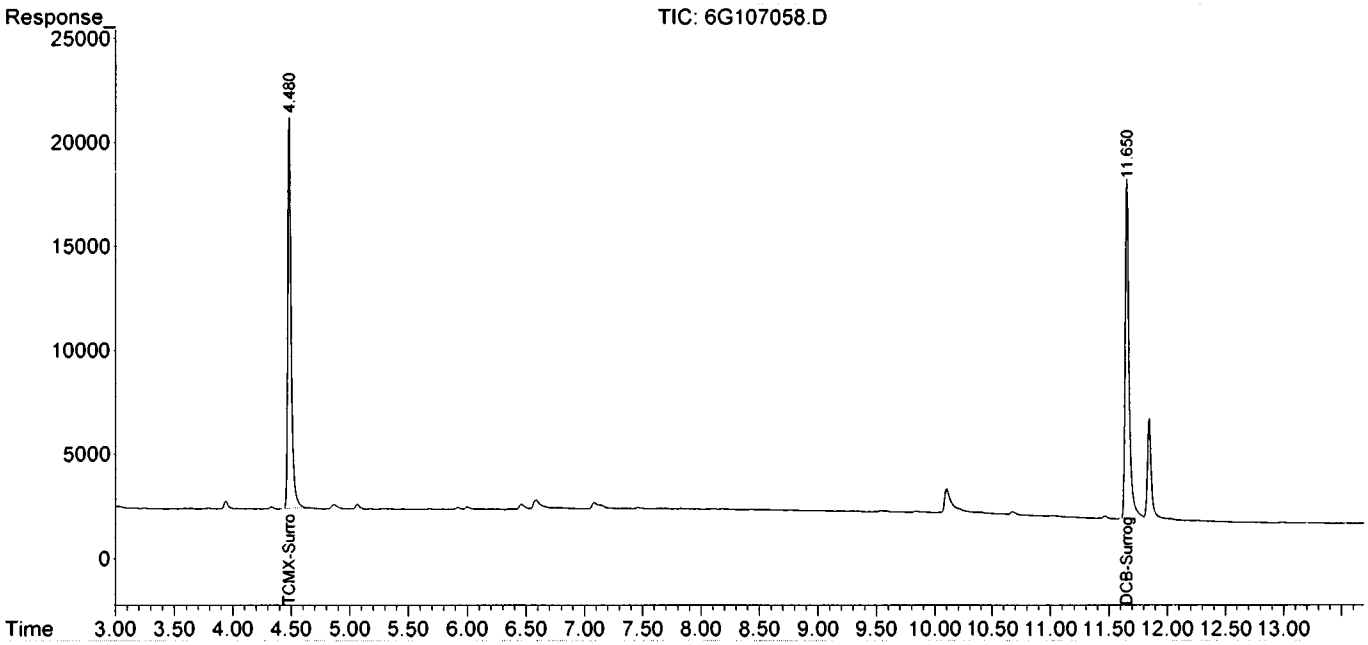
Compound	RT#1	RT#2	Resp#1	Resp#2	pg#1	pg#2
Target Compounds						
1)TCMX-Surrogate	4.481	4.654	374562	1091565	96.258	96.791
22)DCB-Surrogate	11.651	12.461	382860	1105786	94.328	99.058

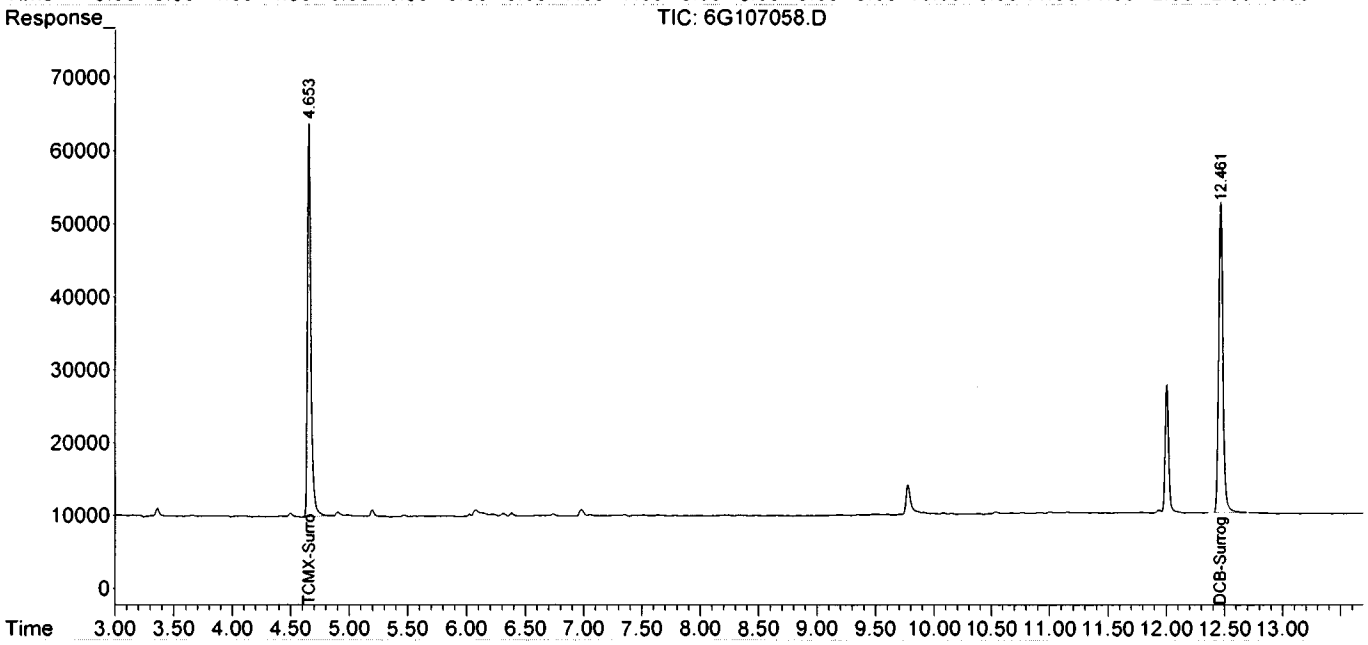
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : G:\Gcdata\2020\GC_6\Data\03-02-20\
Data File : 6G107058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 2 Mar 2020 10:49
Operator : MS/MLC
Sample : SMB83688
Misc : S,PEST
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 03 11:41:27 2020
Quant Method : G:\GCDATA\2020\GC_6\MethodQt\6G_P0227.M
Quant Title : @GC_6,ug,608,8081
QLast Update : Fri Feb 28 10:31:50 2020
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : db-1701P Signal #2 Phase: db-17
Signal #1 Info : .32 Signal #2 Info : .32





FORM2

Surrogate Recovery

Method: EPA 8081B

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column2 S2 Recov	Column1 S3 Recov	Column2 S4 Recov	Column0 S5 Recov	Column0 S6 Recov
6G107058.D	SMB83688	S	03/02/20 10:49	1		96	97	94	99		
6G107076.D	AD15946-001	S	03/03/20 00:30	1		87	87	87	107		
5G89139.D	AD15955-007	S	03/02/20 12:40	1		89	92	86	85		
6G107059.D	SMB83688(MS)	S	03/02/20 11:06	1		96	93	92	97		
6G107062.D	AD15955-007(MS)	S	03/02/20 11:59	1		91	90	90	95		
6G107063.D	AD15955-007(MSD)	S	03/02/20 12:16	1		90	89	89	93		

Flags: SD=Surrogate diluted out
*=Surrogate out

Method: EPA 8081B

Soil Laboratory Limits

Compound	Spike Amt	Limits
S1=TCMX-Surrogate	100	37-141
S2=TCMX-Surrogate	100	37-141
S3=DCB-Surrogate	100	33-146
S4=DCB-Surrogate	100	33-146

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83688

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107059.D	SMB83688(MS)	3/2/2020 11:06:00 AM
Non Spike(If applicable):			
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	87.59	0	100	88	60	130
gamma-BHC	2	84.73	0	100	85	60	130
beta-BHC	2	77.6	0	100	78	60	130
Heptachlor	2	82	0	100	82	60	130
delta-BHC	2	76.44	0	100	76	60	130
Aldrin	2	90.17	0	100	90	70	130
Heptachlor Epoxide	2	91.06	0	100	91	70	130
y-chlordane	2	85.95	0	100	86	70	130
a-chlordane	2	87.71	0	100	88	70	130
Endosulfan I	2	87.84	0	100	88	70	130
p,p'-DDE	2	92.83	0	100	93	70	130
Dieldrin	2	90.4	0	100	90	70	130
Endrin	2	78.64	0	100	79	70	130
p,p'-DDD	2	84.79	0	100	85	70	130
Endosulfan II	2	86.91	0	100	87	70	130
p,p'-DDT	2	79.46	0	100	79	70	130
Endrin Aldehyde	2	91	0	100	91	10	130
Endosulfan Sulfate	2	102.3	0	100	102	70	130
Methoxychlor	2	72.6	0	100	73	60	130
Endrin Ketone	2	78.47	0	100	78	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
Recovery Data Laboratory Limits
QC Batch: SMB83688

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107062.D	AD15955-007(MS)	3/2/2020 11:59:00 AM
Non Spike(If applicable):	5G89139.D	AD15955-007	3/2/2020 12:40:50 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	85.07	0	100	85	60	130
gamma-BHC	2	81.99	0	100	82	60	130
beta-BHC	2	72.74	0	100	73	60	130
Heptachlor	2	81.68	0	100	82	60	130
delta-BHC	2	76.81	0	100	77	60	130
Aldrin	2	87.17	0	100	87	70	130
Heptachlor Epoxide	2	87.79	0	100	88	70	130
y-chlordane	2	82.53	0	100	83	70	130
a-chlordane	2	84.69	0	100	85	70	130
Endosulfan I	2	84.63	0	100	85	70	130
p,p'-DDE	2	90.49	0	100	90	70	130
Dieldrin	2	89.17	0	100	89	70	130
Endrin	2	77.73	0	100	78	70	130
p,p'-DDD	2	84.18	0	100	84	70	130
Endosulfan II	2	86.33	0	100	86	70	130
p,p'-DDT	2	77.04	0	100	77	70	130
Endrin Aldehyde	2	85.75	0	100	86	10	130
Endosulfan Sulfate	2	97.24	0	100	97	70	130
Methoxychlor	2	69.84	0	100	70	60	130
Endrin Ketone	2	82.17	0	100	82	70	130

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107063.D	AD15955-007(MSD)	3/2/2020 12:16:00 PM
Non Spike(If applicable):	5G89139.D	AD15955-007	3/2/2020 12:40:50 PM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
alpha-BHC	2	82.71	0	100	83	60	130
gamma-BHC	2	81.78	0	100	82	60	130
beta-BHC	2	73.63	0	100	74	60	130
Heptachlor	2	81.03	0	100	81	60	130
delta-BHC	2	74.68	0	100	75	60	130
Aldrin	2	84.83	0	100	85	70	130
Heptachlor Epoxide	2	86.04	0	100	86	70	130
y-chlordane	2	80.69	0	100	81	70	130
a-chlordane	2	82.53	0	100	83	70	130
Endosulfan I	2	82.46	0	100	82	70	130
p,p'-DDE	2	88.36	0	100	88	70	130
Dieldrin	2	86.61	0	100	87	70	130
Endrin	2	76.2	0	100	76	70	130
p,p'-DDD	2	81.58	0	100	82	70	130
Endosulfan II	2	82.77	0	100	83	70	130
p,p'-DDT	2	77.81	0	100	78	70	130
Endrin Aldehyde	2	87.06	0	100	87	10	130
Endosulfan Sulfate	2	97.81	0	100	98	70	130
Methoxychlor	2	71.49	0	100	71	60	130
Endrin Ketone	2	80.6	0	100	81	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits
Bold and underline - Indicates the compounds reported on form1

Form3
RPD Data Laboratory Limits
QC Batch: SMB83688

	Data File	Sample ID:	Analysis Date
Spike or Dup:	6G107063.D	AD15955-007(MSD)	3/2/2020 12:16:00 PM
Duplicate(If applicable):	6G107062.D	AD15955-007(MS)	3/2/2020 11:59:00 AM
Inst Blank(If applicable):			

Method: 8081 Matrix: Soil QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
alpha-BHC	2	82.71	85.07	2.8	40
gamma-BHC	2	81.78	81.99	0.26	40
beta-BHC	2	73.63	72.74	1.2	40
Heptachlor	2	81.03	81.68	0.8	40
delta-BHC	2	74.68	76.81	2.8	40
Aldrin	2	84.83	87.17	2.7	40
Heptachlor Epoxide	2	86.04	87.79	2	40
y-chlordane	2	80.69	82.53	2.3	40
a-chlordane	2	82.53	84.69	2.6	40
Endosulfan I	2	82.46	84.63	2.6	40
p,p'-DDE	2	88.36	90.49	2.4	40
Dieldrin	2	86.61	89.17	2.9	40
Endrin	2	76.2	77.73	2	40
p,p'-DDD	2	81.58	84.18	3.1	40
Endosulfan II	2	82.77	86.33	4.2	40
p,p'-DDT	2	77.81	77.04	0.99	40
Endrin Aldehyde	2	87.06	85.75	1.5	40
Endosulfan Sulfate	2	97.81	97.24	0.58	40
Methoxychlor	2	71.49	69.84	2.3	40
Endrin Ketone	2	80.6	82.17	1.9	40

* - Indicates outside of limits NA - Both concentrations=0... no result can be calculated

Bold and underline - Indicates the compounds reported on form1

FORM 4
Blank Summary

Blank Number: SMB83688
Blank Data File: 6G107058.D
Matrix: Soil

Blank Analysis Date: 03/02/20 10:49
Blank Extraction Date: 02/28/20
(If Applicable)
Method: EPA 8081B

Sample Number	Data File	Analysis Date
AD15946-001	6G107076.D	03/03/20 00:30
AD15955-007(MSD	6G107063.D	03/02/20 12:16
AD15955-007(MS)	6G107062.D	03/02/20 11:59
SMB83688(MS)	6G107059.D	03/02/20 11:06
AD15955-007	5G89139.D	03/02/20 12:40

Form 5

Method: EPA 8081B

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G88265.D	CAL EVAL	01/16/20 09:32	Soil					
5G88266.D	CAL PEST@200PPB	01/16/20 09:57	Soil	5G88269.	13.2039	0.0053	13.5753	0.0022
5G88267.D	CAL PEST@400PPB	01/16/20 10:20	Soil	5G88269.	13.2041	0.0038	13.5757	0.0052
5G88268.D	CAL PEST@50PPB	01/16/20 10:49	Soil	5G88269.	13.2056	0.0076	13.5760	0.0074
5G88269.D	CAL PEST@2PPB	01/16/20 11:16	Soil	5G88269.	13.2046	0	13.5750	0
5G88270.D	CAL PEST@10PPB	01/16/20 11:34	Soil	5G88269.	13.1996	0.0379	13.5752	0.0015
5G88271.D	CAL PEST@100PPB	01/16/20 11:52	Soil	5G88269.	13.1986	0.0455	13.5742	0.0059
5G88272.D	CAL CHLOR@100PPB	01/16/20 12:11	Soil	5G88269.	13.1991	0.0417	13.5751	0.0007
5G88273.D	TOX@500PPB	01/16/20 12:29	Soil	5G88269.	13.1981	0.0492	13.5747	0.0022
5G88274.D	TOX@50PPB	01/16/20 12:47	Soil	5G88269.	0.0000		0.0000	200*
5G88275.D	TOX@100PPB	01/16/20 13:05	Soil	5G88269.	0.0000	200*	0.0000	200*
5G88276.D	TOX@200PPB	01/16/20 13:24	Soil	5G88274.	0.0000		0.0000	
5G88277.D	TOX@500PPB	01/16/20 13:42	Soil	5G88274.	0.0000		0.0000	
5G88278.D	TOX@1000PPB	01/16/20 14:00	Soil	5G88274.	0.0000		0.0000	
5G88279.D	TOX@2000PPB	01/16/20 14:18	Soil	5G88274.	0.0000		0.0000	
5G88280.D	TOX@4000PPB	01/16/20 14:36	Soil	5G88274.	0.0000		0.0000	
5G88281.D	TOX V	01/16/20 14:55	Soil	5G88274.	0.0000		0.0000	
5G88282.D	ICV	01/16/20 15:13	Soil	5G88274.	13.1966	200*	13.5734	200*

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B
Instrument: GC_6 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G106995.D	CAL EVAL	02/27/20 11:03	Soil					
6G106996.D	CAL PEST@2PPB	02/27/20 11:23	Soil	6G10699	11.6498	0	12.4652	0
6G106997.D	10PPB	02/27/20 11:40	Soil	6G10699	11.6471	0.0232	12.4643	0.0072
6G106998.D	CAL PEST@50PPB	02/27/20 11:59	Soil	6G10699	11.6475	0.0197	12.4661	0.0072
6G106999.D	CAL PEST@100PPB	02/27/20 12:16	Soil	6G10699	11.6466	0.0275	12.4641	0.0088
6G107000.D	CAL PEST@200PPB	02/27/20 12:34	Soil	6G10699	11.6464	0.0292	12.4635	0.0136
6G107001.D	CAL PEST@400PPB	02/27/20 12:51	Soil	6G10699	11.6452	0.0395	12.4630	0.0177
6G107002.D	CAL CHLOR@100PPB	02/27/20 13:09	Soil	6G10699	11.6460	0.0326	12.4637	0.012
6G107003.D	TEST	02/27/20 13:26	Soil	6G10699	11.6459	0.0335	12.4633	0.0152
6G107004.D	CAL PEST@10PPB	02/27/20 14:59	Soil	6G10699	11.6515	0.0146	12.4655	0.0024
6G107005.D	TOX@50PPB	02/27/20 15:17	Soil	6G10699	11.6477	0.018	12.4630	0.0177
6G107006.D	TOX@100PPB	02/27/20 15:34	Soil	6G10699	11.6472	0.0223	12.4630	0.0177
6G107007.D	TOX@200PPB	02/27/20 15:52	Soil	6G10699	11.6470	0.024	12.4629	0.0185
6G107008.D	TOX@500PPB	02/27/20 16:09	Soil	6G10699	11.6458	0.0343	12.4640	0.0096
6G107009.D	TOX@1000PPB	02/27/20 16:27	Soil	6G10699	11.6452	0.0395	12.4624	0.0225
6G107010.D	TOX@2000PPB	02/27/20 16:44	Soil	6G10699	11.6448	0.0429	12.4613	0.0313
6G107011.D	TOX@4000PPB	02/27/20 17:02	Soil	6G10699	11.6436	0.0532	12.4608	0.0353
6G107013.D	ICV	02/27/20 17:37	Soil	6G10699	11.6444	0.0464	12.4607	0.0361

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_5 Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
5G89127.D	CAL EVAL	03/02/20 08:37	Aqueous					
5G89128.D	100PPB	03/02/20 09:02	Aqueous					
5G89129.D	CAL PEST@200PPB	03/02/20 09:31	Aqueous	5G89129.	13.1831	0	13.5612	0
5G89130.D	AD15941-001(T)(MSD)	03/02/20 09:54	Aqueous	5G89129.	13.1807	0.0182	13.5604	0.0059
5G89131.D	AD15941-001(T)	03/02/20 10:13	Aqueous	5G89129.	13.1778	0.0402	13.5591	0.0155
5G89132.D	EF-1-V-322441(2/27)	03/02/20 10:31	Aqueous	5G89129.	13.1761	0.0531	13.5604	0.0059
5G89133.D	WMB83694	03/02/20 10:51	Aqueous	5G89129.	13.1776	0.0417	13.5578	0.0251
5G89134.D	WMB83694(MS)	03/02/20 11:09	Aqueous	5G89129.	13.1767	0.0486	13.5598	0.0103
5G89135.D	AD15941-001(T)(MS)	03/02/20 11:27	Aqueous	5G89129.	13.1770	0.0463	13.5597	0.0111
5G89136.D	AD15955-026	03/02/20 11:46	Soil	5G89129.	13.1762	0.0524	13.5584	0.0206
5G89137.D	AD15955-003	03/02/20 12:04	Soil	5G89129.	13.1742	0.0675	13.5583	0.0214
5G89138.D	AD15955-005	03/02/20 12:22	Soil	5G89129.	13.1756	0.0569	13.5593	0.014
5G89139.D	AD15955-007	03/02/20 12:40	Soil	5G89129.	13.1761	0.0531	13.5591	0.0155
5G89140.D	AD15955-010	03/02/20 12:59	Soil	5G89129.	13.1776	0.0417	13.5595	0.0125
5G89141.D	AD15955-013	03/02/20 13:17	Soil	5G89129.	13.1760	0.0539	13.5588	0.0177
5G89142.D	AD15955-016	03/02/20 13:35	Soil	5G89129.	13.1769	0.047	13.5596	0.0118
5G89143.D	CAL PEST@200PPB	03/02/20 14:26	Aqueous	5G89129.	13.1720	0.0842	13.5589	0.017

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G107056.D	CAL EVAL	03/02/20 08:42	Soil					
6G107057.D	CAL PEST@100PPB	03/02/20 09:09	Soil	6G10705	11.6484	0	12.4608	0
6G107058.D	SMB83688	03/02/20 10:49	Soil	6G10705	11.6511	0.0232	12.4614	0.0048
6G107059.D	SMB83688(MS)	03/02/20 11:06	Soil	6G10705	11.6421	0.0541	12.4569	0.0313
6G107060.D	SMB83690	03/02/20 11:24	Soil	6G10705	11.6420	0.055	12.4579	0.0233
6G107061.D	SMB83690(MS)	03/02/20 11:41	Soil	6G10705	11.6408	0.0653	12.4566	0.0337
6G107062.D	AD15955-007(MS)	03/02/20 11:59	Soil	6G10705	11.6406	0.067	12.4572	0.0289
6G107063.D	AD15955-007(MSD)	03/02/20 12:16	Soil	6G10705	11.6418	0.0567	12.4575	0.0265
6G107064.D	AD15955-019(MS)	03/02/20 12:34	Soil	6G10705	11.6414	0.0601	12.4572	0.0289
6G107065.D	AD15955-019(MSD)	03/02/20 12:51	Soil	6G10705	11.6413	0.061	12.4572	0.0289
6G107066.D	AD15929-001(MS)	03/02/20 13:11	Soil	6G10705	11.6433	0.0438	12.4590	0.0145
6G107067.D	AD15929-001(MSD)	03/02/20 13:28	Soil	6G10705	11.6415	0.0593	12.4579	0.0233
6G107068.D	AD15903-021(MS)	03/02/20 13:46	Soil	6G10705	11.6423	0.0524	12.4586	0.0177
6G107069.D	AD15903-021(MSD)	03/02/20 14:03	Soil	6G10705	11.6428	0.0481	12.4587	0.0169
6G107070.D	CAL PEST@200PPB	03/02/20 14:56	Soil	6G10705	11.6433	0.0438	12.4592	0.0128

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 5

Method: EPA 8081B

Instrument: GC_6

Column: DB-17/1701P 30M 0.32mm ID 0.25um film

Data File	Sample#	Analysis Date/Time	Matrix	Reference File	Column 1 RT	Column 1 % Drift	Column 2 RT	Column 2 % Drift
6G107071.D	CAL EVAL	03/02/20 23:02	Soil					
6G107072.D	EVAL	03/02/20 23:20	Soil					
6G107073.D	CAL PEST@200PPB	03/02/20 23:37	Soil	6G10707	11.6425	0	12.4585	0
6G107074.D	400PPB	03/02/20 23:55	Soil	6G10707	11.6425	0	12.4586	0.0008
6G107075.D	AD15945-002	03/03/20 00:12	Soil	6G10707	11.6441	0.0137	12.4613	0.0225
6G107076.D	AD15946-001	03/03/20 00:30	Soil	6G10707	11.6435	0.0086	12.4598	0.0104
6G107077.D	AD15955-001	03/03/20 00:47	Soil	6G10707	11.6439	0.012	12.4620	0.0281
6G107078.D	AD15955-002	03/03/20 01:05	Soil	6G10707	11.6445	0.0172	12.4581	0.0032
6G107079.D	AD15955-004	03/03/20 01:22	Soil	6G10707	11.6445	0.0172	12.4608	0.0185
6G107080.D	AD15955-006	03/03/20 01:40	Soil	6G10707	11.6441	0.0137	12.4599	0.0112
6G107081.D	AD15955-008	03/03/20 01:58	Soil	6G10707	11.6441	0.0137	12.4610	0.0201
6G107082.D	AD15955-009	03/03/20 02:15	Soil	6G10707	11.6457	0.0275	12.4620	0.0281
6G107083.D	AD15955-011	03/03/20 02:33	Soil	6G10707	11.6436	0.0095	12.4607	0.0177
6G107084.D	AD15955-025	03/03/20 02:50	Soil	6G10707	11.6467	0.0361	12.4610	0.0201
6G107085.D	AD15955-014	03/03/20 08:57	Soil	6G10707	11.6452	0.0232	12.4606	0.0169
6G107086.D	CAL EVAL	03/03/20 10:18	Soil					
6G107087.D	CAL PEST@200PPB	03/03/20 10:40	Soil	6G10707	11.6465	0.0343	12.4596	0.0088
6G107088.D	AD15955-015	03/03/20 10:58	Soil	6G10708	11.6421	0.0378	12.4581	0.012
6G107089.D	AD15955-017	03/03/20 11:15	Soil	6G10708	11.6414	0.0438	12.4542	0.0434
6G107090.D	AD15955-024	03/03/20 11:33	Soil	6G10708	11.6415	0.0429	12.4564	0.0257
6G107091.D	AD15955-019	03/03/20 11:50	Soil	6G10708	11.6432	0.0283	12.4562	0.0273
6G107092.D	AD15955-018	03/03/20 12:08	Soil	6G10708	11.6413	0.0447	12.4576	0.0161
6G107093.D	AD15955-020	03/03/20 12:25	Soil	6G10708	11.6426	0.0335	12.4588	0.0064
6G107094.D	AD15955-021	03/03/20 12:43	Soil	6G10708	11.6418	0.0404	12.4577	0.0153
6G107095.D	AD15955-022	03/03/20 13:00	Soil	6G10708	11.6428	0.0318	12.4573	0.0185
6G107096.D	AD15955-023	03/03/20 13:18	Soil	6G10708	11.6437	0.024	12.4588	0.0064
6G107097.D	AD15930-007	03/03/20 13:35	Soil	6G10708	11.6435	0.0258	12.4594	0.0016
6G107098.D	CAL PEST@100PPB	03/03/20 14:06	Soil	6G10708	11.6461	0.0034	12.4619	0.0185

Drift Compound: DCB-Surrogate Drift Limit(s): 0.5 (Pest/Pcb) 1.5(Herb/Tph) * - Values outside of limits for this column/run

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G88269.D	CAL PEST@2PPB	01/16/20 11:16	2	5G88270.D	CAL PEST@10PPB	01/16/20 11:34
3	5G88268.D	CAL PEST@50PPB	01/16/20 10:49	4	5G88271.D	CAL PEST@100PPB	01/16/20 11:52
5	5G88266.D	CAL PEST@200PPB	01/16/20 09:57	6	5G88267.D	CAL PEST@400PPB	01/16/20 10:20
7	5G88272.D	CAL CHLOR@100PP	01/16/20 12:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	140.81	167.83	130.95	130.41	122.68	117.00	----	----	135	6.14	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	198.79	233.83	194.93	193.05	193.46	190.35	----	----	201	7.44	1.00	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	LinF	217.74	234.22	181.39	178.79	175.53	170.78	----	----	193	7.97	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	87.169	94.698	74.285	72.980	72.493	69.927	----	----	78.6	8.89	1.00	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	195.43	213.91	157.51	153.68	148.11	142.58	----	----	169	8.24	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	159.16	199.81	164.17	163.26	163.30	159.57	----	----	168	9.21	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	164.31	203.99	162.76	159.61	154.23	147.07	----	----	165	8.60	0.999	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	LinF	214.16	176.46	141.12	134.12	130.31	123.70	----	----	153	9.42	0.999	1.00	23	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	1	0	Avg	155.65	187.33	151.31	150.79	148.58	143.01	----	----	156	9.81	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Avg	159.04	183.33	146.74	145.74	142.96	138.16	----	----	153	9.87	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Avg	144.96	170.82	134.64	131.65	128.24	122.59	----	----	139	9.76	0.999	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	142.61	176.84	144.17	143.51	141.27	136.10	----	----	147	9.96	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	145.71	176.97	142.49	140.66	137.91	133.00	----	----	146	10.19	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	130.60	157.78	129.71	124.91	127.42	122.64	----	----	132	10.44	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	120.84	144.47	117.30	117.84	116.12	114.71	----	----	122	10.88	1.00	1.00	9.2	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	132.42	153.89	124.05	123.53	122.19	119.61	----	----	129	10.99	1.00	1.00	9.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	Avg	96.476	119.84	104.59	107.52	109.54	111.19	----	----	108	11.07	1.00	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	91.860	112.66	88.783	89.133	87.567	85.727	----	----	92.6	11.47	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	121.44	136.79	111.56	112.22	110.57	107.83	----	----	117	11.82	1.00	1.00	9.3	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	58.613	66.495	53.941	54.509	54.484	54.391	----	----	57.1	11.73	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	105.57	121.48	100.09	102.85	101.14	99.111	----	----	105	12.30	1.00	1.00	8.0	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	128.42	140.87	104.74	106.00	105.39	103.53	----	----	115	13.20	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	1	1	Avg	----	----	----	----	----	----	----	----	5.28	8.04	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	2	Avg	----	----	----	----	----	----	----	----	15.7	9.81	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	3	Avg	----	----	----	----	----	----	----	----	22.1	9.87	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	0.4774	0.4459	0.4565	0.4335	0.3951	0.3860	----	----	0.432	10.03	0.999	1.00	8.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	2	Avg	2.4849	2.3343	2.4680	2.4035	2.2828	2.2830	----	----	2.38	10.56	1.00	1.00	3.8	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	3	Avg	2.3904	2.3097	2.3839	2.3809	2.3064	2.2871	----	----	2.34	11.02	1.00	1.00	2.0	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	4	Avg	2.0595	1.9696	2.1373	2.1052	1.9855	2.0301	----	----	2.05	11.32	1.00	1.00	3.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	5	Avg	2.8142	2.5913	2.7260	2.5947	2.4869	2.4752	----	----	2.61	11.75	1.00	1.00	5.1	50.00	200.0	500.0	1000.	2000.	4000.		
TCMX-Surrogate	2	0	Avg	68.940	79.626	64.093	63.767	62.614	60.140	----	----	66.5	6.08	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	95.199	125.25	103.09	104.29	102.99	100.63	----	----	105	7.09	1.00	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	86.311	105.74	88.494	88.998	88.585	86.529	----	----	90.8	7.63	1.00	1.00	8.2	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	45.404	47.538	38.259	37.859	37.427	36.383	----	----	40.5	7.72	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	Avg	97.442	89.314	72.881	72.572	71.803	70.085	----	----	79.0	8.07	1.00	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	110.91	108.92	88.874	88.629	89.385	86.664	----	----	95.6	8.21	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 10.09 Avg Rsd Col 2: 9.11

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0022703 0124

0022703 0125

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5G88269.D	CAL PEST@2PPB	01/16/20 11:16	2	5G88270.D	CAL PEST@10PPB	01/16/20 11:34
3	5G88268.D	CAL PEST@50PPB	01/16/20 10:49	4	5G88271.D	CAL PEST@100PPB	01/16/20 11:52
5	5G88266.D	CAL PEST@200PPB	01/16/20 09:57	6	5G88267.D	CAL PEST@400PPB	01/16/20 10:20
7	5G88272.D	CAL CHLOR@100PP	01/16/20 12:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	80.308	97.041	80.220	80.873	79.114	75.752	----	----	82.2	8.51	0.999	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	75.802	84.063	66.835	66.647	66.121	63.728	----	----	70.5	9.21	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
v-chlordane	2	0	Avg	81.500	93.666	75.300	75.998	75.792	73.562	----	----	79.3	9.41	1.00	1.00	9.5	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	2	0	Avg	78.629	86.856	69.357	70.251	69.922	68.316	----	----	73.9	9.61	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	76.200	86.329	67.474	68.220	67.235	64.943	----	----	71.7	9.65	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	69.400	83.797	69.672	70.904	70.879	69.054	----	----	72.3	9.89	1.00	1.00	7.9	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	72.276	84.532	69.585	68.444	70.206	68.291	----	----	72.2	10.03	1.00	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	62.649	69.585	58.297	56.837	59.919	58.264	----	----	60.9	10.47	1.00	1.00	7.7	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	59.758	68.846	57.658	55.700	59.163	58.384	----	----	59.9	10.56	1.00	1.00	7.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	71.833	76.601	63.032	63.107	63.540	61.989	----	----	66.7	10.68	1.00	1.00	9.1	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	47.049	55.170	50.093	51.807	54.641	55.314	----	----	52.3	10.92	1.00	1.00	6.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	LinF	65.946	63.818	50.381	49.748	49.902	49.006	----	----	54.8	11.07	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	65.938	69.382	55.545	55.421	56.228	55.384	----	----	59.7	11.21	1.00	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	26.376	28.710	23.366	24.217	25.066	25.129	----	----	25.5	11.92	1.00	1.00	7.4	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	62.384	69.361	55.963	57.464	57.913	57.311	----	----	60.1	12.13	1.00	1.00	8.4	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	74.994	74.804	53.816	55.611	54.661	54.205	----	----	61.3	13.58	1.00	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	2	1	Avg	----	----	----	----	----	----	----	----	2.66	7.86	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	2	Avg	----	----	----	----	----	----	----	----	8.31	9.41	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	3	Avg	----	----	----	----	----	----	----	----	6.37	9.61	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	0.5941	0.5404	0.5372	0.5105	0.4931	0.4868	----	----	0.527	9.77	1.00	1.00	7.5	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	2	Avg	1.2763	1.3286	1.3928	1.3944	1.3430	1.4217	----	----	1.36	10.69	0.999	1.00	3.9	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	3	Avg	1.3587	1.1746	1.2131	1.1880	1.1509	1.1532	----	----	1.21	10.96	1.00	1.00	6.5	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	4	Avg	1.4487	1.3245	1.3593	1.3334	1.2932	1.3105	----	----	1.34	11.67	1.00	1.00	4.1	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	5	Avg	1.1289	1.1349	1.1656	1.1675	1.1504	1.1671	----	----	1.15	11.74	1.00	1.00	1.5	50.00	200.0	500.0	1000.	2000.	4000.		

Avg Rsd Col 1: 10.09 Avg Rsd Col 2: 9.11

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G106996.D	CAL PEST@2PPB	02/27/20 11:23	2	6G107004.D	CAL PEST@10PPB	02/27/20 14:59
3	6G106998.D	CAL PEST@50PPB	02/27/20 11:59	4	6G106999.D	CAL PEST@100PPB	02/27/20 12:16
5	6G107000.D	CAL PEST@200PPB	02/27/20 12:34	6	6G107001.D	CAL PEST@400PPB	02/27/20 12:51
7	6G107002.D	CAL CHLOR@100PP	02/27/20 13:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
TCMX-Surrogate	1	0	Avg	0.4505	0.3923	0.3897	0.3781	0.3718	0.3520	----	----	0.389	4.47	0.999	1.00	8.6	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	1	0	Avg	0.3815	0.3660	0.4320	0.4606	0.4923	0.4926	----	----	0.438	5.66	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	1	0	Avg	0.3878	0.3699	0.4281	0.4446	0.4633	0.4570	----	----	0.425	6.19	1.00	1.00	9.0	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	1	0	Avg	0.3728	0.2792	0.2744	0.2615	0.2575	0.2410	----	----	0.281	7.12	0.999	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	1	0	Avg	0.4794	0.3741	0.3597	0.3511	0.3537	0.3435	----	----	0.377	6.47	1.00	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	1	0	Avg	0.2733	0.3171	0.3850	0.4006	0.4221	0.4197	----	----	0.370	7.45	1.00	1.00	16	2.00	10.00	50.00	100.0	200.0	400.0		
Aldrin	1	0	Avg	0.3735	0.3603	0.3769	0.3840	0.4005	0.3953	----	----	0.382	6.84	1.00	1.00	3.9	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	1	0	Avg	0.3840	0.3642	0.3553	0.3500	0.3558	0.3446	----	----	0.359	7.69	1.00	1.00	3.9	2.00	10.00	50.00	100.0	200.0	400.0		
y-chlordane	1	0	Avg	0.4203	0.4033	0.3931	0.3914	0.4079	0.4046	----	----	0.403	8.10	1.00	1.00	2.6	2.00	10.00	50.00	100.0	200.0	400.0		
a-chlordane	1	0	Avg	0.4377	0.4147	0.4048	0.4001	0.4075	0.3958	----	----	0.410	8.16	1.00	1.00	3.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	1	0	Avg	0.3349	0.3242	0.3266	0.3245	0.3282	0.3158	----	----	0.326	8.04	1.00	1.00	1.9	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	1	0	Avg	0.2956	0.3220	0.3371	0.3468	0.3673	0.3648	----	----	0.339	8.26	1.00	1.00	8.0	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	1	0	Avg	0.3333	0.3230	0.3285	0.3320	0.3466	0.3432	----	----	0.334	8.50	1.00	1.00	2.7	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	1	0	Avg	0.3597	0.3103	0.3195	0.3227	0.3347	0.3274	----	----	0.329	8.75	1.00	1.00	5.2	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	1	0	Avg	0.3709	0.3051	0.2919	0.2903	0.3009	0.2920	----	----	0.309	9.22	1.00	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	1	0	Avg	0.3490	0.3436	0.3351	0.3317	0.3385	0.3278	----	----	0.338	9.33	1.00	1.00	2.3	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	1	0	LinF	0.1222	0.1690	0.1919	0.2042	0.2206	0.2276	----	----	0.189	9.43	0.999	1.00	21	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	1	0	Avg	0.2649	0.2878	0.2920	0.2794	0.2816	0.2719	----	----	0.280	9.83	1.00	1.00	3.6	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	1	0	Avg	0.3192	0.2986	0.2968	0.2902	0.3044	0.2949	----	----	0.301	10.20	1.00	1.00	3.4	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	1	0	Avg	0.1715	0.1324	0.1385	0.1349	0.1355	0.1256	----	----	0.140	10.14	0.998	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	1	0	Avg	0.1893	0.2278	0.2492	0.2595	0.2674	0.2677	----	----	0.244	10.71	1.00	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	1	0	Avg	0.5011	0.4566	0.4020	0.3750	0.3632	0.3371	----	----	0.406	11.65	0.998	1.00	15	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	1	1	Avg	----	----	----	----	----	----	----	----	0.0149	6.27	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	2	Avg	----	----	----	----	----	----	----	----	0.0394	8.09	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	1	3	Avg	----	----	----	----	----	----	----	----	0.0611	8.16	-1	-1	Lvl=7	100.0							
Toxaphene	1	1	Avg	0.0056	0.0054	0.0058	0.0057	0.0054	0.0054	----	----	0.00559	8.89	1.00	1.00	3.2	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	2	Avg	0.0030	0.0026	0.0028	0.0027	0.0027	0.0026	----	----	0.00276	9.02	1.00	1.00	5.4	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	3	Avg	0.0063	0.0063	0.0063	0.0065	0.0064	0.0067	----	----	0.00647	9.36	1.00	1.00	2.3	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	4	Avg	0.0057	0.0052	0.0053	0.0051	0.0050	0.0051	----	----	0.00531	9.69	1.00	1.00	4.9	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	1	5	Avg	0.0085	0.0113	0.0116	0.0115	0.0112	0.0114	----	----	0.0110	10.15	1.00	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
TCMX-Surrogate	2	0	Avg	1.3938	1.3025	1.1321	1.0457	0.9814	0.9108	----	----	1.13	4.65	0.998	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
alpha-BHC	2	0	Avg	1.4514	1.5069	1.5270	1.5216	1.5200	1.4642	----	----	1.50	5.60	1.00	1.00	2.2	2.00	10.00	50.00	100.0	200.0	400.0		
gamma-BHC	2	0	Avg	1.4246	1.4648	1.4367	1.4042	1.3833	1.3115	----	----	1.40	6.15	0.999	1.00	3.8	2.00	10.00	50.00	100.0	200.0	400.0		
beta-BHC	2	0	Avg	0.9194	0.9542	0.8192	0.7662	0.7221	0.6629	----	----	0.807	6.23	0.997	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor	2	0	LinF	2.1812	1.3831	1.2210	1.1575	1.1249	1.0568	----	----	1.35	6.59	0.999	1.00	31	2.00	10.00	50.00	100.0	200.0	400.0		
delta-BHC	2	0	Avg	1.3187	1.3437	1.3289	1.3304	1.3364	1.2807	----	----	1.32	6.73	1.00	1.00	1.7	2.00	10.00	50.00	100.0	200.0	400.0		

Avg Rsd Col 1: 7.95 Avg Rsd Col 2: 10.48

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc.)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

0022703 0126

0022703 0127

Form 6

Initial Calibration

Method: EPA 8081B

Instrument: GC_6

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	6G106996.D	CAL PEST@2PPB	02/27/20 11:23	2	6G107004.D	CAL PEST@10PPB	02/27/20 14:59
3	6G106998.D	CAL PEST@50PPB	02/27/20 11:59	4	6G106999.D	CAL PEST@100PPB	02/27/20 12:16
5	6G107000.D	CAL PEST@200PPB	02/27/20 12:34	6	6G107001.D	CAL PEST@400PPB	02/27/20 12:51
7	6G107002.D	CAL CHLOR@100PP	02/27/20 13:09				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	AvgRf	RT	Corr1	Corr2	%Rsd	Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8
Aldrin	2	0	Avg	1.3392	1.3424	1.2577	1.2184	1.1939	1.1103	----	----	1.24	7.05	0.998	1.00	7.2	2.00	10.00	50.00	100.0	200.0	400.0		
Heptachlor Epoxide	2	0	Avg	1.3034	1.3063	1.1203	1.0614	1.0174	0.9286	----	----	1.12	7.78	0.997	1.00	14	2.00	10.00	50.00	100.0	200.0	400.0		
γ-chlordane	2	0	Avg	1.3531	1.4443	1.2422	1.1971	1.1732	1.0991	----	----	1.25	7.99	0.999	1.00	10	2.00	10.00	50.00	100.0	200.0	400.0		
α-chlordane	2	0	Avg	1.3472	1.3789	1.1760	1.1171	1.0764	0.9856	----	----	1.18	8.20	0.998	1.00	13	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan I	2	0	Avg	1.2822	1.3296	1.1649	1.1353	1.1014	1.0227	----	----	1.17	8.25	0.998	1.00	9.8	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDE	2	0	Avg	0.9593	1.1865	1.0852	1.0688	1.0694	1.0030	----	----	1.06	8.50	0.999	1.00	7.3	2.00	10.00	50.00	100.0	200.0	400.0		
Dieldrin	2	0	Avg	1.2644	1.2234	1.0813	1.0500	1.0341	0.9582	----	----	1.10	8.64	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin	2	0	Avg	1.1224	1.1097	1.0049	0.9863	0.9490	0.8675	----	----	1.01	9.12	0.997	1.00	9.6	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDD	2	0	Avg	0.9498	1.0235	0.9103	0.9051	0.8866	0.8307	----	----	0.918	9.21	0.999	1.00	7.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan II	2	0	Avg	1.1256	1.2042	1.0306	1.0141	0.9672	0.8903	----	----	1.04	9.34	0.998	1.00	11	2.00	10.00	50.00	100.0	200.0	400.0		
p,p'-DDT	2	0	Avg	0.7040	0.8217	0.7590	0.7822	0.7833	0.7606	----	----	0.769	9.60	1.00	1.00	5.1	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Aldehyde	2	0	Avg	1.1136	0.9997	0.8734	0.8201	0.7704	0.7002	----	----	0.880	9.75	0.997	1.00	17	2.00	10.00	50.00	100.0	200.0	400.0		
Endosulfan Sulfate	2	0	Avg	0.7606	0.8624	0.7724	0.7625	0.7288	0.6915	----	----	0.763	9.90	0.999	1.00	7.5	2.00	10.00	50.00	100.0	200.0	400.0		
Methoxychlor	2	0	Avg	0.3983	0.5203	0.4749	0.4476	0.4079	0.3771	----	----	0.438	10.67	0.997	1.00	12	2.00	10.00	50.00	100.0	200.0	400.0		
Endrin Ketone	2	0	Avg	0.8501	0.8891	0.8218	0.8077	0.7777	0.7355	----	----	0.814	10.89	0.999	1.00	6.6	2.00	10.00	50.00	100.0	200.0	400.0		
DCB-Surrogate	2	0	Avg	1.2704	1.4227	1.0935	1.0369	0.9838	0.8902	----	----	1.12	12.46	0.997	1.00	18	2.00	10.00	50.00	100.0	200.0	400.0		
Chlordane (Technical)	2	1	Avg	----	----	----	----	----	----	----	----	0.0541	6.38	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	2	Avg	----	----	----	----	----	----	----	----	0.245	7.99	-1	-1	Lvl=7	100.0							
Chlordane (Technical)	2	3	Avg	----	----	----	----	----	----	----	----	0.121	8.20	-1	-1	Lvl=7	100.0							
Toxaphene	2	1	Avg	0.0106	0.0103	0.0098	0.0095	0.0086	0.0078	----	----	0.00949	8.89	0.996	1.00	11	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	2	Avg	0.0209	0.0180	0.0177	0.0174	0.0150	0.0152	----	----	0.0174	9.15	0.999	0.999	12	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	3	Avg	0.0213	0.0199	0.0191	0.0179	0.0165	0.0148	----	----	0.0183	9.64	0.996	1.00	13	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	4	Avg	0.0268	0.0258	0.0270	0.0264	0.0253	0.0234	----	----	0.0258	10.40	0.998	1.00	5.1	50.00	200.0	500.0	1000.	2000.	4000.		
Toxaphene	2	5	Avg	0.0215	0.0179	0.0203	0.0208	0.0208	0.0205	----	----	0.0203	10.47	1.00	1.00	6.1	50.00	200.0	500.0	1000.	2000.	4000.		

Avg Rsd Col 1: 7.95 Avg Rsd Col 2: 10.48

Flags

c - failed the initial calibration criteria(if applicable)

Note:

Col = Column Number
Mr = MultiPeak Analyte 0=single peak analyte, >0=multi peak analyte (i.e. pcb/chlordane etc..)
Fit = Indicates whehter Avg RF, Linear, or Quadratic Curve was used for compound.
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.

All Response Factors = Response Factors / 10000
Initial Calibration Criteria: either %RSD <=20 or Corr >= .995
Columns: Signal #1 db-1701 : Signal #2 db-608

^Lvl: These compounds use a single pt calibration as specified by the method. The file used to update this calibration point is listed in the header under level #

Form7
Continuing Calibration

Method: EPA 8081B

Data File:				5G89129.D			5G89143.D			6G107057.D			6G107070.D			6G107073.D			
Method:				8081			8081			8081			8081			8081			
Calibration Name:				CAL PEST@200PP			CAL PEST@200PP			CAL PEST@100PP			CAL PEST@200PP			CAL PEST@200PP			
Calibration Date/Time				03/02/20 09:31			03/02/20 14:26			03/02/20 09:09			03/02/20 14:56			03/02/20 23:37			
Compound	Limit	Col	Mr	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff	Conc	Conc Exp	%Diff
TCMX-Surrogate	20	1	0	182.9	200	8.6	193.2	200	3.4	95.56	100	4.4	190.1	200	4.9	192.2	200	3.9
alpha-BHC	20	1	0	183.5	200	8.2	202.4	200	1.2	99.53	100	0.5	225.0	200	12.5	222.7	200	11.3
gamma-BHC	20	1	0	198.4	200	0.8	214.1	200	7.1	94.25	100	5.8	215	200	7.5	209.7	200	4.8
beta-BHC	20	1	0	179.9	200	10.0	187.4	200	6.3	85.79	100	14.2	176.3	200	11.8	175.9	200	12.1
Heptachlor	20	1	0	173.9	200	13.0	185.7	200	7.1	76.35	100	23.7*	170.9	200	14.6	156	200	22.0*
delta-BHC	20	1	0	180.0	200	10.0	195.4	200	2.3	94.09	100	5.9	229	200	14.5	222.9	200	11.5
Aldrin	20	1	0	187.9	200	6.1	196.0	200	2.0	100	100	0.0	208.8	200	4.4	209.5	200	4.8
Heptachlor Epoxide	20	1	0	209.9	200	4.9	219.6	200	9.8	94.07	100	5.9	194.4	200	2.8	196.6	200	1.7
y-chlordane	20	1	0	180.5	200	9.8	196.6	200	1.7	96.52	100	3.5	202.8	200	1.4	204.4	200	2.2
a-chlordane	20	1	0	181.3	200	9.3	193.7	200	3.2	97.74	100	2.3	200.4	200	0.2	200.8	200	0.4
Endosulfan I	20	1	0	187.2	200	6.4	195.2	200	2.4	97.43	100	2.6	201.5	200	0.7	200.3	200	0.1
p,p'-DDE	20	1	0	185.9	200	7.1	198.4	200	0.8	97.18	100	2.8	211.0	200	5.5	208.4	200	4.2
Dieldrin	20	1	0	188.2	200	5.9	195.9	200	2.0	97.03	100	3.0	206.4	200	3.2	203.2	200	1.6
Endrin	20	1	0	171.5	200	14.3	201.6	200	0.8	88.85	100	11.2	202.4	200	1.2	170.8	200	14.6
p,p'-DDD	20	1	0	189.3	200	5.3	205.7	200	2.8	81.75	100	18.3	181.9	200	9.1	176.1	200	12.0
Endosulfan II	20	1	0	188.2	200	5.9	199.4	200	0.3	97.53	100	2.5	203.7	200	1.9	202.1	200	1.1
p,p'-DDT	20	1	0	163.5	200	18.2	174.6	200	12.7	78.98	100	21.0*	191.9	200	4.1	163.8	200	18.1
Endrin Aldehyde	20	1	0	181.1	200	9.5	194.2	200	2.9	100.3	100	0.3	196.1	200	2.0	203.7	200	1.8
Endosulfan Sulfate	20	1	0	181.9	200	9.0	192.5	200	3.8	97.48	100	2.5	200.1	200	0.0	192.5	200	3.7
Methoxychlor	20	1	0	163.8	200	18.1	175.6	200	12.2	81.41	100	18.6	180.7	200	9.7	145.6	200	27.2*
Endrin Ketone	20	1	0	191.9	200	4.0	200.4	200	0.2	107.9	100	7.9	242	200	21.0*	238.8	200	19.4
DCB-Surrogate	20	1	0	174.9	200	12.5	186.3	200	6.9	94.5	100	5.5	178.4	200	10.8	181 5	200	9.2
Average Difference	20	1	0			9.0			4.2			7.4			6.5			8.5
TCMX-Surrogate	20	2	0	191.8	200	4.1	196	200	2.0	94.19	100	5.8	178.1	200	11.0	185.3	200	7.4
alpha-BHC	20	2	0	197 7	200	1.1	206	200	3.0	95.73	100	4.3	206	200	3.0	208.8	200	4.4
gamma-BHC	20	2	0	190.7	200	4.6	203.1	200	1.5	91.53	100	8.5	199	200	0.5	199.7	200	0.1
beta-BHC	20	2	0	184.6	200	7.7	197.2	200	1.4	89.4	100	10.6	178.5	200	10.8	184.9	200	7.6
Heptachlor	20	2	0	164.1	200	18.0	180.1	200	9.9	88.96	100	11.0	198.6	200	0.7	187.6	200	6.2
delta-BHC	20	2	0	172.9	200	13.5	192.5	200	3.8	90	100	10.0	208.8	200	4.4	208.9	200	4.5
Aldrin	20	2	0	195.2	200	2.4	205.5	200	2.7	95.5	100	4.5	193.1	200	3.4	200.6	200	0.3
Heptachlor Epoxide	20	2	0	189.3	200	5.4	200.1	200	0.0	90.4	100	9.6	181.6	200	9.2	187.7	200	6.2
y-chlordane	20	2	0	189.8	200	5.1	200.5	200	0.3	93.65	100	6.3	190.7	200	4.7	199.3	200	0.3
a-chlordane	20	2	0	186.5	200	6.8	196.9	200	1.5	93.34	100	6.7	186.7	200	6.7	194.3	200	2.8
Endosulfan I	20	2	0	199.4	200	0.3	210.3	200	5.1	93.33	100	6.7	190.2	200	4.9	196.1	200	1.9
p,p'-DDE	20	2	0	193.2	200	3.4	206.1	200	3.1	97.8	100	2.2	203.2	200	1.6	210.0	200	5.0
Dieldrin	20	2	0	194.8	200	2.6	206.3	200	3.2	94.28	100	5.7	192.3	200	3 8	194.3	200	2.9
Endrin	20	2	0	180.4	200	9.8	211.7	200	5.8	88.52	100	11.5	193.6	200	3.2	167.1	200	16.5
p,p'-DDD	20	2	0	198.6	200	0.7	210.8	200	5.4	90.88	100	9.1	193.7	200	3.2	193.8	200	3.1
Endosulfan II	20	2	0	199.0	200	0.5	210.4	200	5.2	95.51	100	4.5	198 6	200	0.7	199.6	200	0.2
p,p'-DDT	20	2	0	167.6	200	16.2	178.7	200	10.6	90.69	100	9.3	209.9	200	5.0	193.5	200	3.3
Endrin Aldehyde	20	2	0	209.3	200	4.6	207.3	200	3.7	93.29	100	6.7	180.2	200	9.9	190.3	200	4.8
Endosulfan Sulfate	20	2	0	181.5	200	9.3	190.9	200	4.5	108.6	100	8.6	220.2	200	10.1	229.3	200	14.6
Methoxychlor	20	2	0	159.2	200	20.4	173.2	200	13.4	84.2	100	15.8	185.6	200	7.2	161.2	200	19.4
Endrin Ketone	20	2	0	190.3	200	4.8	194.3	200	2.9	95.06	100	4.9	213.3	200	6.7	210.6	200	5.3
DCB-Surrogate	20	2	0	173.1	200	13.5	182.3	200	8.9	94.73	100	5.3	183	200	8.5	187.7	200	6.2
Average Difference	20	2	0			7.0			4.5			7.6			5.4			5.6

Flags/Notes: **** - Values outside of limits for this column/run***

Form7
Continuing Calibration

Method: EPA 8081B

Data File: 6G107087.D
Method: 8081
Calibration Name: CAL PEST@200PP
Calibration Date/Time 03/03/20 10:40

Compound	Limit	Col	Mr	Conc Conc	Conc Exp	Conc %Diff	Conc Conc	Conc Exp	Conc %Diff	Conc Conc	Conc Exp	Conc %Diff	Conc Conc	Conc Exp	Conc %Diff
TCMX-Surrogate	20	1	0	192.3	200	3.9									
alpha-BHC	20	1	0	229.7	200	14.8									
gamma-BHC	20	1	0	219.1	200	9.6									
beta-BHC	20	1	0	179.8	200	10.1									
Heptachlor	20	1	0	173.5	200	13.2									
delta-BHC	20	1	0	240.1	200	20.0									
Aldrin	20	1	0	210	200	5.0									
Heptachlor Epoxide	20	1	0	196.5	200	1.8									
y-chlordane	20	1	0	203.0	200	1.5									
a-chlordane	20	1	0	199.2	200	0.4									
Endosulfan I	20	1	0	201.4	200	0.7									
p,p'-DDE	20	1	0	211.6	200	5.8									
Dieldrin	20	1	0	208.1	200	4.1									
Endrin	20	1	0	201.7	200	0.8									
p,p'-DDD	20	1	0	186.5	200	6.7									
Endosulfan II	20	1	0	205.1	200	2.6									
p,p'-DDT	20	1	0	193.5	200	3.3									
Endrin Aldehyde	20	1	0	196.0	200	2.0									
Endosulfan Sulfate	20	1	0	194.7	200	2.6									
Methoxychlor	20	1	0	170.3	200	14.9									
Endrin Ketone	20	1	0	255.6	200	27.8*									
DCB-Surrogate	20	1	0	178.7	200	10.6									
Average Difference	20	1	0			7.4									
TCMX-Surrogate	20	2	0	177.6	200	11.2									
alpha-BHC	20	2	0	204.1	200	2.1									
gamma-BHC	20	2	0	198.1	200	1.0									
beta-BHC	20	2	0	178.7	200	10.6									
Heptachlor	20	2	0	198.1	200	1.0									
delta-BHC	20	2	0	211.4	200	5.7									
Aldrin	20	2	0	189.7	200	5.1									
Heptachlor Epoxide	20	2	0	178.1	200	11.0									
y-chlordane	20	2	0	185.0	200	7.5									
a-chlordane	20	2	0	179.5	200	10.3									
Endosulfan I	20	2	0	184.5	200	7.8									
p,p'-DDE	20	2	0	196.4	200	1.8									
Dieldrin	20	2	0	183.9	200	8.1									
Endrin	20	2	0	180.6	200	9.7									
p,p'-DDD	20	2	0	186.3	200	6.8									
Endosulfan II	20	2	0	185.2	200	7.4									
p,p'-DDT	20	2	0	201.7	200	0.9									
Endrin Aldehyde	20	2	0	177.1	200	11.4									
Endosulfan Sulfate	20	2	0	221.4	200	10.7									
Methoxychlor	20	2	0	180.5	200	9.8									
Endrin Ketone	20	2	0	216.7	200	8.3									
DCB-Surrogate	20	2	0	169.1	200	15.5									
Average Difference	20	2	0			7.4									

Flags/Notes: **** - Values outside of limits for this column/run***

Form7

RtWindow Summary

Method: EPA 8081B

Compound	Col	Mr	5G88269.D CAL PEST@2PPB 1/16/2020 11:16:23 AM Cal RT	Limit	6G106996.D CAL PEST@2PPB 2/27/2020 11:23:00 AM Cal RT	Limit	5G89129.D CAL PEST@200PPB 3/2/2020 9:31:05 AM Cal RT	Limit	6G107057.D CAL PEST@100PPB 3/2/2020 9:09:00 AM Cal RT	Limit	6G107073.D CAL PEST@200PPB 3/2/2020 11:37:00 PM Cal RT	Limit
TCMX-Surrogate	1	0	6.14	(6.08 - 6.20)	4.47	(4.41 - 4.53)	6.14	(6.08 - 6.20)	4.48	(4.42 - 4.54)	4.47	(4.41 - 4.53)
alpha-BHC	1	0	7.44	(7.40 - 7.48)	5.66	(5.62 - 5.70)	7.43	(7.39 - 7.47)	5.67	(5.63 - 5.71)	5.66	(5.62 - 5.70)
gamma-BHC	1	0	7.97	(7.93 - 8.01)	6.19	(6.15 - 6.23)	7.96	(7.92 - 8.00)	6.19	(6.15 - 6.23)	6.18	(6.14 - 6.22)
beta-BHC	1	0	8.89	(8.81 - 8.97)	7.12	(7.04 - 7.20)	8.87	(8.79 - 8.95)	7.12	(7.04 - 7.20)	7.11	(7.03 - 7.19)
Heptachlor	1	0	8.24	(8.20 - 8.28)	6.47	(6.43 - 6.51)	8.23	(8.19 - 8.27)	6.48	(6.44 - 6.52)	6.47	(6.43 - 6.51)
delta-BHC	1	0	9.21	(9.13 - 9.29)	7.45	(7.37 - 7.53)	9.19	(9.11 - 9.27)	7.45	(7.37 - 7.53)	7.44	(7.36 - 7.52)
Aldrin	1	0	8.60	(8.52 - 8.68)	6.84	(6.76 - 6.92)	8.58	(8.50 - 8.66)	6.85	(6.77 - 6.93)	6.84	(6.76 - 6.92)
Heptachlor Epoxide	1	0	9.42	(9.38 - 9.46)	7.69	(7.65 - 7.73)	9.41	(9.37 - 9.45)	7.69	(7.65 - 7.73)	7.69	(7.65 - 7.73)
g-chlordane	1	0	9.81	(9.77 - 9.85)	8.10	(8.06 - 8.14)	9.79	(9.75 - 9.83)	8.10	(8.06 - 8.14)	8.09	(8.05 - 8.13)
a-chlordane	1	0	9.87	(9.83 - 9.91)	8.16	(8.12 - 8.20)	9.86	(9.82 - 9.90)	8.17	(8.13 - 8.21)	8.16	(8.12 - 8.20)
Endosulfan I	1	0	9.76	(9.72 - 9.80)	8.05	(8.01 - 8.09)	9.75	(9.71 - 9.79)	8.05	(8.01 - 8.09)	8.04	(8.00 - 8.08)
p,p'-DDE	1	0	9.96	(9.88 - 10.04)	8.26	(8.18 - 8.34)	9.94	(9.86 - 10.02)	8.26	(8.18 - 8.34)	8.26	(8.18 - 8.34)
Dieldrin	1	0	10.19	(10.11 - 10.27)	8.50	(8.42 - 8.58)	10.18	(10.10 - 10.26)	8.50	(8.42 - 8.58)	8.49	(8.41 - 8.57)
Endrin	1	0	10.44	(10.40 - 10.48)	8.75	(8.71 - 8.79)	10.42	(10.38 - 10.46)	8.76	(8.72 - 8.80)	8.75	(8.71 - 8.79)
p,p'-DDD	1	0	10.88	(10.80 - 10.96)	9.22	(9.14 - 9.30)	10.86	(10.78 - 10.94)	9.22	(9.14 - 9.30)	9.22	(9.14 - 9.30)
Endosulfan II	1	0	10.99	(10.91 - 11.07)	9.33	(9.25 - 9.41)	10.97	(10.89 - 11.05)	9.33	(9.25 - 9.41)	9.33	(9.25 - 9.41)
p,p'-DDT	1	0	11.07	(10.99 - 11.15)	9.43	(9.35 - 9.51)	11.05	(10.97 - 11.13)	9.43	(9.35 - 9.51)	9.43	(9.35 - 9.51)
Endrin Aldehyde	1	0	11.47	(11.39 - 11.55)	9.83	(9.75 - 9.91)	11.45	(11.37 - 11.53)	9.83	(9.75 - 9.91)	9.82	(9.74 - 9.90)
Endosulfan Sulfate	1	0	11.82	(11.78 - 11.86)	10.20	(10.16 - 10.24)	11.80	(11.76 - 11.84)	10.20	(10.16 - 10.24)	10.20	(10.16 - 10.24)
Methoxychlor	1	0	11.73	(11.69 - 11.77)	10.14	(10.10 - 10.18)	11.71	(11.67 - 11.75)	10.14	(10.10 - 10.18)	10.13	(10.09 - 10.17)
Endrin Ketone	1	0	12.30	(12.22 - 12.38)	10.71	(10.63 - 10.79)	12.28	(12.20 - 12.36)	10.71	(10.63 - 10.79)	10.70	(10.62 - 10.78)
DCB-Surrogate	1	0	13.20	(13.14 - 13.26)	11.65	(11.59 - 11.71)	13.18	(13.12 - 13.24)	11.65	(11.59 - 11.71)	11.64	(11.58 - 11.70)
Chlordane (Technical	1	1										
Chlordane (Technical	1	2										
Chlordane (Technical	1	3										
Toxaphene	1	1										
Toxaphene	1	2										
Toxaphene	1	3										
Toxaphene	1	4										
Toxaphene	1	5										
TCMX-Surrogate	2	0	6.08	(6.02 - 6.14)	4.65	(4.59 - 4.71)	6.08	(6.02 - 6.14)	4.65	(4.59 - 4.71)	4.65	(4.59 - 4.71)
alpha-BHC	2	0	7.09	(7.05 - 7.13)	5.60	(5.56 - 5.64)	7.09	(7.05 - 7.13)	5.60	(5.56 - 5.64)	5.60	(5.56 - 5.64)
gamma-BHC	2	0	7.63	(7.59 - 7.67)	6.15	(6.11 - 6.19)	7.63	(7.59 - 7.67)	6.15	(6.11 - 6.19)	6.14	(6.10 - 6.18)
beta-BHC	2	0	7.72	(7.64 - 7.80)	6.23	(6.15 - 6.31)	7.71	(7.63 - 7.79)	6.23	(6.15 - 6.31)	6.23	(6.15 - 6.31)
Heptachlor	2	0	8.07	(8.03 - 8.11)	6.59	(6.55 - 6.63)	8.06	(8.02 - 8.10)	6.59	(6.55 - 6.63)	6.59	(6.55 - 6.63)
delta-BHC	2	0	8.21	(8.13 - 8.29)	6.73	(6.65 - 6.81)	8.20	(8.12 - 8.28)	6.73	(6.65 - 6.81)	6.73	(6.65 - 6.81)
Aldrin	2	0	8.51	(8.43 - 8.59)	7.04	(6.96 - 7.12)	8.50	(8.42 - 8.58)	7.05	(6.97 - 7.13)	7.04	(6.96 - 7.12)
Heptachlor Epoxide	2	0	9.21	(9.17 - 9.25)	7.78	(7.74 - 7.82)	9.20	(9.16 - 9.24)	7.78	(7.74 - 7.82)	7.78	(7.74 - 7.82)
g-chlordane	2	0	9.41	(9.37 - 9.45)	7.99	(7.95 - 8.03)	9.40	(9.36 - 9.44)	7.99	(7.95 - 8.03)	7.99	(7.95 - 8.03)
a-chlordane	2	0	9.61	(9.57 - 9.65)	8.20	(8.16 - 8.24)	9.60	(9.56 - 9.64)	8.20	(8.16 - 8.24)	8.20	(8.16 - 8.24)
Endosulfan I	2	0	9.65	(9.61 - 9.69)	8.25	(8.21 - 8.29)	9.64	(9.60 - 9.68)	8.25	(8.21 - 8.29)	8.25	(8.20 - 8.28)
p,p'-DDE	2	0	9.89	(9.81 - 9.97)	8.50	(8.42 - 8.58)	9.88	(9.80 - 9.96)	8.50	(8.42 - 8.58)	8.50	(8.42 - 8.58)
Dieldrin	2	0	10.03	(9.95 - 10.11)	8.64	(8.56 - 8.72)	10.02	(9.94 - 10.10)	8.65	(8.57 - 8.73)	8.64	(8.56 - 8.72)
Endrin	2	0	10.47	(10.43 - 10.51)	9.12	(9.08 - 9.16)	10.46	(10.42 - 10.50)	9.12	(9.08 - 9.16)	9.12	(9.08 - 9.16)
p,p'-DDD	2	0	10.56	(10.48 - 10.64)	9.21	(9.13 - 9.29)	10.55	(10.47 - 10.63)	9.21	(9.13 - 9.29)	9.21	(9.13 - 9.29)
Endosulfan II	2	0	10.68	(10.60 - 10.76)	9.34	(9.26 - 9.42)	10.67	(10.59 - 10.75)	9.34	(9.26 - 9.42)	9.34	(9.26 - 9.42)
p,p'-DDT	2	0	10.92	(10.84 - 11.00)	9.59	(9.51 - 9.67)	10.91	(10.83 - 10.99)	9.59	(9.51 - 9.67)	9.59	(9.51 - 9.67)
Endrin Aldehyde	2	0	11.07	(10.99 - 11.15)	9.75	(9.67 - 9.83)	11.06	(10.98 - 11.14)	9.75	(9.67 - 9.83)	9.75	(9.67 - 9.83)
Endosulfan Sulfate	2	0	11.21	(11.17 - 11.25)	9.90	(9.86 - 9.94)	11.20	(11.16 - 11.24)	9.90	(9.86 - 9.94)	9.90	(9.86 - 9.94)
Methoxychlor	2	0	11.92	(11.88 - 11.96)	10.67	(10.63 - 10.71)	11.91	(11.87 - 11.95)	10.67	(10.63 - 10.71)	10.66	(10.62 - 10.70)
Endrin Ketone	2	0	12.13	(12.05 - 12.21)	10.89	(10.81 - 10.97)	12.12	(12.04 - 12.20)	10.89	(10.81 - 10.97)	10.89	(10.81 - 10.97)
DCB-Surrogate	2	0	13.58	(13.52 - 13.64)	12.46	(12.40 - 12.52)	13.56	(13.50 - 13.62)	12.46	(12.40 - 12.52)	12.46	(12.40 - 12.52)
Chlordane (Technical	2	1										
Chlordane (Technical	2	2										
Chlordane (Technical	2	3										
Toxaphene	2	1										
Toxaphene	2	2										
Toxaphene	2	3										
Toxaphene	2	4										
Toxaphene	2	5										

Metal Data

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15946-001	% Solid:	66	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-110-1 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	300	16000	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-39-3	Barium	15	35	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-70-2	Calcium	1500	ND	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-47-3	Chromium	7.6	38	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-48-4	Cobalt	3.8	15	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-50-8	Copper	7.6	11	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7439-89-6	Iron	300	40000	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7439-92-1	Lead	7.6	12	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7439-95-4	Magnesium	760	7400	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7439-96-5	Manganese	15	270	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7439-97-6	Mercury	0.13	ND	1	0.15	25	03/03/20	82692	H25453S	28	CV	HGCV3A
7440-02-0	Nickel	7.6	25	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-09-7	Potassium	760	3100	1	0.5	50	03/01/20	82692	S25453A4	33	P	PEICPRAD4A
7440-23-5	Sodium	380	1700	1	0.5	50	03/01/20	82692	S25453A4	33	P	PEICPRAD4A
7440-62-2	Vanadium	15	42	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A
7440-66-6	Zinc	15	70	1	0.5	50	03/02/20	82692	S25453A3	31	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD15946-001	% Solid:	66	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	TB-110-1 COMP	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	2/27/2020	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.2	ND	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA
7440-38-2	Arsenic	0.30	41	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA
7440-41-7	Beryllium	0.30	0.62	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA
7440-43-9	Cadmium	0.61	ND	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA
7782-49-2	Selenium	3.0	ND	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA
7440-22-4	Silver	0.30	ND	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA
7440-28-0	Thallium	0.61	ND	1	0.5	100	02/28/20	826932	820BNEW	35	MS	MS3_7700SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82692 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 82692 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	100	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-39-3	Barium	5.0	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-70-2	Calcium	500	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-47-3	Chromium	2.5	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-48-4	Cobalt	1.2	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-50-8	Copper	2.5	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7439-89-6	Iron	100	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7439-92-1	Lead	2.5	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7439-95-4	Magnesium	250	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7439-96-5	Manganese	5.0	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-02-0	Nickel	2.5	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-09-7	Potassium	250	ND	1	0.5	50	02/29/20	82692	S25453A4	14	P	PEICPRAD4A
7440-23-5	Sodium	120	ND	1	0.5	50	02/29/20	82692	S25453A4	14	P	PEICPRAD4A
7440-62-2	Vanadium	5.0	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A
7440-66-6	Zinc	5.0	ND	1	0.5	50	03/02/20	82692	S25453A3	14	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82692 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 82692 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	03/03/20	82692	H25453S	11	CV	HGCV3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 82693
Client Id: MB 82693
Matrix: SOIL
Level: LOW

% Solid: 0
Units: MG/KG

Lab Name: Hampton-Clarke
Lab Code:

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.40	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA
7440-38-2	Arsenic	0.10	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA
7440-41-7	Beryllium	0.10	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA
7440-43-9	Cadmium	0.20	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA
7782-49-2	Selenium	1.0	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA
7440-22-4	Silver	0.10	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA
7440-28-0	Thallium	0.20	ND	1	0.5	100	02/28/20	82693	2820BNEW	17	MS	MS3_7700SWA

Comments:

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 2
(ICV/CCV Summary)

Date Analyzed: 02/28/20
Data File: S022820BNEW
Prep Batch: 82693
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-322057-8	Rec	CCV V-322061-15	Rec	CCV V-322061-27	Rec	CCV V-322061-39	Rec	CCV V-322061-45	Rec		Rec		Rec		Rec
Antimony	50/50	48.50500	97	49.36700	99	49.48500	99	49.35200	99	48.89000	98						
Arsenic	50/50	47.54300	95	49.38600	99	53.70900	107	47.80200	96	47.55800	95						
Beryllium	50/50	50.05800	100	50.82000	102	50.07400	100	50.81500	102	51.53200	103						
Cadmium	50/50	51.59400	103	50.69100	101	51.28800	103	50.83900	102	50.74100	101						
Selenium	50/250	53.13200	106	250.63200	100	274.41900	110	237.11400	95	241.52300	97						
Silver	10/50	10.30600	103	48.29400	97	48.76300	98	48.64200	97	49.89200	100						
Thallium	50/50	50.62000	101	51.57500	103	51.84300	104	50.98300	102	50.93900	102						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 02/28/20
Data File: S022820BNEW
Prep Batch: 82693
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-322062	Recovery	Low Limit	High Limit		LRS Spike Amount	LRS V-322060	Recovery	Low Limit	High Limit	
Magnesium	500	485.344	97	80	120		50000	50392.908	101	90	110	
Aluminum	500	478.135	96	80	120		15000	14769.039	98	90	110	
Chromium	2	2.087	104	80	120		500	520.128	104	90	110	
Copper	10	10.086	101	80	120		500	510.754	102	90	110	
Iron	500	505.806	101	80	120		50000	50446.267	101	90	110	
Arsenic	1	0.985	98	80	120		500	470.505	94	90	110	
Barium	5	4.931	99	80	120		500	512.524	103	90	110	
Beryllium	1	0.952	95	80	120		500	470.851	94	90	110	
Calcium	500	480.987	96	80	120		50000	53172.968	106	90	110	
Cadmium	2	1.947	97	80	120		500	512.493	102	90	110	
Silver	1	0.934	93	80	120		500	330.073	66 a	90	110	
Potassium	500	484.283	97	80	120		50000	51603.073	103	90	110	
Zinc	20	20.091	100	80	120		500	490.317	98	90	110	
Manganese	6	5.904	98	80	120		500	525.504	105	90	110	
Molybdenum	1	0.952	95	80	120		500	513.606	103	90	110	
Sodium	500	465.633	93	80	120		50000	51403.924	103	90	110	
Nickel	3	2.898	97	80	120		500	522.575	105	90	110	
Lead	2	1.812	91	80	120		500	464.771	93	90	110	
Antimony	4	4.149	104	80	120		500	491.843	98	90	110	
Selenium	10	9.465	95	80	120		2500	2324.383	93	90	110	
Thallium	2	1.808	90	80	120		500	467.762	94	90	110	
Vanadium	1	0.968	97	80	120		500	532.407	106	90	110	
Cobalt	2	1.983	99	80	120		500	516.171	103	90	110	

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 02/29/20
Data File: S25453A4
Prep Batch: 82692
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-12	Rec	CCV V-321090-23	Rec	CCV V-321090-34	Rec	CCV V-321090-45	Rec	CCV V-321090-57	Rec	CCV V-321090-68	Rec		Rec
Potassium	50/50	48.86800	98	48.51520	97	48.86830	98	49.05070	98	49.18210	98	49.35570	99	49.52550	99		
Sodium	50/50	48.18110	96	48.29580	97	48.61390	97	48.77480	98	48.84690	98	49.13670	98	49.48080	99		

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 02/29/20
Data File: S25453A4
Prep Batch: 82692
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-319737	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-321254	Recovery	Low Limit	High Limit
Zinc	0.1	0.0950186	95	80	120	10	10.2292	102	90	110
Barium	0.1	0.0985061	99	80	120	10	10.1684	102	90	110
Copper	0.05	0.0483661	97	80	120	10	10.6600	107	90	110
Molybdenum	0.025	0.0313795	126 a	80	120	10	10.5621	106	90	110
Nickel	0.05	0.0434847	87	80	120	10	10.3410	103	90	110
Selenium	0.05	0.0626847	125 a	80	120	5	4.84825	97	90	110
Silicon	0.1	0.152413	152 a	80	120	25	27.8060	111 a	90	110
Boron	0.2	0.188170	94	80	120	5	4.07976	82 a	90	110
Vanadium	0.1	0.0989324	99	80	120	10	9.98432	100	90	110
Titanium	0.1	0.103078	103	80	120	10	10.7465	107	90	110
Magnesium	5.00	4.97494	99	80	120	500	542.898	109	90	110
Aluminum	2.00	1.91303	96	80	120	500	494.647	99	90	110
Calcium	10.00	9.79834	98	80	120	500	535.816	107	90	110
Iron	2.00	1.89368	95	80	120	400	390.570	98	90	110
Manganese	0.10	0.100602	101	80	120	10	10.5294	105	90	110
Potassium	5.00	5.15470	103	80	120	200	247.054	124 a	90	110
Sodium	2.50	2.82680	113	80	120	1000	1218.40	122 a	90	110
Tin	0.2	0.217029	109	80	120	10	10.9040	109	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 03/02/20
Data File: S25453A3
Prep Batch: 82692
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

Analyte	ICV/CCV Amt	ICV V-321090-5	Rec	CCV V-321090-12	Rec	CCV V-321090-23	Rec	CCV V-321090-33	Rec	CCV V-321090-42	Rec		Rec		Rec		Rec
Aluminum	5/5	4.88968	98	4.86838	97	4.79874	96	4.76652	95	4.72342	94						
Barium	.5/.5	0.49049	98	0.48833	98	0.48344	97	0.47997	96	0.47901	96						
Calcium	50/50	49.24290	98	48.57590	97	47.90310	96	47.46270	95	47.70970	95						
Chromium	.5/.5	0.49430	99	0.49127	98	0.48494	97	0.48269	97	0.48045	96						
Cobalt	.5/.5	0.51952	104	0.51155	102	0.50997	102	0.50135	100	0.50480	101						
Copper	.5/.5	0.49847	100	0.49412	99	0.49040	98	0.48159	96	0.47531	95						
Iron	5/5	4.93351	99	4.92467	98	4.84568	97	4.81385	96	4.80518	96						
Lead	.5/.5	0.49815	100	0.48811	98	0.48698	97	0.48038	96	0.48691	97						
Magnesium	50/50	49.84620	100	50.74670	101	48.48580	97	49.97330	100	48.53700	97						
Manganese	.5/.5	0.49445	99	0.49220	98	0.48684	97	0.48386	97	0.48143	96						
Nickel	.5/.5	0.49737	99	0.48985	98	0.48760	98	0.47893	96	0.48280	97						
Vanadium	.5/.5	0.50395	101	0.50169	100	0.49642	99	0.49364	99	0.49178	98						
Zinc	.5/.5	0.51704	103	0.50827	102	0.50413	101	0.49032	98	0.49546	99						

Notes: a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits: ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 2
LLQCS/LRS Summary)

Date Analyzed: 03/02/20
Data File: S25453A3
Prep Batch: 82692
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
LLQCS/LRS SOURCE: SPEX

Analyte	LLQCS Spike Amount	LLICV V-319737	Recovery	Low Limit	High Limit	LRS Spike Amount	LRS V-321254	Recovery	Low Limit	High Limit
Magnesium	5.0	5.51114	110	80	120	500	494.136	99	90	110
Silver	0.015	0.0152428	102	80	120	1	1.05372	105	90	110
Aluminum	2.0	1.98748	99	80	120	500	522.295	104	90	110
Arsenic	0.04	0.0464119	116	80	120	10	10.1864	102	90	110
Boron	0.2	0.199579	100	80	120	5	4.49219	90	90	110
Barium	0.1	0.103652	104	80	120	10	9.93189	99	90	110
Beryllium	0.012	0.0167229	139 a	80	120	5	4.84140	97	90	110
Calcium	10	10.4639	105	80	120	500	466.584	93	90	110
Cadmium	0.012	0.0125615	105	80	120	5	5.28969	106	90	110
Cobalt	0.025	0.0249626	100	80	120	5	4.73102	95	90	110
Chromium	0.05	0.0564537	113	80	120	10	9.66756	97	90	110
Copper	0.05	0.0594967	119	80	120	10	10.4486	104	90	110
Silicon	0.1	0.223497	223 a	80	120	25	23.5580	94	90	110
Potassium	NA	13.5268		80	120	200	480.233	240 a	90	110
Zinc	0.1	0.101804	102	80	120	10	9.51837	95	90	110
Manganese	0.1	0.104677	105	80	120	10	9.67369	97	90	110
Molybdenum	0.025	0.0294325	118	80	120	10	9.26066	93	90	110
Sodium	NA	3.26711		80	120	1000	1276.39	128 a	90	110
Nickel	0.05	0.0553488	111	80	120	10	8.90216	89 a	90	110
Lead	0.05	0.0543649	109	80	120	10	9.12643	91	90	110
Antimony	0.04	0.0484354	121 a	80	120	5	5.37720	108	90	110
Selenium	0.05	0.0542199	108	80	120	5	4.96515	99	90	110
Tin	0.2	0.227854	114	80	120	10	10.2760	103	90	110
Titanium	0.1	0.101671	102	80	120	10	10.1664	102	90	110
Thallium	0.05	0.0553071	111	80	120	5	4.72619	95	90	110
Vanadium	0.1	0.102044	102	80	120	10	9.69564	97	90	110
Iron	2.0	2.07225	104	80	120	400	378.494	95	90	110

Notes: a-indicates analyte is outsite the limits.

If linear range sample (LRS) exceeds criteria, high standard becomes upper limit criteria

FORM 2
(ICV/CCV Summary)

Date Analyzed: 03/03/20
Data File: H25453S
Prep Batch: 82692
Analytical Method: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICV/CCV SOURCE: SCP Science

		ICV (2)-9		CCV-21		CCV-33												
Analyte	ICV/CCV Amt		Rec		Rec		Rec		Rec		Rec		Rec		Rec		Rec	
Mercury	20/10	19.35000	97	9.96000	100	9.93800	99											

Notes:
a-indicates analyte failed the ICV limits for 6010D, 6020B
b-indicates analyte failed the ICV limits for 200.7 or 200.8
c-indicates analyte failed the CCV limits for 200.7/200.8/245.1/6010C,6020B, Hg 7470A,7471B
d-indicates analyte failed the CCV limits Hg 7470A/7471B

Qc Limits:
ICV - 200.7 (95-105) 6010D/6020B/200.8 (90-110)
CCV- 200.7/200.8/6010D/245.1, Hg 7470A/ 7471B (90-110)

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 02/28/20
Data File: S022820BNEW
Prep Batch: 82693
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-322058-10	CCB V-322058-16	CCB V-322058-28	CCB V-322058-40	CCB V-322058-46	MB 82693-17
Antimony	2 U	4 U	4 U	4 U	4 U	400 U
Arsenic	.5 U	1 U	1 U	1 U	1 U	100 U
Beryllium	.5 U	1 U	1 U	1 U	1 U	100 U
Cadmium	1 U	2 U	2 U	2 U	2 U	200 U
Selenium	5 U	10 U	10 U	10 U	10 U	1000 U
Silver	.5 U	1 U	1 U	1 U	1 U	100 U
Thallium	1 U	2 U	2 U	2 U	2 U	200 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 02/29/20
Data File: S25453A4
Prep Batch: 82692
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-317800-6	CCB V-317800-13	CCB V-317800-24	CCB V-317800-35	CCB V-317800-46	CCB V-317800-58	CCB V-317800-69	MB 82692 (100)-14
Potassium	2.5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.5 U
Sodium	1.25 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1.3 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/02/20
Data File: S25453A3
Prep Batch: 82692
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-317800-6	CCB V-317800-13	CCB V-317800-24	CCB V-317800-34	CCB V-317800-43	MB 82692 (100)-14
Aluminum	1 U	2 U	2 U	2 U	2 U	100 U
Barium	.05 U	.1 U	.1 U	.1 U	.1 U	5 U
Calcium	5 U	10 U	10 U	10 U	10 U	500 U
Chromium	.025 U	.05 U	.05 U	.05 U	.05 U	2.5 U
Cobalt	.0125 U	.025 U	.025 U	.025 U	.025 U	1.3 U
Copper	.025 U	.05 U	.05 U	.05 U	.05 U	2.5 U
Iron	1 U	2 U	2 U	2 U	2 U	100 U
Lead	.025 U	.05 U	.05 U	.05 U	.05 U	2.5 U
Magnesium	2.5 U	5 U	5 U	5 U	5 U	250 U
Manganese	.05 U	.1 U	.1 U	.1 U	.1 U	5 U
Nickel	.025 U	.05 U	.05 U	.05 U	.05 U	2.5 U
Vanadium	.05 U	.1 U	.1 U	.1 U	.1 U	5 U
Zinc	.05 U	.1 U	.1 U	.1 U	.1 U	5 U

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 03/03/20
Data File: H25453S
Prep Batch: 82692
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: HGCV3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	MB 82692 (167)-11			
Mercury	.5 U	.5 U	.5 U	83 U			

Notes: a -for methods 7470A, 7471B indicates absolute value of result found above the reporting limits in ICB/CCB/MB.
for methods 6010D, 6020B indicates absolute value of result found above the reporting limit in CCB or above 1/2 the reporting limit in ICB/MB.

u-indicates result below reporting criteria.

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 02/28/20
Data File: S022820BNEW
Prep Batch: 82693
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: MS3_7700SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-322059-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	50000	46915.34	94							
Antimony	0	U								
Arsenic	0	U								
Beryllium	0	U								
Cadmium	0	U								
Calcium	150000	155389.9	104							
Iron	125000	125310.4	100							
Magnesium	50000	49511.25	99							
Selenium	0	U								
Silver	0	U								
Thallium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 02/29/20
Data File: S25453A4
Prep Batch: 82692
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-317801-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	477.812	96							
Calcium	500	515.203	103							
Iron	200	183.848	92							
Magnesium	500	512.405	102							
Potassium	0	U								
Sodium	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM 4
(ICSA/ICSAB Summary)

Date Analyzed: 03/02/20
Data File: S25453A3
Prep Batch: 82692
Reporting Limits Used: 6010D, 6020B, 7470A, 7471B
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 0022703

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:
ICSA/ICSAB: SOURCE: SCP Science

Analyte	Spk Amt	ICSA V-321157-11	Rec	Rec	Rec	Rec	Rec	Rec	Rec	Rec
Aluminum	500	486.749	97							
Barium	0	U								
Calcium	500	435.785	87							
Chromium	0	U								
Cobalt	0	U								
Copper	0	U								
Iron	200	179.456	90							
Lead	0	U								
Magnesium	500	469.656	94							
Manganese	0	U								
Nickel	0	U								
Vanadium	0	U								
Zinc	0	U								

Notes: a-indicates absolute value of the concentration > 2 * Reporting Limits In the ICSA
b-indicates absolute value of the concentration above Reporting Limits but < 2 * Reporting Limits in the ICSA
c-indicates the recovery failed the Qc Criteria in the ICSAB
u-indicates the absolute value of the concentration was below the reporting limit

Qc Limits: 200.7, 6020B < 2 * Reporting Limit
6010D < Reporting Limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82692

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82692

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82692	1	S25453A3	16	81.8254	110	74		55	152
Barium	82692	1	S25453A3	16	6.9814	8.92	78		65	110
Calcium	82692	1	S25453A3	16	154.0680	207.00	74		69	110
Chromium	82692	1	S25453A3	16	1.6543	2.27	73		61	114
Cobalt	82692	1	S25453A3	16	2.1128	2.87	74		64	110
Copper	82692	1	S25453A3	16	1.5560	2.09	74		66	110
Iron	82692	1	S25453A3	16	133.4310	192.00	69		34	138
Lead	82692	1	S25453A3	16	1.2031	1.63	74		62	110
Magnesium	82692	1	S25453A3	16	54.9553	74.60	74		26	114
Manganese	82692	1	S25453A3	16	4.4063	6.03	73		68	110
Mercury	82692	4	H25453S	15	7.0960	41.64	68		39	110
Nickel	82692	1	S25453A3	16	0.4064	.553	73		61	114
Potassium	82692	1	S25453A4	16	15.6975	22.60	69		61	140
Sodium	82692	1	S25453A4	16	6.5098	8.67	75		57	125
Vanadium	82692	1	S25453A3	16	2.1223	3.00	71		66	110
Zinc	82692	1	S25453A3	16	5.2375	7.13	73		60	112

TxtQcType: LCS Matrix: SOIL SampleID: LCS 82692

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82692	1	S25453A3	15	78.6194	110	71		55	152
Barium	82692	1	S25453A3	15	6.1728	8.92	69		65	110
Calcium	82692	1	S25453A3	15	143.9470	207.00	70		69	110
Chromium	82692	1	S25453A3	15	1.5456	2.27	68		61	114
Cobalt	82692	1	S25453A3	15	1.9812	2.87	69		64	110
Copper	82692	1	S25453A3	15	1.4518	2.09	69		66	110
Iron	82692	1	S25453A3	15	128.5630	192.00	67		34	138
Lead	82692	1	S25453A3	15	1.1322	1.63	69		62	110
Magnesium	82692	1	S25453A3	15	52.7572	74.60	71		26	114
Manganese	82692	1	S25453A3	15	4.2065	6.03	70		68	110
Mercury	82692	4	H25453S	14	7.2600	41.64	70		39	110
Nickel	82692	1	S25453A3	15	0.3844	.553	70		61	114
Potassium	82692	1	S25453A4	15	14.7074	22.60	65		61	140
Sodium	82692	1	S25453A4	15	6.0730	8.67	70		57	125
Vanadium	82692	1	S25453A3	15	1.9958	3.00	67		66	110
Zinc	82692	1	S25453A3	15	4.9080	7.13	69		60	112

TxtQcType: MSD Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82692	1	S25453A3	20	S25453A3	17	28.6295	33.3535	5.0	-94	b	75	125
Barium	82692	1	S25453A3	20	S25453A3	17	0.5133	0.1339	0.5	76		75	125
Calcium	82692	1	S25453A3	20	S25453A3	17	107.6330	77.5391	50	60	a	75	125
Chromium	82692	1	S25453A3	20	S25453A3	17	0.4856	0.1581	0.5	65	a	75	125
Cobalt	82692	1	S25453A3	20	S25453A3	17	0.4759	0.0386	0.5	87		75	125
Copper	82692	1	S25453A3	20	S25453A3	17	0.5269	0.4165	0.5	22	a	75	125
Iron	82692	1	S25453A3	20	S25453A3	17	51.4516	82.2459	5.0	-620	b	75	125
Lead	82692	1	S25453A3	20	S25453A3	17	0.5038	0.0766	0.5	85		75	125
Magnesium	82692	1	S25453A3	20	S25453A3	17	58.1126	23.4162	50	69	a	75	125
Manganese	82692	1	S25453A3	20	S25453A3	17	0.9225	1.0242	0.5	-20	a	75	125
Mercury	82692	1	H25453S	19	H25453S	16	10.3500	.5U	10	104		75	125
Nickel	82692	1	S25453A3	20	S25453A3	17	0.4751	0.0676	0.5	81		75	125
Potassium	82692	1	S25453A4	20	S25453A4	17	44.1502	5U	50	88		75	125
Sodium	82692	1	S25453A4	20	S25453A4	17	43.3215	2.5U	50	87		75	125
Vanadium	82692	1	S25453A3	20	S25453A3	17	0.5408	0.1899	0.5	70	a	75	125
Zinc	82692	1	S25453A3	20	S25453A3	17	0.6052	0.2327	0.5	74	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82692

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	82692	1	S25453A3	19	S25453A3	17	34.5430	33.3535	5.0	24	b	75	125
Barium	82692	1	S25453A3	19	S25453A3	17	0.6771	0.1339	0.5	109		75	125
Calcium	82692	1	S25453A3	19	S25453A3	17	110.3950	77.5391	50	66	a	75	125
Chromium	82692	1	S25453A3	19	S25453A3	17	0.5321	0.1581	0.5	75		75	125
Cobalt	82692	1	S25453A3	19	S25453A3	17	0.5253	0.0386	0.5	97		75	125
Copper	82692	1	S25453A3	19	S25453A3	17	0.5965	0.4165	0.5	36	a	75	125
Iron	82692	1	S25453A3	19	S25453A3	17	74.5766	82.2459	5.0	-150	b	75	125
Lead	82692	1	S25453A3	19	S25453A3	17	0.5692	0.0766	0.5	99		75	125
Magnesium	82692	1	S25453A3	19	S25453A3	17	62.0424	23.4162	50	77		75	125
Manganese	82692	1	S25453A3	19	S25453A3	17	3.3840	1.0242	0.5	472	a	75	125
Mercury	82692	1	H25453S	18	H25453S	16	10.4000	.5U	10	104		75	125
Nickel	82692	1	S25453A3	19	S25453A3	17	0.5317	0.0676	0.5	93		75	125
Potassium	82692	1	S25453A4	19	S25453A4	17	47.6410	5U	50	95		75	125
Sodium	82692	1	S25453A4	19	S25453A4	17	45.7897	2.5U	50	92		75	125
Vanadium	82692	1	S25453A3	19	S25453A3	17	0.5937	0.1899	0.5	81		75	125
Zinc	82692	1	S25453A3	19	S25453A3	17	0.6989	0.2327	0.5	93		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82692

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD15963-001

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S25453A3	21	S25453A3	17	33.5369	33.3535	5.0	3.7	b	75	125
Barium	1	S25453A3	21	S25453A3	17	0.6090	0.1339	0.50	95		75	125
Calcium	1	S25453A3	21	S25453A3	17	116.6390	77.5391	50	78		75	125
Chromium	1	S25453A3	21	S25453A3	17	0.6192	0.1581	0.50	92		75	125
Cobalt	1	S25453A3	21	S25453A3	17	0.5471	0.0386	0.50	102		75	125
Copper	1	S25453A3	21	S25453A3	17	0.8323	0.4165	0.50	83		75	125
Iron	1	S25453A3	21	S25453A3	17	72.3378	82.2459	5.0	-200	b	75	125
Lead	1	S25453A3	21	S25453A3	17	0.5571	0.0766	0.50	96		75	125
Magnesium	1	S25453A3	21	S25453A3	17	69.7863	23.4162	50	93		75	125
Manganese	1	S25453A3	21	S25453A3	17	1.3411	1.0242	0.50	63	a	75	125
Nickel	1	S25453A3	21	S25453A3	17	0.5471	0.0676	0.50	96		75	125
Potassium	1	S25453A4	21	S25453A4	17	50.5664	5U	50	101		75	125
Sodium	1	S25453A4	21	S25453A4	17	49.2372	2.5U	50	98		75	125
Vanadium	1	S25453A3	21	S25453A3	17	0.6468	0.1899	0.50	91		75	125
Zinc	1	S25453A3	21	S25453A3	17	0.6720	0.2327	0.50	88		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82693

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82693

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82693	1	S022820B	19	23.3940	117	20		10	110
Arsenic	82693	1	S022820B	19	37.6580	49.4	76		61	113
Beryllium	82693	1	S022820B	19	155.9010	187	83		66	110
Cadmium	82693	1	S022820B	19	171.0800	197	87		64	110
Selenium	82693	1	S022820B	19	278.3630	364	76		60	112
Silver	82693	1	S022820B	19	79.4260	94.0	84		61	111
Thallium	82693	1	S022820B	19	195.3870	229	85		61	110

TxtQcType: LCS Matrix: SOIL SampleID: LCS 82693

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82693	1	S022820B	18	23.9350	117	20		10	110
Arsenic	82693	1	S022820B	18	37.4580	49.4	76		61	113
Beryllium	82693	1	S022820B	18	164.7440	187	88		66	110
Cadmium	82693	1	S022820B	18	177.7370	197	90		64	110
Selenium	82693	1	S022820B	18	276.0360	364	76		60	112
Silver	82693	1	S022820B	18	82.4520	94.0	88		61	111
Thallium	82693	1	S022820B	18	201.8370	229	88		61	110

TxtQcType: MSD Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82693	1	S022820B	24	S022820B	20	78.8930	4U	250	32	a	75	125
Arsenic	82693	1	S022820B	24	S022820B	20	137.9850	2.6200	250	54	a	75	125
Beryllium	82693	1	S022820B	24	S022820B	20	153.3140	1U	250	61	a	75	125
Cadmium	82693	1	S022820B	24	S022820B	20	154.5670	2U	250	62	a	75	125
Selenium	82693	1	S022820B	24	S022820B	20	135.1310	10U	250	54	a	75	125
Silver	82693	1	S022820B	24	S022820B	20	27.3860	1U	50	55	a	75	125
Thallium	82693	1	S022820B	24	S022820B	20	153.0410	2U	250	61	a	75	125

TxtQcType: MS Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	82693	1	S022820B	23	S022820B	20	63.7020	4U	250	25	a	75	125
Arsenic	82693	1	S022820B	23	S022820B	20	166.0720	2.6200	250	65	a	75	125
Beryllium	82693	1	S022820B	23	S022820B	20	180.0580	1U	250	72	a	75	125
Cadmium	82693	1	S022820B	23	S022820B	20	187.0670	2U	250	75		75	125
Selenium	82693	1	S022820B	23	S022820B	20	159.6500	10U	250	64	a	75	125
Silver	82693	1	S022820B	23	S022820B	20	33.5370	1U	50	67	a	75	125
Thallium	82693	1	S022820B	23	S022820B	20	183.1720	2U	250	73	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 82693

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD15963-001

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S022820B	25	S022820B	20	46.0680	4U	50	92		75	125
Arsenic	1	S022820B	25	S022820B	20	47.3500	2.6200	50	89		75	125
Beryllium	1	S022820B	25	S022820B	20	45.8850	1U	50	92		75	125
Cadmium	1	S022820B	25	S022820B	20	48.1730	2U	50	96		75	125
Selenium	1	S022820B	25	S022820B	20	226.3930	10U	250	91		75	125
Silver	1	S022820B	25	S022820B	20	45.6140	1U	50	91		75	125
Thallium	1	S022820B	25	S022820B	20	48.2060	2U	50	96		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82692

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82692

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82692	S25453A3	16	S25453A3	15	81.8254	78.6194	4		20
Barium	82692	S25453A3	16	S25453A3	15	6.9814	6.1728	12		20
Calcium	82692	S25453A3	16	S25453A3	15	154.0680	143.9470	6.8		20
Chromium	82692	S25453A3	16	S25453A3	15	1.6543	1.5456	6.8		20
Cobalt	82692	S25453A3	16	S25453A3	15	2.1128	1.9812	6.4		20
Copper	82692	S25453A3	16	S25453A3	15	1.5560	1.4518	6.9		20
Iron	82692	S25453A3	16	S25453A3	15	133.4310	128.5630	3.7		20
Lead	82692	S25453A3	16	S25453A3	15	1.2031	1.1322	6.1		20
Magnesium	82692	S25453A3	16	S25453A3	15	54.9553	52.7572	4.1		20
Manganese	82692	S25453A3	16	S25453A3	15	4.4063	4.2065	4.6		20
Mercury	82692	H25453S	15	H25453S	14	7.0960	7.2600	2.3		20
Nickel	82692	S25453A3	16	S25453A3	15	0.4064	0.3844	5.6		20
Potassium	82692	S25453A4	16	S25453A4	15	15.6975	14.7074	6.5		20
Sodium	82692	S25453A4	16	S25453A4	15	6.5098	6.0730	6.9		20
Vanadium	82692	S25453A3	16	S25453A3	15	2.1223	1.9958	6.1		20
Zinc	82692	S25453A3	16	S25453A3	15	5.2375	4.9080	6.5		20

TxtQcType: MR Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82692	S25453A3	18	S25453A3	17	18.4884	33.3535	57	a	20
Barium	82692	S25453A3	18	S25453A3	17	0.1036	0.1339	26	b	20
Calcium	82692	S25453A3	18	S25453A3	17	63.4696	77.5391	20		20
Chromium	82692	S25453A3	18	S25453A3	17	0.0622	0.1581	87	b	20
Cobalt	82692	S25453A3	18	S25453A3	17	0.025U	0.0386	---		20
Copper	82692	S25453A3	18	S25453A3	17	0.1125	0.4165	110	b	20
Iron	82692	S25453A3	18	S25453A3	17	45.2450	82.2459	58	a	20
Lead	82692	S25453A3	18	S25453A3	17	0.0876	0.0766	13		20
Magnesium	82692	S25453A3	18	S25453A3	17	12.3566	23.4162	62	b	20
Manganese	82692	S25453A3	18	S25453A3	17	0.4834	1.0242	72	b	20
Mercury	82692	H25453S	17	H25453S	16	.5U	.5U	---		20
Nickel	82692	S25453A3	18	S25453A3	17	0.05U	0.0676	---		20
Potassium	82692	S25453A4	18	S25453A4	17	5U	5U	---		20
Sodium	82692	S25453A4	18	S25453A4	17	2.5U	2.5U	---		20
Vanadium	82692	S25453A3	18	S25453A3	17	0.1U	0.1899	---		20
Zinc	82692	S25453A3	18	S25453A3	17	0.1928	0.2327	19		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82692

Instrument Type: ICP/HG

Analytical Method(s):6010D/200.7/7470A/7471B/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	82692	S25453A3	20	S25453A3	19	28.6295	34.5430	19		20
Barium	82692	S25453A3	20	S25453A3	19	0.5133	0.6771	28	a	20
Calcium	82692	S25453A3	20	S25453A3	19	107.6330	110.3950	2.5		20
Chromium	82692	S25453A3	20	S25453A3	19	0.4856	0.5321	9.1		20
Cobalt	82692	S25453A3	20	S25453A3	19	0.4759	0.5253	9.9		20
Copper	82692	S25453A3	20	S25453A3	19	0.5269	0.5965	12		20
Iron	82692	S25453A3	20	S25453A3	19	51.4516	74.5766	37	a	20
Lead	82692	S25453A3	20	S25453A3	19	0.5038	0.5692	12		20
Magnesium	82692	S25453A3	20	S25453A3	19	58.1126	62.0424	6.5		20
Manganese	82692	S25453A3	20	S25453A3	19	0.9225	3.3840	114	a	20
Mercury	82692	H25453S	19	H25453S	18	10.3500	10.4000	.48		20
Nickel	82692	S25453A3	20	S25453A3	19	0.4751	0.5317	11		20
Potassium	82692	S25453A4	20	S25453A4	19	44.1502	47.6410	7.6		20
Sodium	82692	S25453A4	20	S25453A4	19	43.3215	45.7897	5.5		20
Vanadium	82692	S25453A3	20	S25453A3	19	0.5408	0.5937	9.3		20
Zinc	82692	S25453A3	20	S25453A3	19	0.6052	0.6989	14		20

TxtQcType: SD Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	82692	S25453A3	22	S25453A3	17	5	6.6385	33.3535	0.48		10
Barium	82692	S25453A3	22	S25453A3	17	5	0.0279	0.1339	4.1		10
Calcium	82692	S25453A3	22	S25453A3	17	5	16.2674	77.5391	4.9		10
Chromium	82692	S25453A3	22	S25453A3	17	5	0.0318	0.1581	0.44		10
Cobalt	82692	S25453A3	22	S25453A3	17	5	0.0067	0.0386	13	c	10
Copper	82692	S25453A3	22	S25453A3	17	5	0.0933	0.4165	12	a	10
Iron	82692	S25453A3	22	S25453A3	17	5	16.7067	82.2459	1.6		10
Lead	82692	S25453A3	22	S25453A3	17	5	0.0198	0.0766	29	c	10
Magnesium	82692	S25453A3	22	S25453A3	17	5	5.0851	23.4162	8.6		10
Manganese	82692	S25453A3	22	S25453A3	17	5	0.2072	1.0242	1.2		10
Nickel	82692	S25453A3	22	S25453A3	17	5	0.0164	0.0676	22	a	10
Potassium	82692	S25453A4	22	S25453A4	17	5	0.9711	2.9641	64	c	10
Sodium	82692	S25453A4	22	S25453A4	17	5	0.9077	2.2884	98	a	10
Vanadium	82692	S25453A3	22	S25453A3	17	5	0.0357	0.1899	5.9		10
Zinc	82692	S25453A3	22	S25453A3	17	5	0.0525	0.2327	13	a	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 82693

Instrument Type: ICPMS

Analytical Method(s):6020B/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 82693

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82693	S022820B	19	S022820B	18	23.3940	23.9350	2.3		20
Arsenic	82693	S022820B	19	S022820B	18	37.6580	37.4580	.53		20
Beryllium	82693	S022820B	19	S022820B	18	155.9010	164.7440	5.5		20
Cadmium	82693	S022820B	19	S022820B	18	171.0800	177.7370	3.8		20
Selenium	82693	S022820B	19	S022820B	18	278.3630	276.0360	.84		20
Silver	82693	S022820B	19	S022820B	18	79.4260	82.4520	3.7		20
Thallium	82693	S022820B	19	S022820B	18	195.3870	201.8370	3.2		20

TxtQcType: MR Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82693	S022820B	21	S022820B	20	4U	4U	---		20
Arsenic	82693	S022820B	21	S022820B	20	2.3300	2.6200	12		20
Beryllium	82693	S022820B	21	S022820B	20	1U	1U	---		20
Cadmium	82693	S022820B	21	S022820B	20	2U	2U	---		20
Selenium	82693	S022820B	21	S022820B	20	10U	10U	---		20
Silver	82693	S022820B	21	S022820B	20	1U	1U	---		20
Thallium	82693	S022820B	21	S022820B	20	2U	2U	---		20

TxtQcType: MSD Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	82693	S022820B	24	S022820B	23	78.8930	63.7020	21	a	20
Arsenic	82693	S022820B	24	S022820B	23	137.9850	166.0720	18		20
Beryllium	82693	S022820B	24	S022820B	23	153.3140	180.0580	16		20
Cadmium	82693	S022820B	24	S022820B	23	154.5670	187.0670	19		20
Selenium	82693	S022820B	24	S022820B	23	135.1310	159.6500	17		20
Silver	82693	S022820B	24	S022820B	23	27.3860	33.5370	20		20
Thallium	82693	S022820B	24	S022820B	23	153.0410	183.1720	18		20

TxtQcType: SD Matrix: SOIL SampleID: AD15963-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	82693	S022820B	22	S022820B	20	5	0.0300	0.1540	2.6		20
Arsenic	82693	S022820B	22	S022820B	20	5	0.5810	2.6200	11		20
Beryllium	82693	S022820B	22	S022820B	20	5	0.0550	0.2430	13	c	20
Cadmium	82693	S022820B	22	S022820B	20	5	0.0610	0.2790	9.3		20
Selenium	82693	S022820B	22	S022820B	20	5	0.1350	1.1410	---		20
Silver	82693	S022820B	22	S022820B	20	5	0.0060	0.0870	---		20
Thallium	82693	S022820B	22	S022820B	20	5	0.0140	0.1140	---		20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER

Batch No.: 25453 Analyst: BR

QC Number: 82692 Prep Date: 2/28/20

Matrix: SOIL 6010 Reviewed By: [illegible]

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL				–	
LCS	.5g					–	
LCSD						–	
1. 15963 -001							Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 15963 -001							
MS 15963 -001							Balance used: 038
MSD 15963 -001							Pipettes used: 149,160
2. 15955 -021							
3. -022							Hot Block used: 4
4. -023							
5. -024							
6. -025							
7. -026							
8. 15946 -001							
9. 15945 -002							
10. 15956 -001							
11. -007							
12. -013							
13. 15919 -001							
14. -002							
15. -003							
16. -004							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 94° C (90-95° C) Start Time: 830am End Time: 100pm

	Volume mL	Lot #
LCS	.5g	V- 13005
LCSD		V-
MS	0.25mL	V-12919, 12537
MSD		V- 320443

Acid	Vol mL	Lot#
HNO_3	2.5	V-13046
HCl	5	V-12968
H_2O_2	1.5	V-12516

Acid	Vol mL	Lot#
1:1 HNO_3	5	V-320611
1:1 HCl		V-

Relinquished By BR Date 2/28/20

Received By [illegible] Date 02/28/2020

Hampton-Clarke

ICP SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 3010A 3005A 3050B 200.7/200.8 OTHER

Batch No.: 25454 Analyst: BR

QC Number: 82693 Prep Date: 2/28/20

Matrix: SOIL 6020 Reviewed By: 2/28/20 R

LAB ID#	ICP		ICP-MS (Secondary dil)		TCLP		COMMENTS
	Initial	Final	Aliquot	Final	Eff	TCLP	
Method blank	50mL	50mL	25mL	50mL		--	
LCS	.19					--	
LCSD						--	
1. 15963 -001	.59						Samples are combined prior to analysis to provide extra sample volume for analysis
1. Analytical Duplicate							
MR 15963 -001							
MS 15963 -001							Balance used: 038
MSD 15963 -001							Pipettes used: 149, 160
2. 15955 -021							
3. -022							Hot Block used: 4
4. -023							
5. -024							
6. -025							
7. -026							
8. 15946 -001							
9. 15945 -002							
10. 15956 -001							
11. -007							
12. -013							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							

Hot Plate Temperature: 95 ~~[illegible]~~ BR 2/28/20 C (90-95° C) Start Time: 830 am End Time: 1230 pm

	Volume mL	Lot #
LCS, LCSD	.19	V- 13005
LLLCS, LLLCSD		V-
MS, MSD	0.25mL	V- 12919, 12537
LLMS, LLMSD		V-

Acid	Vol mL	Lot#
HNO_3	2.5	V-13046
HCl		V-
H_2O_2	1.5	V-12516

Acid	Vol mL	Lot#
1:1 HNO_3	5	V- 320611
1:1 HCl		V-

Relinquished By BR Date 2/28/20

Received By R Date 2/28/20

T:\QC\FORMS\LOGBOOK FORMS\METALS\ICP sample prep log 2018 DOD.DOC

Hampton-Clarke/Veritech

HG SAMPLE PREPARATION LOG

ANALYTICAL METHOD: 245.1 7470A 7471B OTHER_____

Batch No.:* 25453

QC Number: 82692

Matrix: SOIL

Analyst: BR

Prep Date: 2/28/20

Review By: BR

LAB ID#	MERCURY INITIAL	MERCURY FINAL	COMMENTS	STANDARDS
Method blank	25mL	25mL		CAL CURVE BLK 0ppb V- 322676
LCS	.15g			
LCSD				STD 0.2 ppb V- 322677
1 15963 -001				STD 0.5 ppb V- 322678
MR 15963 -001				STD 1.0 ppb V- 322679
MS 15963 -001				STD 2.0 ppb V- 322680
MSD 15963 -001				STD 5.0 ppb V- 322681
2 15955 -001				STD 10.0 ppb V- 322682
3 -022				STD 25.0 ppb V- 322683
4 -023				ICV 10.0 ppb V- 322674
5 -024				CCV 20.0 ppb V- 322675
6 -025				
7 -026				
8 15946 -001				Balance used: 038
9 15945 -002				Pipettes used: 152, 159, 143
10 15956 -001				
11 -007				Hot Block used: 7
12 -013				
13				
14				
15				
16				
17				
18				
19				
20				

Lot Numbers	Volume (mL)	Acid	Volume (mL)	Lot #
$KMnO_4$: V- 321814	3.75mL	HNO3		V-
$K_2S_2O_8$: V-		HCl		V-
NH_2OH: V- 317822	1.5mL	H2SO4		V-
		Aqua Regia	1.25mL	V- 322673

**Block Temp.: °C	94
Time In Block:	2:30 pm
Time Out of Block:	3:00 pm

Spike Volume & Lot #

☐ LCS V- 13005 (0.15g) 0.25 ml

☐ MS V- 322421 0.250 ml

☐ Standards/Control Batch B- 28614

Start time: 8:30 am End Time: 3:30 pm

**Temperature
245.1 / 7470A: 90-95C
7471B : 92-98C

Relinquished By: BR

*25 mLs of each standard was digested with this batch using the same reagents and at the same time as the above samples. The preparation of each standard may be referenced in Veriprog using the standard batch number and the corresponding V #s.

HG PREP 2016

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICP3A\S25453A3.txt

Analysis Date: 03/02/20 **Instrument:** PEICP3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-317800	1	CAL	12:22	1							V-317800(ICB/CCB)
CALST2 V-319737	1	CAL	12:26	2							V-319737(LLICV/LLCCV soil)
CALST3 V-321087	1	CAL	12:30	3							V-321087(ICS3 - Middle Std)
CALST4 V-321088	1	CAL	12:34	4							V-321088(ICS4 High std)
ICV V-321090	1	ICV	12:38	5							V-321090(CCV)
ICB V-317800	1	ICB	12:42	6							V-317800(ICB/CCB)
LRS V-321254	1	LRS	12:46	7		SOIL	SOIL	SW846	82692		V-321254(LRS)
ICS3 V-321087	1	ICS	12:51	8							V-321087(ICS3 - Middle Std)
RINSE	1	NA	12:55	9		SOIL	SOIL	SW846	82692		()
LLICV V-319737	1	LLICV	12:59	10		SOIL	SOIL	SW846	82692		V-319737(LLICV/LLCCV soil)
ICSA V-321157	1	ICSA	13:03	11							V-321157(ICSA)
CCV V-321090	1	CCV	13:08	12							V-321090(CCV)
CCB V-317800	1	CCB	13:12	13							V-317800(ICB/CCB)
MB 82692 (100)	1	MB	13:16	14		SOIL	SOIL	SW846	82692		()
LCS 82692	1	LCS	13:19	15		SOIL	SOIL	SW846	82692		()
LCS MR 82692	1	LCS	13:25	16		SOIL	SOIL	SW846	82692		()
AD15963-001	1	SMP	13:30	17	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	MR	13:34	18	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	MS	13:38	19	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	MSD	13:42	20	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	PS	13:46	21	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	5	SD	13:51	22	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
CCV V-321090	1	CCV	13:55	23							V-321090(CCV)
CCB V-317800	1	CCB	13:59	24							V-317800(ICB/CCB)
AD15955-021	1	SMP	14:03	25	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-022	1	SMP	14:08	26	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-023	1	SMP	14:12	27	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-024	1	SMP	14:17	28	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-025	1	SMP	14:22	29	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-026	1	SMP	14:27	30	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15946-001	1	SMP	14:31	31	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15945-002	1	SMP	14:36	32	MET-RCRA-S	SOIL	SOIL	SW846	82692		()
CCV V-321090	1	CCV	14:40	33							V-321090(CCV)
CCB V-317800	1	CCB	14:44	34							V-317800(ICB/CCB)
AD15956-001	1	SMP	14:48	35	MET-RCRA-S	SOIL	SOIL	SW846	82692		()
AD15956-007	1	SMP	14:53	36	MET-RCRA-S	SOIL	SOIL	SW846	82692		()
AD15956-013	1	SMP	14:57	37	MET-RCRA-S	SOIL	SOIL	SW846	82692		()
AD15919-001	1	SMP	15:01	38	PB-SOIL	SOIL	SOIL	SW846	82692		()
AD15919-002	1	SMP	15:05	39	PB-SOIL	SOIL	SOIL	SW846	82692		()
AD15919-003	1	SMP	15:09	40	PB-SOIL	SOIL	SOIL	SW846	82692		()
AD15919-004	1	SMP	15:12	41	PB-SOIL	SOIL	SOIL	SW846	82692		()
CCV V-321090	1	CCV	15:16	42							V-321090(CCV)
CCB V-317800	1	CCB	15:20	43							V-317800(ICB/CCB)

Comments/Reviewedby:

Olufemi
192.168.1.105 3/2/2020 7:16:29 PM

RUN IS OK
All elements reported, except Na, K

3/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S25453A4.txt

Analysis Date: 02/29/20 **Instrument:** PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
CALBLK V-317800	1	CAL	22:31	1							V-317800(ICB/CCB)
CALST2 V-319737	1	CAL	22:36	2							V-319737(LLICV/LLCCV soil)
CALST3 V-322730	1	CAL	22:41	3							V-322730(ICS3 - Middle Std)
CALST4 V-322349	1	CAL	22:45	4							V-322349(ICS4 High std)
ICV V-321090	1	ICV	22:50	5							V-321090(CCV)
ICB V-317800	1	ICB	22:54	6							V-317800(ICB/CCB)
LRS V-321254	1	LRS	22:59	7	MET-TAL6010S	SOIL	SOIL	SW846	82692		V-321254(LRS)
ICS3 V-321087	1	ICS	23:05	8							V-321087(ICS3 - Middle Std)
RINSE	1	NA	23:09	9	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
LLICV V-319737	1	LLICV	23:13	10	MET-TAL6010S	SOIL	SOIL	SW846	82692		V-319737(LLICV/LLCCV soil)
ICSA V-317801	1	ICSA	23:18	11							V-317801(ICSA)
CCV V-321090	1	CCV	23:24	12							V-321090(CCV)
CCB V-317800	1	CCB	23:28	13							V-317800(ICB/CCB)
MB 82692 (100)	1	MB	23:33	14	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
LCS 82692	1	LCS	23:37	15	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
LCS MR 82692	1	LCS	23:41	16	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	SMP	23:45	17	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	MR	23:50	18	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	MS	23:54	19	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	MSD	23:58	20	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	1	PS	00:02	21	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15963-001	5	SD	00:06	22	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
CCV V-321090	1	CCV	00:11	23							V-321090(CCV)
CCB V-317800	1	CCB	00:15	24							V-317800(ICB/CCB)
AD15955-021	1	SMP	00:19	25	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-022	1	NA	00:23	26	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-023	1	NA	00:28	27	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-022	1	SMP	00:32	28	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-023	1	SMP	00:36	29	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-024	1	SMP	00:41	30	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-025	1	SMP	00:45	31	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-026	1	SMP	00:49	32	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15946-001	1	SMP	00:53	33	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
CCV V-321090	1	CCV	00:57	34							V-321090(CCV)
CCB V-317800	1	CCB	01:01	35							V-317800(ICB/CCB)
MB 82690 (100)	1	MB	01:06	36	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
LCS 82690	1	LCS	01:11	37	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
LCS MR 82690	1	LCS	01:15	38	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-007	1	SMP	01:19	39	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-007	1	MR	01:23	40	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-007	1	MS	01:27	41	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-007	1	MSD	01:31	42	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-007	1	PS	01:35	43	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-007	5	SD	01:39	44	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
CCV V-321090	1	CCV	01:44	45							V-321090(CCV)
CCB V-317800	1	CCB	01:48	46							V-317800(ICB/CCB)
AD15955-001	1	SMP	01:53	47	MET-TAL6010S	SOIL	SOIL	SW846	82692		()
AD15955-002	1	SMP	01:57	48	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-003	1	SMP	02:01	49	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-004	1	SMP	02:05	50	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-005	1	SMP	02:09	51	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-006	1	SMP	02:13	52	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-008	1	SMP	02:18	53	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-009	1	SMP	02:22	54	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-010	1	SMP	02:26	55	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-011	1	SMP	02:30	56	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
CCV V-321090	1	CCV	02:34	57							V-321090(CCV)
CCB V-317800	1	CCB	02:38	58							V-317800(ICB/CCB)
AD15955-012	1	SMP	02:43	59	MET-TAL6010S	SOIL	SOIL	SW846	82690		()
AD15955-013	1	SMP	02:47	60	MET-TAL6010S	SOIL	SOIL	SW846	82690		()

Comments/Reviewedby:

Olufemi
192.168.1.105 3/2/2020 12:14:29 PM

RUN IS OK
Na, K reported

3/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\PEICPRAD4A\S25453A4.txt

Analysis Date: 03/01/20

Instrument: PEICPRAD4A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
AD15955-014	1	SMP	02:51	61	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
AD15955-015	1	SMP	02:55	62	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
AD15955-016	1	SMP	02:59	63	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
AD15955-017	1	SMP	03:03	64	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
AD15955-018	1	SMP	03:07	65	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
AD15955-019	1	SMP	03:12	66	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
AD15955-020	1	SMP	03:16	67	MET-TAL6010S	SOIL	SOIL	SW846	82690		0
CCV V-321090	1	CCV	03:20	68							V-321090(CCV)
CCB V-317800	1	CCB	03:24	69							V-317800(ICB/CCB)

Comments/Reviewedby:

Olufemi
192.168.1.105 3/2/2020 12:14:29 PM

RUN IS OK
Na, K reported

R 3/3/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\HGCV3A\H25453S.txt

Analysis Date: 03/03/20 **Instrument:** HGCV3A

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
Calibration Blank	1	CAL	18:21	1							0
.2 PPB	1	CAL	18:22	2							0
.5 PPB	1	CAL	18:24	3							0
1 PPB	1	CAL	18:25	4							0
2 PPB	1	CAL	18:26	5							0
5 PPB	1	CAL	18:28	6							0
10 PPB	1	CAL	18:29	7							0
25 PPB	1	CAL	18:31	8							0
ICV (2)	1	ICV	18:32	9							0
ICB	1	ICB	18:34	10							0
MB 82692 (167)	1	MB	18:35	11	HG-SOIL	SOIL	SOIL	SW846	82692		0
LCS 82692	1	NA	18:37	12	HG-SOIL	SOIL	SOIL	SW846	82692	over calibration limit	0
LCS MR 82692	1	NA	18:38	13	HG-SOIL	SOIL	SOIL	SW846	82692	over calibration limit	0
LCS 4D	4	LCS	18:40	14	HG-SOIL	SOIL	SOIL	SW846	82692		0
LCS MR 4D	4	LCS	18:42	15	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15963-001	1	SMP	18:43	16	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15963-001	1	MR	18:44	17	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15963-001	1	MS	18:46	18	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15963-001	1	MSD	18:47	19	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15955-021	1	SMP	18:49	20	HG-SOIL	SOIL	SOIL	SW846	82692		0
CCV	1	CCV	18:50	21							0
CCB	1	CCB	18:52	22							0
AD15955-022	1	SMP	18:53	23	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15955-023	1	SMP	18:55	24	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15955-024	1	SMP	18:56	25	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15955-025	1	SMP	18:57	26	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15955-026	1	SMP	18:59	27	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15946-001	1	SMP	19:00	28	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15945-002	1	SMP	19:01	29	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15956-001	1	SMP	19:03	30	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15956-007	1	SMP	19:04	31	HG-SOIL	SOIL	SOIL	SW846	82692		0
AD15956-013	1	SMP	19:05	32	HG-SOIL	SOIL	SOIL	SW846	82692		0
CCV	1	CCV	19:07	33							0
CCB	1	CCB	19:08	34							0

Comments/Reviewedby:

olufemi
192.168.1.120 3/3/2020 7:25:49 PM

RUN IS OK

3/4/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor:_____

Standard/Batch/SnCl2 Lot #:

V-322789

Run Log

Data File: W:\METALS.FRM\ICPDATA\New\MS3_7700SWA\S022820BNEW.txt

Analysis Date: 02/28/20 **Instrument:** MS3_7700SWA

Sample Id	DF	Qc Type	Time	Run #	Test Group	Rept Limit Matrix	Qc Matrix	Anal Method	Prep Batch	Comments:	Stds:
RINSE	1	NA	19:33	1		SOIL	SOIL	SW846	82693		()
CalBlk V-322051	1	ISBLK	19:37	2		SOIL	SOIL				V-322051(Cal Blk WARNING)
CalStd1 V-322052	1	CAL	19:42	3							V-322052(Cal Std-1 WARNING)
CalStd2 V-322053	1	CAL	19:46	4							V-322053(Cal Std-2 WARNING)
CalStd3 V-322054	1	CAL	19:50	5							V-322054(Cal Std-3 WARNING)
CalStd4 V-322055	1	CAL	19:55	6							V-322055(Cal Std-4 WARNING)
CalStd5 V-322056	1	CAL	19:59	7							V-322056(Cal Std-5 WARNING)
ICV V-322057	1	ICV	20:03	8							V-322057(ICV WARNING)
LLICV V-322062	1	LLICV	20:07	9		SOIL	SOIL	SW846	82693		V-322062(LL-ICV/CCV SOIL WARNING)
ICB V-322058	1	ICB	20:12	10							V-322058(ICB/CCB WARNING)
ICSA V-322059	1	ICSA	20:16	11							V-322059(ICSA WARNING)
RINSE	1	NA	20:20	12		SOIL	SOIL	SW846	82693		()
LRS V-322060	1	LRS	20:25	13		SOIL	SOIL	SW846	82693	Ag fail.	V-322060(LRS WARNING)
RINSE	1	NA	20:29	14		SOIL	SOIL	SW846	82693		()
CCV V-322061	1	CCV	20:33	15							V-322061(CCV WARNING)
CCB V-322058	1	CCB	20:37	16							V-322058(ICB/CCB WARNING)
MB 82693	1	MB	20:42	17		SOIL	SOIL	SW846	82693		()
LCS 82693	1	LCS	20:46	18		SOIL	SOIL	SW846	82693		()
LCS MR 82693	1	LCS	20:50	19		SOIL	SOIL	SW846	82693		()
AD15963-001	1	SMP	20:54	20	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15963-001	1	MR	20:59	21	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15963-001	5	SD	21:03	22	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15963-001	1	MS	21:07	23	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15963-001	1	MSD	21:11	24	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15963-001	1	PS	21:16	25	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
RINSE	1	NA	21:20	26		SOIL	SOIL	SW846	82693		()
CCV V-322061	1	CCV	21:24	27							V-322061(CCV WARNING)
CCB V-322058	1	CCB	21:28	28							V-322058(ICB/CCB WARNING)
AD15955-021	1	SMP	21:33	29	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15955-022	1	SMP	21:37	30	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15955-023	1	SMP	21:41	31	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15955-024	1	SMP	21:46	32	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15955-025	1	SMP	21:50	33	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15955-026	1	SMP	21:54	34	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15946-001	1	SMP	21:58	35	MET-TAL6020S	SOIL	SOIL	SW846	82693		()
AD15945-002	1	SMP	22:03	36	MET-RCRA-MS	SOIL	SOIL	SW846	82693		()
AD15956-001	1	SMP	22:07	37	MET-RCRA-MS	SOIL	SOIL	SW846	82693		()
RINSE	1	NA	22:11	38		SOIL	SOIL	SW846	82693		()
CCV V-322061	1	CCV	22:15	39							V-322061(CCV WARNING)
CCB V-322058	1	CCB	22:20	40							V-322058(ICB/CCB WARNING)
AD15956-007	1	SMP	22:24	41	MET-RCRA-MS	SOIL	SOIL	SW846	82693		()
AD15956-013	1	SMP	22:28	42	MET-RCRA-MS	SOIL	SOIL	SW846	82693		()
AD15903-009	3	SMP	22:33	43	MET-TAL6020S	SOIL	SOIL	SW846	82680	Report As.	()
RINSE	1	NA	22:37	44		SOIL	SOIL	SW846	82693		()
CCV V-322061	1	CCV	22:41	45							V-322061(CCV WARNING)
CCB V-322058	1	CCB	22:45	46							V-322058(ICB/CCB WARNING)

Comments/Reviewedby:

pcousineau
192.168.1.87 3/2/2020 12:17:47 PM

B-25442 Report As for 15903-009.
B-25454 Report Ag, As, Be, Cd, Sb, Se, Tl. LRS fail for Ag. Ag LR = 100ppb. PC.

3/2/20

Note: ICP-MS dilution factor column does not reflect dilution which is performed prior to analysis. Secondary analytical dilution is documented on prep log. Dilution Factor: 2x 2/28/20

Standard/Batch/SnCl2 Lot #:

ICPMS Internal Standard Summary Report

TuneID: 1

Batch/FileID: S022820BNSample ID: CalBlk V-322051 Sample Date 02/28/20 Sample Time: 19:37

IS ID:	Area	Area Limit		
Ho-1	2201437.03	1541005.921	-	2861868.139
In-1	1517253.44	1062077.408	-	1972429.472
Sc-1	1110712.59	777498.813	-	1443926.367
Tb-1	2238252.05	1566776.435	-	2909727.665

QcType	txtSamId:	Pos	Ho-1 Area	In-1 Area	Sc-1 Area	Tb-1 Area	Area	Area	Area	Area
ISBLK	CalBlk V-322051	2	2201437.	1517253.	1110712.	2238252.				
SMP	RINSE	1	2379261.	1677898.	1210614.	2442092.				
CAL	CalStd1 V-32205	3	2407519.	1708804.	1235359.	2463516.				
CAL	CalStd2 V-32205	4	2383103.	1708002.	1233645.	2450489.				
CAL	CalStd3 V-32205	5	2418630.	1701453.	1253207.	2473787.				
CAL	CalStd4 V-32205	6	2381171.	1666562.	1229360.	2448467.				
CAL	CalStd5 V-32205	7	2354338.	1632656.	1207252.	2409919.				
ICV	ICV V-322057	8	2360470.	1647235.	1213690.	2417735.				
LLICV	LLICV V-322062	9	2375001.	1670021.	1223457.	2411783.				
ICB	ICB V-322058	10	2364018.	1676611.	1213804.	2416874.				
ICSA	ICSA V-322059	11	2480680.	1626019.	1268439.	2504473.				
SMP	RINSE	12	2556455.	1839473.	1331240.	2625579.				
LRS	LRS V-322060	13	2396531.	1627272.	1240934.	2452687.				
SMP	RINSE	14	2486417.	1785316.	1324724.	2555805.				
CCV	CCV V-322061	15	2458325.	1724569.	1280099.	2501181.				
CCB	CCB V-322058	16	2430915.	1739648.	1246270.	2467808.				
MB	MB 82693	17	2447400.	1714224.	1252740.	2486398.				
LCS	LCS 82693	18	2370693.	1633923.	1264888.	2412076.				
MR	LCS MR 82693	19	2414278.	1679339.	1271889.	2468726.				
SMP	AD15963-001	20	2419280.	1666193.	1314668.	2483611.				
MR	AD15963-001	21	2464276.	1674329.	1476848.	* 2534354.				
SD	AD15963-001	22	2417093.	1699967.	1226933.	2488773.				
MS	AD15963-001	23	2378689.	1619247.	1344434.	2426093.				
MSD	AD15963-001	24	2431046.	1684019.	1378297.	2465336.				
PS	AD15963-001	25	2456959.	1688797.	1381436.	2494319.				
SMP	RINSE	26	2352363.	1674262.	1173490.	2418093.				
CCV	CCV V-322061	27	2420982.	1695207.	1242490.	2487215.				
CCB	CCB V-322058	28	2417626.	1736136.	1255870.	2485549.				
SMP	AD15955-021	29	2497035.	1690699.	1605809.	* 2552499.				
SMP	AD15955-022	30	2482520.	1678925.	1639188.	* 2543952.				
SMP	AD15955-023	31	2518486.	1662253.	1526583.	* 2529343.				
SMP	AD15955-024	32	2528285.	1720668.	1760024.	* 2601721.				
SMP	AD15955-025	33	2537146.	1806377.	1672941.	* 2601363.				
SMP	AD15955-026	34	2508453.	1651431.	1723715.	* 2545331.				
SMP	AD15946-001	35	2591143.	1754853.	1766452.	* 2678102.				
SMP	AD15945-002	36	2677597.	1730751.	2176360.	* 2731536.				
SMP	AD15956-001	37	2582214.	1818631.	1365045.	2608984.				
SMP	RINSE	38	2513312.	1816261.	1321985.	2587049.				
CCV	CCV V-322061	39	2523689.	1800660.	1350269.	2578673.				
CCB	CCB V-322058	40	2550497.	1843918.	1370009.	2604552.				
SMP	AD15956-007	41	2565249.	1811141.	1386993.	2617389.				
SMP	AD15956-013	42	2570381.	1813085.	1388256.	2620920.				
SMP	AD15903-009	43	2532413.	1803951.	1478349.	* 2603955.				
SMP	RINSE	44	2535303.	1853515.	1359893.	2616478.				
CCV	CCV V-322061	45	2554253.	1824337.	1385469.	2611373.				
CCB	CCB V-322058	46	2548992.	1816191.	1353495.	2601600.				

* Indicates Internal Standard Area outside of limits

ICPMS Internal Standard Summary Report

TuneID: 2

Batch/FileID: S022820BNSample ID: CalBlk V-322051 Sample Date 02/28/20 Sample Time: 19:37

IS ID:	Area	Area Limit		
Ho-2	1002979.73	702085.811	-	1303873.649
In-2	312767.23	218937.061	-	406597.399
Sc-2	54425.68	38097.976	-	70753.384
Tb-2	1011942.85	708359.995	-	1315525.705

QcType	txtSamId:	Pos	Ho-2 Area	In-2 Area	Sc-2 Area	Tb-2 Area	Area	Area	Area	Area
ISBLK	CalBlk V-322051	2	1002979.	312767.2	54425.68	1011942.				
SMP	RINSE	1	1002940.	311453.0	54816.84	1012288.				
CAL	CalStd1 V-32205	3	1002245.	314501.0	54986.32	1011893.				
CAL	CalStd2 V-32205	4	959152.6	299264.6	51982.14	968462.9				
CAL	CalStd3 V-32205	5	1020764.	316836.7	56525.06	1031206.				
CAL	CalStd4 V-32205	6	1021997.	312721.5	55244.81	1024425.				
CAL	CalStd5 V-32205	7	1003305.	304318.3	53299.23	1011627.				
ICV	ICV V-322057	8	1006472.	309417.8	54488.15	1014266.				
LLICV	LLICV V-322062	9	1007971.	315588.2	54702.09	1013788.				
ICB	ICB V-322058	10	996757.3	312418.5	53887.72	1007634.				
ICSA	ICSA V-322059	11	1001694.	299857.6	58038.65	995062.9				
SMP	RINSE	12	1030385.	324474.7	57821.17	1039238.				
LRS	LRS V-322060	13	984652.7	296796.6	54938.29	990718.9				
SMP	RINSE	14	1026959.	324953.5	57673.06	1034540.				
CCV	CCV V-322061	15	997510.8	308138.4	54951.23	1004017.				
CCB	CCB V-322058	16	1005130.	316686.0	55410.87	1016729.				
MB	MB 82693	17	1006758.	312075.9	55313.94	1012518.				
LCS	LCS 82693	18	1011789.	311818.0	56451.70	1017789.				
MR	LCS MR 82693	19	1012932.	309030.8	55208.11	1018230.				
SMP	AD15963-001	20	1010020.	305201.9	57757.91	1020554.				
MR	AD15963-001	21	1041914.	313643.4	65304.17	1047076.				
SD	AD15963-001	22	1009145.	310113.6	54104.78	1013031.				
MS	AD15963-001	23	995477.6	301400.8	59628.10	996017.1				
MSD	AD15963-001	24	1014512.	312908.9	59712.78	1019823.				
PS	AD15963-001	25	1028560.	310563.6	59795.93	1031439.				
SMP	RINSE	26	1016430.	315598.1	55483.21	1020469.				
CCV	CCV V-322061	27	903102.0	279216.3	48707.06	914474.4				
CCB	CCB V-322058	28	1010531.	315728.8	54935.04	1012472.				
SMP	AD15955-021	29	1042990.	311913.2	73171.80	* 1052331.				
SMP	AD15955-022	30	1034651.	309085.5	73853.39	* 1038821.				
SMP	AD15955-023	31	1062400.	310748.3	68747.45	1053495.				
SMP	AD15955-024	32	1058721.	312829.2	77831.22	* 1060081.				
SMP	AD15955-025	33	1076043.	338292.2	75612.43	* 1083118.				
SMP	AD15955-026	34	1041891.	301621.4	75747.11	* 1049603.				
SMP	AD15946-001	35	1094052.	319020.3	80047.95	* 1106412.				
SMP	AD15945-002	36	958979.3	268196.1	91662.63	* 964104.8				
SMP	AD15956-001	37	1049120.	325796.4	58670.50	1057304.				
SMP	RINSE	38	988297.0	303155.1	52739.98	1000536.				
CCV	CCV V-322061	39	1067305.	332713.2	59119.51	1076576.				
CCB	CCB V-322058	40	1055539.	338654.8	60188.47	1069629.				
SMP	AD15956-007	41	1045074.	325112.8	59022.74	1060625.				
SMP	AD15956-013	42	1049134.	326363.8	60568.55	1058576.				
SMP	AD15903-009	43	1060100.	327844.0	65359.14	1070258.				
SMP	RINSE	44	1061038.	340399.7	59475.46	1077577.				
CCV	CCV V-322061	45	1063034.	334129.3	60022.48	1070651.				
CCB	CCB V-322058	46	1046261.	337053.7	59894.39	1062667.				

* Indicates Internal Standard Area outside of limits

Wet Chemistry Data

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AD15946-001
Matrix Soil
Client SampleID: TB-110-1 COMP

Project Number: 0022703
Received Date: 2/27/2020
Collect Date: 2/26/2020

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cyanide	CN-S-9012	1	ND	mg/Kg	0.36	03/04/20	03/04/20

VERITECH Wet Chem Form1 Analysis Summary
% Solids

TestGroupName: % Solids SM2540G **Project #: 0022703**

TestGroup: %SOLIDS

Lab#	Client SampleID	Matrix	Dilution:	Result	Units:	RL	Prep Date	Analysis Date	Received Date	Collect Date
AD15946-001	TB-110-1 COMP	Soil	1	66	Percent			02/28/20	02/27/20	02/26/20
AD15946-002	TB-110-1 GRAB	Soil/Terracore	1	72	Percent			02/28/20	02/27/20	02/26/20

% Solids Report

Analysis Type: SOLIDS-SS
BatchID: SOLIDS-SS-10338

QcType	SampleID:	Rounded Result	Raw Result	Units	Tare Weight	Wet Weight	Dry Weight	Analysis Date	Analyzed By	QC RPD	Rpd Limit
DUP	AD15946-001	66	65.79892	Percent	1.32	12.46	8.64	02/28/20	BEENA	0.87	5
Sample	AD15945-001	82	82.20721	Percent	1.31	10.19	8.61	02/28/20	BEENA		
Sample	AD15945-002	85	84.76563	Percent	1.33	11.57	10.01	02/28/20	BEENA		
Sample	AD15946-001	66	66.37168	Percent	1.32	12.62	8.82	02/28/20	BEENA		
Sample	AD15946-002	72	71.88161	Percent	1.32	10.78	8.12	02/28/20	BEENA		
Sample	AD15955-001	91	90.54726	Percent	1.32	13.38	12.24	02/28/20	BEENA		
Sample	AD15955-002	86	86.06486	Percent	1.32	12.73	11.15	02/28/20	BEENA		
Sample	AD15955-003	80	80.21486	Percent	1.32	12.49	10.28	02/28/20	BEENA		
Sample	AD15955-004	91	90.62812	Percent	1.33	11.36	10.42	02/28/20	BEENA		
Sample	AD15955-005	90	90.32542	Percent	1.32	12.69	11.59	02/28/20	BEENA		
Sample	AD15955-006	91	90.70191	Percent	1.32	12.29	11.27	02/28/20	BEENA		
Sample	AD15955-007	93	93.27902	Percent	1.32	11.14	10.47	02/28/20	BEENA		
Sample	AD15955-008	89	89.33218	Percent	1.32	12.85	11.62	02/28/20	BEENA		
Sample	AD15955-009	89	89.09427	Percent	1.31	12.13	10.95	02/28/20	BEENA		
Sample	AD15955-010	87	87.31527	Percent	1.31	9.43	8.39	02/28/20	BEENA		
Sample	AD15955-011	91	90.95064	Percent	1.32	12.26	11.27	02/28/20	BEENA		
Sample	AD15955-012	85	84.70280	Percent	1.32	12.76	11.01	02/28/20	BEENA		
Sample	AD15955-013	84	84.10351	Percent	1.32	12.14	10.42	02/28/20	BEENA		
Sample	AD15955-014	89	88.75000	Percent	1.32	11.72	10.56	02/28/20	BEENA		
Sample	AD15955-015	87	87.07150	Percent	1.32	11.53	10.20	02/28/20	BEENA		
Sample	AD15955-016	86	85.67775	Percent	1.32	13.05	11.38	02/28/20	BEENA		

* - Indicates Failed Rpd Criteria

MS/MSD/DUP Recovery

0022703 0173

Prep Batch: S-2348 Sample ID: AD15964-001
Method: EPA 9012B Matrix: Soil

Qc Type: DUP	Limits		DUP	Sample			MS/MSD/DUP			Non Spike		
Analyte	Rpd	Dil	Conc	Conc	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	35	1	0	0.0321	NA		20200304133	15	03/04/20 14:03	20200304133	14	03/04/20 14:01

Qc Type: MS		Limits		MS	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Dil	Conc	Conc	% Rec	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	1	0.2987	0.0321	67	Ms	20200304133	16	03/04/20 14:06	20200304133	14	03/04/20 14:01

Qc Type: MSD		Limits		MSD	Sample			MS/MSD/DUP			Non Spike		
Analyte	Amt	Recov	Rpd	Dil	Conc	Conc	% Rec	Rpd	Flag	Batch	RunID	Analysis Date	Batch	RunID	Analysis Date
Cyanide	0.4	75-125	20	1	0.3839	0.0321	88	25		20200304133	17	03/04/20 14:08	20200304133	14	03/04/20 14:01

LCS Recoveries

BatchRunID/RunID:====>			202003041331-13									
QcBatchID:====>			LCSS-2348DUP									
Date/Time:====>			03/04/20 13:59									
Analytical Method:====>			EPA 9012B									
Matrix:====>			Soil		Soil		Soil		Soil		Soil	
Analyte	EPA 9012B Amt	Limits	Amt	Limits	% Rec	Flags	% Rec	Flags	% Rec	Flags	% Rec	Flags
Cyanide	0.4	80-120			102							

Calibration Summary:

0022703 0175

Instrument: DA1
Analysis Meth: EPA 9012B

Analyte	Batch ID	Run#	Qc Type	Recov	Spk Amt	Limit
Cyanide	20200304133	9	ICV	102	0.4	85-115
Cyanide	20200304133	21	CCV	102	0.4	85-115
Cyanide	20200304133	26	CCV	100	0.4	85-115

Blank Summary

Instrument: DA1

Qc Type: Method Blank Summary Prep Date: 3/4/20

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200304133	3/4/20 13:54	MBS-2348	11	Cyanide	ND	0.020

Qc Type: ICB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200304133	3/4/20 13:52	CCB	10	Cyanide	ND	0.020

Qc Type: CCB Summary Prep Date: NA

Run Batch ID	Analysis Date/Time	Sample ID	Run#	Analyte	Conc	RL
20200304133	3/4/20 14:19	CCB	22	Cyanide	ND	0.020
20200304133	3/4/20 14:28	CCB	27	Cyanide	ND	0.020

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke Report Of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0030502

Sample ID: TB-111-1 Comp
Lab#: AD16045-001
Matrix: Soil

Collection Date: 3/4/2020
Receipt Date: 3/5/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0065	ND
Aldrin	1	mg/kg	0.0065	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0065	ND
delta-BHC	1	mg/kg	0.0065	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0065	ND
Endosulfan II	1	mg/kg	0.0065	ND
Endosulfan Sulfate	1	mg/kg	0.0065	ND
Endrin	1	mg/kg	0.0065	ND
Endrin Aldehyde	1	mg/kg	0.0065	ND
Endrin Ketone	1	mg/kg	0.0065	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0065	ND
Heptachlor Epoxide	1	mg/kg	0.0065	ND
Methoxychlor	1	mg/kg	0.0065	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0065	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	101.46	100	37	141	101	
TCMX-Surrogate	98.00	100	37	141	98	
DCB-Surrogate	94.02	100	33	146	94	
DCB-Surrogate	81.76	100	33	146	82	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Sample ID: TB-111-1 Comp **Collection Date: 3/4/2020**
Lab#: AD16045-001 **Receipt Date: 3/5/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	141.08	100	37	141	141	
TCMX-Surrogate	133.19	100	37	141	133	
DCB-Surrogate	124.81	100	34	146	125	
DCB-Surrogate	125.03	100	34	146	125	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND
2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND

Sample ID: TB-111-1 Comp **Collection Date: 3/4/2020**
Lab#: AD16045-001 **Receipt Date: 3/5/2020**
Matrix: Soil

N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	45.77	50	58	148	92	
Phenol-d5	74.29	100	49	129	74	
Nitrobenzene-d5	33.77	50	52	129	68	
2-Fluorophenol	73.91	100	43	128	74	
2-Fluorobiphenyl	37.24	50	58	125	74	
2,4,6-Tribromophenol	81.16	100	54	145	81	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Heneicosane	**1**	**mg/kg**	**12.63**	**0.094J**
Octadecane	**1**	**mg/kg**	**14.11**	**0.11J**
unknown	**1**	**mg/kg**	**15.73**	**0.21J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.1JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.23**	**0.11J**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.67**	**0.13J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.8J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**8700**
Barium	**1**	**mg/kg**	**13**	**19**
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.5**	**24**
Cobalt	**1**	**mg/kg**	**3.2**	**7.5**
Copper	**1**	**mg/kg**	**6.5**	**6.6**
Iron	**1**	**mg/kg**	**260**	**24000**
Lead	**1**	**mg/kg**	**6.5**	**8.6**
Magnesium	**1**	**mg/kg**	**650**	**4400**
Manganese	**1**	**mg/kg**	**13**	**190**
Nickel	**1**	**mg/kg**	**6.5**	**20**
Potassium	**1**	**mg/kg**	**650**	**1900**
Sodium	**1**	**mg/kg**	**320**	**1400**
Vanadium	**1**	**mg/kg**	**13**	**29**
Zinc	**1**	**mg/kg**	**13**	**53**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**6.7**
Beryllium	**1**	**mg/kg**	**0.26**	**0.39**
Cadmium	1	mg/kg	0.52	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID:	**TB-111-1 Grab**	**Collection Date:**	**3/4/2020**
Lab#:	**AD16045-002**	**Receipt Date:**	**3/5/2020**
Matrix:	**Soil/Terracore**		

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**63**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.789	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	0.789	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.789	mg/kg	0.0025	ND
1,1,2-Trichloroethane	0.789	mg/kg	0.0025	ND
1,1-Dichloroethane	0.789	mg/kg	0.0025	ND
1,1-Dichloroethene	0.789	mg/kg	0.0025	ND
1,2,3-Trichlorobenzene	0.789	mg/kg	0.0025	ND
1,2,4-Trichlorobenzene	0.789	mg/kg	0.0025	ND
1,2-Dibromo-3-chloropropane	0.789	mg/kg	0.0025	ND
1,2-Dibromoethane	0.789	mg/kg	0.00098	ND
1,2-Dichlorobenzene	0.789	mg/kg	0.0025	ND
1,2-Dichloroethane	0.789	mg/kg	0.0025	ND
1,2-Dichloropropane	0.789	mg/kg	0.0025	ND
1,3-Dichlorobenzene	0.789	mg/kg	0.0025	ND
1,4-Dichlorobenzene	0.789	mg/kg	0.0025	ND
1,4-Dioxane	0.789	mg/kg	0.13	ND
2-Butanone	**0.789**	**mg/kg**	**0.0025**	**0.0036**
2-Hexanone	0.789	mg/kg	0.0025	ND
4-Methyl-2-pentanone	0.789	mg/kg	0.0025	ND
Acetone	**0.789**	**mg/kg**	**0.013**	**0.052**
Benzene	0.789	mg/kg	0.0013	ND
Bromochloromethane	0.789	mg/kg	0.0025	ND
Bromodichloromethane	0.789	mg/kg	0.0025	ND
Bromoform	0.789	mg/kg	0.0025	ND
Bromomethane	0.789	mg/kg	0.0025	ND
Carbon disulfide	**0.789**	**mg/kg**	**0.0025**	**0.0048**
Carbon tetrachloride	0.789	mg/kg	0.0025	ND
Chlorobenzene	0.789	mg/kg	0.0025	ND
Chloroethane	0.789	mg/kg	0.0025	ND
Chloroform	0.789	mg/kg	0.0025	ND
Chloromethane	0.789	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	0.789	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	0.789	mg/kg	0.0025	ND
Cyclohexane	0.789	mg/kg	0.0025	ND
Dibromochloromethane	0.789	mg/kg	0.0025	ND
Dichlorodifluoromethane	0.789	mg/kg	0.0025	ND
Ethylbenzene	0.789	mg/kg	0.0013	ND
Isopropylbenzene	0.789	mg/kg	0.0013	ND
m&p-Xylenes	0.789	mg/kg	0.0013	ND
Methyl Acetate	0.789	mg/kg	0.0025	ND
Methylcyclohexane	0.789	mg/kg	0.0025	ND
Methylene chloride	0.789	mg/kg	0.0025	ND
Methyl-t-butyl ether	0.789	mg/kg	0.0013	ND
o-Xylene	0.789	mg/kg	0.0013	ND
Styrene	0.789	mg/kg	0.0025	ND
Tetrachloroethene	0.789	mg/kg	0.0025	ND
Toluene	0.789	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.789	mg/kg	0.0025	ND
trans-1,3-Dichloropropene	0.789	mg/kg	0.0025	ND
Trichloroethene	0.789	mg/kg	0.0025	ND
Trichlorofluoromethane	0.789	mg/kg	0.0025	ND
Vinyl chloride	0.789	mg/kg	0.0025	ND
Xylenes (Total)	0.789	mg/kg	0.0013	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.54	30	68	122	98	
Dibromofluoromethane	30.39	30	63	140	101	
Bromofluorobenzene	31.24	30	64	129	104	
1,2-Dichloroethane-d4	31.72	30	63	143	106	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-111-1 Grab
Lab#: AD16045-002
Matrix: Soil/Terracore

Collection Date: 3/4/2020
Receipt Date: 3/5/2020

Acetaldehyde	0.789	mg/kg	2.35	0.0051J
Ethanol	0.789	mg/kg	2.93	0.012J
TotalVolatileTic	0.789	mg/kg	NA	0.017J

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

CHAIN OF CUSTODY RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): 0030502

Page 1 of 1

Customer Information

1a) Customer: Arcadis
Address: 17-17 Route 208 North
Fair Lawn, NJ 07410
1b) Email/Cell/Fax/Ph: christopher.goldsmith@arcadis.com
1c) Send Invoice to: richard.gilmour@arcadis.com
1d) Send Report to: max.goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 3001015.00040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / (NY) / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
(5) Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 days		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD16045

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA + 15	TCL SVOC-BNA-15	TAL Metals	TAL CN	TCL PCB	TCL Pest					8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: DI H2O	9) Comments
001/002	TB-111-1	Se	3.4.2020	1000	X	X	X	X	X	X	X	X				2	~~4~~	1						2	

10) Relinquished by:	Accepted by:	Date	Time
Kim Hanson	FedEx	3.4.2020	1520
FedEx	[signature]	3/5/2020	0915

11) Sampler (print name): Kim Hanson Date: 03.04.2020

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.2°C

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke Report Of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0032601

Sample ID: TB-112-01 Comp
Lab#: AD16382-001
Matrix: Soil

Collection Date: 3/25/2020
Receipt Date: 3/25/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		42

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.57	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.20	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.012	ND
Aldrin	1	mg/kg	0.012	ND
Alpha-BHC	1	mg/kg	0.0024	ND
beta-BHC	1	mg/kg	0.0024	ND
Chlordane (Total)	1	mg/kg	0.012	ND
delta-BHC	1	mg/kg	0.012	ND
Dieldrin	1	mg/kg	0.0024	ND
Endosulfan I	1	mg/kg	0.012	ND
Endosulfan II	1	mg/kg	0.012	ND
Endosulfan Sulfate	1	mg/kg	0.012	ND
Endrin	1	mg/kg	0.012	ND
Endrin Aldehyde	1	mg/kg	0.012	ND
Endrin Ketone	1	mg/kg	0.012	ND
gamma-BHC	1	mg/kg	0.0024	ND
Heptachlor	1	mg/kg	0.012	ND
Heptachlor Epoxide	1	mg/kg	0.012	ND
Methoxychlor	1	mg/kg	0.012	ND
p,p'-DDD	1	mg/kg	0.0060	ND
p,p'-DDE	1	mg/kg	0.0060	ND
p,p'-DDT	1	mg/kg	0.0060	ND
Toxaphene	1	mg/kg	0.060	ND
y-Chlordane	1	mg/kg	0.012	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	102.97	100	37	141	103	
TCMX-Surrogate	97.64	100	37	141	98	
DCB-Surrogate	87.66	100	33	146	88	
DCB-Surrogate	94.74	100	33	146	95	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.060	ND
Aroclor-1016	1	mg/kg	0.060	ND
Aroclor-1221	1	mg/kg	0.060	ND
Aroclor-1232	1	mg/kg	0.060	ND
Aroclor-1242	1	mg/kg	0.060	ND
Aroclor-1248	1	mg/kg	0.060	ND
Aroclor-1254	1	mg/kg	0.060	ND
Aroclor-1260	1	mg/kg	0.060	ND
Aroclor-1262	1	mg/kg	0.060	ND
Aroclor-1268	1	mg/kg	0.060	ND

Sample ID: TB-112-01 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-001 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	82.26	100	37	141	82	
TCMX-Surrogate	99.11	100	37	141	99	
DCB-Surrogate	107.45	100	34	146	107	
DCB-Surrogate	91.36	100	34	146	91	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.079	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.079	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.079	ND
2,4,5-Trichlorophenol	1	mg/kg	0.079	ND
2,4,6-Trichlorophenol	1	mg/kg	0.079	ND
2,4-Dichlorophenol	1	mg/kg	0.020	ND
2,4-Dimethylphenol	1	mg/kg	0.020	ND
2,4-Dinitrophenol	1	mg/kg	0.40	ND
2,4-Dinitrotoluene	1	mg/kg	0.079	ND
2,6-Dinitrotoluene	1	mg/kg	0.079	ND
2-Chloronaphthalene	1	mg/kg	0.079	ND
2-Chlorophenol	1	mg/kg	0.079	ND
2-Methylnaphthalene	1	mg/kg	0.079	ND
2-Methylphenol	1	mg/kg	0.020	ND
2-Nitroaniline	1	mg/kg	0.079	ND
2-Nitrophenol	1	mg/kg	0.079	ND
3&4-Methylphenol	1	mg/kg	0.020	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.079	ND
3-Nitroaniline	1	mg/kg	0.079	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.40	ND
4-Bromophenyl-phenylether	1	mg/kg	0.079	ND
4-Chloro-3-methylphenol	1	mg/kg	0.079	ND
4-Chloroaniline	1	mg/kg	0.020	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.079	ND
4-Nitroaniline	1	mg/kg	0.079	ND
4-Nitrophenol	1	mg/kg	0.079	ND
Acenaphthene	1	mg/kg	0.079	ND
Acenaphthylene	1	mg/kg	0.079	ND
Acetophenone	1	mg/kg	0.079	ND
Anthracene	1	mg/kg	0.079	ND
Atrazine	1	mg/kg	0.079	ND
Benzaldehyde	1	mg/kg	0.079	ND
Benzo[a]anthracene	1	mg/kg	0.079	ND
Benzo[a]pyrene	1	mg/kg	0.079	ND
Benzo[b]fluoranthene	1	mg/kg	0.079	ND
Benzo[g,h,i]perylene	1	mg/kg	0.079	ND
Benzo[k]fluoranthene	1	mg/kg	0.079	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.079	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.020	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.079	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.079	ND
Butylbenzylphthalate	1	mg/kg	0.079	ND
Caprolactam	1	mg/kg	0.079	ND
Carbazole	1	mg/kg	0.079	ND
Chrysene	1	mg/kg	0.079	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.079	ND
Dibenzofuran	1	mg/kg	0.020	ND
Diethylphthalate	1	mg/kg	0.079	ND
Dimethylphthalate	1	mg/kg	0.079	ND
Di-n-butylphthalate	1	mg/kg	0.020	ND
Di-n-octylphthalate	1	mg/kg	0.079	ND
Fluoranthene	1	mg/kg	0.079	ND
Fluorene	1	mg/kg	0.079	ND
Hexachlorobenzene	1	mg/kg	0.079	ND
Hexachlorobutadiene	1	mg/kg	0.079	ND
Hexachlorocyclopentadiene	1	mg/kg	0.079	ND
Hexachloroethane	1	mg/kg	0.079	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.079	ND
Isophorone	1	mg/kg	0.079	ND
Naphthalene	1	mg/kg	0.020	ND
Nitrobenzene	1	mg/kg	0.079	ND

N-Nitroso-di-n-propylamine	1	mg/kg	0.020	ND
N-Nitrosodiphenylamine	1	mg/kg	0.079	ND
Pentachlorophenol	1	mg/kg	0.40	ND
Phenanthrene	1	mg/kg	0.079	ND
Phenol	1	mg/kg	0.079	ND
Pyrene	1	mg/kg	0.079	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	44.78	50	58	148	90	
Phenol-d5	58.16	100	49	129	58	
Nitrobenzene-d5	28.09	50	52	129	56	
2-Fluorophenol	34.87	100	43	128	35	Sa8
2-Fluorobiphenyl	35.38	50	58	125	71	
2,4,6-Tribromophenol	81.62	100	54	145	82	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
unknown	**1**	**mg/kg**	**12.47**	**0.40J**
unknown	**1**	**mg/kg**	**13.22**	**0.36J**
[1,1'-Biphenyl]-3,3'-dicarboxaldehyde,	**1**	**mg/kg**	**13.55**	**0.57J**
1,3,7,9-Tetramethoxy-4-methyldibenzofur	**1**	**mg/kg**	**13.72**	**0.77J**
Hexacosane	**1**	**mg/kg**	**14.1**	**0.38J**
unknown	**1**	**mg/kg**	**14.77**	**0.22J**
unknown	**1**	**mg/kg**	**14.87**	**0.24J**
8-Isopropyl-1-methylbicyclo[5.3.1]dec-7	**1**	**mg/kg**	**15.57**	**1.5J**
D-Friedoolean-14-en-3-one	**1**	**mg/kg**	**16.24**	**2.9J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.28**	**8.9JAB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**16J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**480**	**13000**
Barium	**1**	**mg/kg**	**24**	**28**
Calcium	1	mg/kg	2400	ND
Chromium	**1**	**mg/kg**	**12**	**37**
Cobalt	**1**	**mg/kg**	**6.0**	**8.7**
Copper	1	mg/kg	12	ND
Iron	**1**	**mg/kg**	**480**	**30000**
Lead	1	mg/kg	12	ND
Magnesium	**1**	**mg/kg**	**1200**	**6700**
Manganese	**1**	**mg/kg**	**24**	**210**
Nickel	**1**	**mg/kg**	**12**	**21**
Potassium	**1**	**mg/kg**	**1200**	**4100**
Sodium	**1**	**mg/kg**	**600**	**12000**
Vanadium	**1**	**mg/kg**	**24**	**41**
Zinc	**1**	**mg/kg**	**24**	**58**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.9	ND
Arsenic	**1**	**mg/kg**	**0.48**	**9.8**
Beryllium	**1**	**mg/kg**	**0.48**	**0.58**
Cadmium	1	mg/kg	0.95	ND
Selenium	1	mg/kg	4.8	ND
Silver	1	mg/kg	0.48	ND
Thallium	1	mg/kg	0.95	ND

Sample ID: TB-112-01 Grab | **Collection Date: 3/25/2020**
Lab#: AD16382-002 | **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**35**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.12	mg/kg	0.0064	ND
1,1,2,2-Tetrachloroethane	1.12	mg/kg	0.0064	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.12	mg/kg	0.0064	ND
1,1,2-Trichloroethane	1.12	mg/kg	0.0064	ND
1,1-Dichloroethane	1.12	mg/kg	0.0064	ND
1,1-Dichloroethene	1.12	mg/kg	0.0064	ND
1,2,3-Trichlorobenzene	1.12	mg/kg	0.0064	ND
1,2,4-Trichlorobenzene	1.12	mg/kg	0.0064	ND
1,2-Dibromo-3-chloropropane	1.12	mg/kg	0.0064	ND
1,2-Dibromoethane	1.12	mg/kg	0.0032	ND
1,2-Dichlorobenzene	1.12	mg/kg	0.0064	ND
1,2-Dichloroethane	1.12	mg/kg	0.0050	ND
1,2-Dichloropropane	1.12	mg/kg	0.0064	ND
1,3-Dichlorobenzene	1.12	mg/kg	0.0064	ND
1,4-Dichlorobenzene	1.12	mg/kg	0.0064	ND
1,4-Dioxane	1.12	mg/kg	0.32	ND
2-Butanone	**1.12**	**mg/kg**	**0.0064**	**0.018**
2-Hexanone	1.12	mg/kg	0.0064	ND
4-Methyl-2-pentanone	1.12	mg/kg	0.0064	ND
Acetone	**1.12**	**mg/kg**	**0.032**	**0.14**
Benzene	1.12	mg/kg	0.0032	ND
Bromochloromethane	1.12	mg/kg	0.0064	ND
Bromodichloromethane	1.12	mg/kg	0.0064	ND
Bromoform	1.12	mg/kg	0.0064	ND
Bromomethane	1.12	mg/kg	0.0064	ND
Carbon disulfide	**1.12**	**mg/kg**	**0.0064**	**0.12**
Carbon tetrachloride	1.12	mg/kg	0.0064	ND
Chlorobenzene	1.12	mg/kg	0.0064	ND
Chloroethane	1.12	mg/kg	0.0064	ND
Chloroform	1.12	mg/kg	0.0064	ND
Chloromethane	1.12	mg/kg	0.0064	ND
cis-1,2-Dichloroethene	1.12	mg/kg	0.0064	ND
cis-1,3-Dichloropropene	1.12	mg/kg	0.0064	ND
Cyclohexane	1.12	mg/kg	0.0064	ND
Dibromochloromethane	1.12	mg/kg	0.0064	ND
Dichlorodifluoromethane	1.12	mg/kg	0.0064	ND
Ethylbenzene	1.12	mg/kg	0.0032	ND
Isopropylbenzene	1.12	mg/kg	0.0032	ND
m&p-Xylenes	1.12	mg/kg	0.0032	ND
Methyl Acetate	1.12	mg/kg	0.0064	ND
Methylcyclohexane	1.12	mg/kg	0.0064	ND
Methylene chloride	**1.12**	**mg/kg**	**0.0064**	**0.0076**
Methyl-t-butyl ether	1.12	mg/kg	0.0032	ND
o-Xylene	1.12	mg/kg	0.0032	ND
Styrene	1.12	mg/kg	0.0064	ND
Tetrachloroethene	1.12	mg/kg	0.0064	ND
Toluene	**1.12**	**mg/kg**	**0.0032**	**0.0032**
trans-1,2-Dichloroethene	1.12	mg/kg	0.0064	ND
trans-1,3-Dichloropropene	1.12	mg/kg	0.0064	ND
Trichloroethene	1.12	mg/kg	0.0064	ND
Trichlorofluoromethane	1.12	mg/kg	0.0064	ND
Vinyl chloride	1.12	mg/kg	0.0064	ND
Xylenes (Total)	1.12	mg/kg	0.0032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.82	30	68	122	89	
Dibromofluoromethane	32.55	30	63	140	109	
Bromofluorobenzene	32.30	30	64	129	108	
1,2-Dichloroethane-d4	34.23	30	63	143	114	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-01 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-002 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	1.12	mg/kg	NA	ND
TotalVolatileTic	1.12	mg/kg	NA	ND

Sample ID: TB-112-02 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-003 **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**46**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.52	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.18	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.011	ND
Aldrin	1	mg/kg	0.011	ND
Alpha-BHC	1	mg/kg	0.0022	ND
beta-BHC	1	mg/kg	0.0022	ND
Chlordane (Total)	1	mg/kg	0.011	ND
delta-BHC	1	mg/kg	0.011	ND
Dieldrin	1	mg/kg	0.0022	ND
Endosulfan I	1	mg/kg	0.011	ND
Endosulfan II	1	mg/kg	0.011	ND
Endosulfan Sulfate	1	mg/kg	0.011	ND
Endrin	1	mg/kg	0.011	ND
Endrin Aldehyde	1	mg/kg	0.011	ND
Endrin Ketone	1	mg/kg	0.011	ND
gamma-BHC	1	mg/kg	0.0022	ND
Heptachlor	1	mg/kg	0.011	ND
Heptachlor Epoxide	1	mg/kg	0.011	ND
Methoxychlor	1	mg/kg	0.011	ND
p,p'-DDD	1	mg/kg	0.0054	ND
p,p'-DDE	1	mg/kg	0.0054	ND
p,p'-DDT	1	mg/kg	0.0054	ND
Toxaphene	1	mg/kg	0.054	ND
y-Chlordane	1	mg/kg	0.011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	106.42	100	37	141	106	
TCMX-Surrogate	88.10	100	37	141	88	
DCB-Surrogate	81.29	100	33	146	81	
DCB-Surrogate	93.04	100	33	146	93	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.054	ND
Aroclor-1016	1	mg/kg	0.054	ND
Aroclor-1221	1	mg/kg	0.054	ND
Aroclor-1232	1	mg/kg	0.054	ND
Aroclor-1242	1	mg/kg	0.054	ND
Aroclor-1248	1	mg/kg	0.054	ND
Aroclor-1254	1	mg/kg	0.054	ND
Aroclor-1260	1	mg/kg	0.054	ND
Aroclor-1262	1	mg/kg	0.054	ND
Aroclor-1268	1	mg/kg	0.054	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	89.45	100	37	141	89	
TCMX-Surrogate	86.90	100	37	141	87	
DCB-Surrogate	68.86	100	34	146	69	
DCB-Surrogate	68.18	100	34	146	68	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.072	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.072	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.072	ND
2,4,5-Trichlorophenol	1	mg/kg	0.072	ND

Sample ID: TB-112-02 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-003 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.072	ND
2,4-Dichlorophenol	1	mg/kg	0.018	ND
2,4-Dimethylphenol	1	mg/kg	0.018	ND
2,4-Dinitrophenol	1	mg/kg	0.36	ND
2,4-Dinitrotoluene	1	mg/kg	0.072	ND
2,6-Dinitrotoluene	1	mg/kg	0.072	ND
2-Chloronaphthalene	1	mg/kg	0.072	ND
2-Chlorophenol	1	mg/kg	0.072	ND
2-Methylnaphthalene	1	mg/kg	0.072	ND
2-Methylphenol	1	mg/kg	0.018	ND
2-Nitroaniline	1	mg/kg	0.072	ND
2-Nitrophenol	1	mg/kg	0.072	ND
3&4-Methylphenol	1	mg/kg	0.018	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.072	ND
3-Nitroaniline	1	mg/kg	0.072	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.36	ND
4-Bromophenyl-phenylether	1	mg/kg	0.072	ND
4-Chloro-3-methylphenol	1	mg/kg	0.072	ND
4-Chloroaniline	1	mg/kg	0.018	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.072	ND
4-Nitroaniline	1	mg/kg	0.072	ND
4-Nitrophenol	1	mg/kg	0.072	ND
Acenaphthene	1	mg/kg	0.072	ND
Acenaphthylene	1	mg/kg	0.072	ND
Acetophenone	1	mg/kg	0.072	ND
Anthracene	1	mg/kg	0.072	ND
Atrazine	1	mg/kg	0.072	ND
Benzaldehyde	1	mg/kg	0.072	ND
Benzo[a]anthracene	1	mg/kg	0.072	ND
Benzo[a]pyrene	1	mg/kg	0.072	ND
Benzo[b]fluoranthene	1	mg/kg	0.072	ND
Benzo[g,h,i]perylene	1	mg/kg	0.072	ND
Benzo[k]fluoranthene	1	mg/kg	0.072	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.072	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.018	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.072	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.072	ND
Butylbenzylphthalate	1	mg/kg	0.072	ND
Caprolactam	1	mg/kg	0.072	ND
Carbazole	1	mg/kg	0.072	ND
Chrysene	1	mg/kg	0.072	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.072	ND
Dibenzofuran	1	mg/kg	0.018	ND
Diethylphthalate	1	mg/kg	0.072	ND
Dimethylphthalate	1	mg/kg	0.072	ND
Di-n-butylphthalate	1	mg/kg	0.018	ND
Di-n-octylphthalate	1	mg/kg	0.072	ND
Fluoranthene	1	mg/kg	0.072	ND
Fluorene	1	mg/kg	0.072	ND
Hexachlorobenzene	1	mg/kg	0.072	ND
Hexachlorobutadiene	1	mg/kg	0.072	ND
Hexachlorocyclopentadiene	1	mg/kg	0.072	ND
Hexachloroethane	1	mg/kg	0.072	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.072	ND
Isophorone	1	mg/kg	0.072	ND
Naphthalene	1	mg/kg	0.018	ND
Nitrobenzene	1	mg/kg	0.072	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.018	ND
N-Nitrosodiphenylamine	1	mg/kg	0.072	ND
Pentachlorophenol	1	mg/kg	0.36	ND
Phenanthrene	1	mg/kg	0.072	ND
Phenol	1	mg/kg	0.072	ND
Pyrene	1	mg/kg	0.072	ND

Sample ID: TB-112-02 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-003 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	53.50	50	58	148	107	
Phenol-d5	81.44	100	49	129	81	
Nitrobenzene-d5	37.77	50	52	129	76	
2-Fluorophenol	71.55	100	43	128	72	
2-Fluorobiphenyl	42.51	50	58	125	85	
2,4,6-Tribromophenol	90.50	100	54	145	90	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
ACIPHYLLENE	**1**	**mg/kg**	**12.47**	**0.23J**
5-Ethyl-9,9-dimethyl-5H,9H-quino[3,2,1-	**1**	**mg/kg**	**13.22**	**0.29J**
Eicosane	**1**	**mg/kg**	**14.1**	**0.76J**
Heptadecane	**1**	**mg/kg**	**14.87**	**0.35J**
8-Isopropyl-1-methylbicyclo[5.3.1]dec-7	**1**	**mg/kg**	**15.57**	**1.1J**
unknown	**1**	**mg/kg**	**15.74**	**0.34J**
1,3-Dichloro-4,6-dimethoxybenzene	**1**	**mg/kg**	**15.87**	**0.24J**
4H-Naphtho[2,3-b]pyran-4,6,9-trione, 5,	**1**	**mg/kg**	**16.25**	**2.2J**
unknown	**1**	**mg/kg**	**16.35**	**0.25J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.28**	**7.4JAB**
Benzene, 1,3,5-trimethyl-	**1**	**mg/kg**	**5.67**	**0.19J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**13J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**430**	**8800**
Barium	1	mg/kg	22	ND
Calcium	1	mg/kg	2200	ND
Chromium	**1**	**mg/kg**	**11**	**27**
Cobalt	**1**	**mg/kg**	**5.4**	**6.6**
Copper	1	mg/kg	11	ND
Iron	**1**	**mg/kg**	**430**	**20000**
Lead	1	mg/kg	11	ND
Magnesium	**1**	**mg/kg**	**1100**	**4700**
Manganese	**1**	**mg/kg**	**22**	**150**
Nickel	**1**	**mg/kg**	**11**	**14**
Potassium	**1**	**mg/kg**	**1100**	**2900**
Sodium	**1**	**mg/kg**	**540**	**8000**
Vanadium	**1**	**mg/kg**	**22**	**34**
Zinc	**1**	**mg/kg**	**22**	**40**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.7	ND
Arsenic	**1**	**mg/kg**	**0.43**	**10**
Beryllium	**1**	**mg/kg**	**0.43**	**0.53**
Cadmium	1	mg/kg	0.87	ND
Selenium	1	mg/kg	4.3	ND
Silver	1	mg/kg	0.43	ND
Thallium	1	mg/kg	0.87	ND

Sample ID: TB-112-02 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-004 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**63**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.02	mg/kg	0.0032	ND
1,1,2,2-Tetrachloroethane	1.02	mg/kg	0.0032	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.02	mg/kg	0.0032	ND
1,1,2-Trichloroethane	1.02	mg/kg	0.0032	ND
1,1-Dichloroethane	1.02	mg/kg	0.0032	ND
1,1-Dichloroethene	1.02	mg/kg	0.0032	ND
1,2,3-Trichlorobenzene	1.02	mg/kg	0.0032	ND
1,2,4-Trichlorobenzene	1.02	mg/kg	0.0032	ND
1,2-Dibromo-3-chloropropane	1.02	mg/kg	0.0032	ND
1,2-Dibromoethane	1.02	mg/kg	0.0016	ND
1,2-Dichlorobenzene	1.02	mg/kg	0.0032	ND
1,2-Dichloroethane	1.02	mg/kg	0.0025	ND
1,2-Dichloropropane	1.02	mg/kg	0.0032	ND
1,3-Dichlorobenzene	1.02	mg/kg	0.0032	ND
1,4-Dichlorobenzene	1.02	mg/kg	0.0032	ND
1,4-Dioxane	1.02	mg/kg	0.16	ND
2-Butanone	**1.02**	**mg/kg**	**0.0032**	**0.0083**
2-Hexanone	1.02	mg/kg	0.0032	ND
4-Methyl-2-pentanone	1.02	mg/kg	0.0032	ND
Acetone	**1.02**	**mg/kg**	**0.016**	**0.039**
Benzene	1.02	mg/kg	0.0016	ND
Bromochloromethane	1.02	mg/kg	0.0032	ND
Bromodichloromethane	1.02	mg/kg	0.0032	ND
Bromoform	1.02	mg/kg	0.0032	ND
Bromomethane	1.02	mg/kg	0.0032	ND
Carbon disulfide	**1.02**	**mg/kg**	**0.0032**	**0.033**
Carbon tetrachloride	1.02	mg/kg	0.0032	ND
Chlorobenzene	1.02	mg/kg	0.0032	ND
Chloroethane	1.02	mg/kg	0.0032	ND
Chloroform	1.02	mg/kg	0.0032	ND
Chloromethane	1.02	mg/kg	0.0032	ND
cis-1,2-Dichloroethene	1.02	mg/kg	0.0032	ND
cis-1,3-Dichloropropene	1.02	mg/kg	0.0032	ND
Cyclohexane	1.02	mg/kg	0.0032	ND
Dibromochloromethane	1.02	mg/kg	0.0032	ND
Dichlorodifluoromethane	1.02	mg/kg	0.0032	ND
Ethylbenzene	1.02	mg/kg	0.0016	ND
Isopropylbenzene	1.02	mg/kg	0.0016	ND
m&p-Xylenes	1.02	mg/kg	0.0016	ND
Methyl Acetate	1.02	mg/kg	0.0032	ND
Methylcyclohexane	1.02	mg/kg	0.0032	ND
Methylene chloride	1.02	mg/kg	0.0032	ND
Methyl-t-butyl ether	1.02	mg/kg	0.0016	ND
o-Xylene	1.02	mg/kg	0.0016	ND
Styrene	1.02	mg/kg	0.0032	ND
Tetrachloroethene	1.02	mg/kg	0.0032	ND
Toluene	1.02	mg/kg	0.0016	ND
trans-1,2-Dichloroethene	1.02	mg/kg	0.0032	ND
trans-1,3-Dichloropropene	1.02	mg/kg	0.0032	ND
Trichloroethene	1.02	mg/kg	0.0032	ND
Trichlorofluoromethane	1.02	mg/kg	0.0032	ND
Vinyl chloride	1.02	mg/kg	0.0032	ND
Xylenes (Total)	1.02	mg/kg	0.0016	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.17	30	68	122	91	
Dibromofluoromethane	32.35	30	63	140	108	
Bromofluorobenzene	32.35	30	64	129	108	
1,2-Dichloroethane-d4	32.80	30	63	143	109	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-02 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-004 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

No Unknown Compounds Detected	1.02	mg/kg	NA	ND
TotalVolatileTic	1.02	mg/kg	NA	ND

Sample ID:	**TB-112-03 Comp**	**Collection Date:**	**3/25/2020**
Lab#:	**AD16382-005**	**Receipt Date:**	**3/25/2020**
Matrix:	**Soil**		

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**64**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.37	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0078	ND
Aldrin	1	mg/kg	0.0078	ND
Alpha-BHC	1	mg/kg	0.0016	ND
beta-BHC	1	mg/kg	0.0016	ND
Chlordane (Total)	1	mg/kg	0.0078	ND
delta-BHC	1	mg/kg	0.0078	ND
Dieldrin	1	mg/kg	0.0016	ND
Endosulfan I	1	mg/kg	0.0078	ND
Endosulfan II	1	mg/kg	0.0078	ND
Endosulfan Sulfate	1	mg/kg	0.0078	ND
Endrin	1	mg/kg	0.0078	ND
Endrin Aldehyde	1	mg/kg	0.0078	ND
Endrin Ketone	1	mg/kg	0.0078	ND
gamma-BHC	1	mg/kg	0.0016	ND
Heptachlor	1	mg/kg	0.0078	ND
Heptachlor Epoxide	1	mg/kg	0.0078	ND
Methoxychlor	1	mg/kg	0.0078	ND
p,p'-DDD	1	mg/kg	0.0039	ND
p,p'-DDE	1	mg/kg	0.0039	ND
p,p'-DDT	1	mg/kg	0.0039	ND
Toxaphene	1	mg/kg	0.039	ND
y-Chlordane	1	mg/kg	0.0078	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	155.08	100	37	141	155	S8
TCMX-Surrogate	178.94	100	37	141	179	S8
DCB-Surrogate	159.32	100	33	146	159	S8
DCB-Surrogate	164.30	100	33	146	164	S8

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.039	ND
Aroclor-1016	1	mg/kg	0.039	ND
Aroclor-1221	1	mg/kg	0.039	ND
Aroclor-1232	1	mg/kg	0.039	ND
Aroclor-1242	1	mg/kg	0.039	ND
Aroclor-1248	1	mg/kg	0.039	ND
Aroclor-1254	1	mg/kg	0.039	ND
Aroclor-1260	1	mg/kg	0.039	ND
Aroclor-1262	1	mg/kg	0.039	ND
Aroclor-1268	1	mg/kg	0.039	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	198.82	100	37	141	199	S8
TCMX-Surrogate	181.25	100	37	141	181	S8
DCB-Surrogate	146.02	100	34	146	146	
DCB-Surrogate	135.04	100	34	146	135	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.052	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.052	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.052	ND
2,4,5-Trichlorophenol	1	mg/kg	0.052	ND

Sample ID: TB-112-03 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-005 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.052	ND
2,4-Dichlorophenol	1	mg/kg	0.013	ND
2,4-Dimethylphenol	1	mg/kg	0.013	ND
2,4-Dinitrophenol	1	mg/kg	0.26	ND
2,4-Dinitrotoluene	1	mg/kg	0.052	ND
2,6-Dinitrotoluene	1	mg/kg	0.052	ND
2-Chloronaphthalene	1	mg/kg	0.052	ND
2-Chlorophenol	1	mg/kg	0.052	ND
2-Methylnaphthalene	1	mg/kg	0.052	ND
2-Methylphenol	1	mg/kg	0.013	ND
2-Nitroaniline	1	mg/kg	0.052	ND
2-Nitrophenol	1	mg/kg	0.052	ND
3&4-Methylphenol	1	mg/kg	0.013	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.052	ND
3-Nitroaniline	1	mg/kg	0.052	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.26	ND
4-Bromophenyl-phenylether	1	mg/kg	0.052	ND
4-Chloro-3-methylphenol	1	mg/kg	0.052	ND
4-Chloroaniline	1	mg/kg	0.013	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.052	ND
4-Nitroaniline	1	mg/kg	0.052	ND
4-Nitrophenol	1	mg/kg	0.052	ND
Acenaphthene	1	mg/kg	0.052	ND
Acenaphthylene	1	mg/kg	0.052	ND
Acetophenone	1	mg/kg	0.052	ND
Anthracene	1	mg/kg	0.052	ND
Atrazine	1	mg/kg	0.052	ND
Benzaldehyde	1	mg/kg	0.052	ND
Benzo[a]anthracene	1	mg/kg	0.052	ND
Benzo[a]pyrene	1	mg/kg	0.052	ND
Benzo[b]fluoranthene	1	mg/kg	0.052	ND
Benzo[g,h,i]perylene	1	mg/kg	0.052	ND
Benzo[k]fluoranthene	1	mg/kg	0.052	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.052	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.013	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.052	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.052	ND
Butylbenzylphthalate	1	mg/kg	0.052	ND
Caprolactam	1	mg/kg	0.052	ND
Carbazole	1	mg/kg	0.052	ND
Chrysene	1	mg/kg	0.052	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.052	ND
Dibenzofuran	1	mg/kg	0.013	ND
Diethylphthalate	1	mg/kg	0.052	ND
Dimethylphthalate	1	mg/kg	0.052	ND
Di-n-butylphthalate	1	mg/kg	0.013	ND
Di-n-octylphthalate	1	mg/kg	0.052	ND
Fluoranthene	1	mg/kg	0.052	ND
Fluorene	1	mg/kg	0.052	ND
Hexachlorobenzene	1	mg/kg	0.052	ND
Hexachlorobutadiene	1	mg/kg	0.052	ND
Hexachlorocyclopentadiene	1	mg/kg	0.052	ND
Hexachloroethane	1	mg/kg	0.052	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.052	ND
Isophorone	1	mg/kg	0.052	ND
Naphthalene	1	mg/kg	0.013	ND
Nitrobenzene	1	mg/kg	0.052	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.013	ND
N-Nitrosodiphenylamine	1	mg/kg	0.052	ND
Pentachlorophenol	1	mg/kg	0.26	ND
Phenanthrene	1	mg/kg	0.052	ND
Phenol	1	mg/kg	0.052	ND
Pyrene	1	mg/kg	0.052	ND

Sample ID: TB-112-03 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-005 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	49.92	50	58	148	100	
Phenol-d5	56.11	100	49	129	56	
Nitrobenzene-d5	33.18	50	52	129	66	
2-Fluorophenol	39.90	100	43	128	40	Sa8
2-Fluorobiphenyl	42.02	50	58	125	84	
2,4,6-Tribromophenol	100.23	100	54	145	100	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Eicosane	**1**	**mg/kg**	**14.17**	**0.11J**
unknown	**1**	**mg/kg**	**15.68**	**0.19J**
D-Friedoolean-14-en-3-one	**1**	**mg/kg**	**16.36**	**0.17J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.33**	**6.5JAB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**7J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**310**	**7600**
Barium	**1**	**mg/kg**	**16**	**18**
Calcium	**1**	**mg/kg**	**1600**	**2000**
Chromium	**1**	**mg/kg**	**7.8**	**23**
Cobalt	**1**	**mg/kg**	**3.9**	**5.6**
Copper	1	mg/kg	7.8	ND
Iron	**1**	**mg/kg**	**310**	**19000**
Lead	1	mg/kg	7.8	ND
Magnesium	**1**	**mg/kg**	**780**	**4000**
Manganese	**1**	**mg/kg**	**16**	**150**
Nickel	**1**	**mg/kg**	**7.8**	**12**
Potassium	**1**	**mg/kg**	**780**	**2400**
Sodium	**1**	**mg/kg**	**390**	**5900**
Vanadium	**1**	**mg/kg**	**16**	**25**
Zinc	**1**	**mg/kg**	**16**	**35**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.2	ND
Arsenic	**1**	**mg/kg**	**0.31**	**8.8**
Beryllium	**1**	**mg/kg**	**0.31**	**0.38**
Cadmium	1	mg/kg	0.62	ND
Selenium	1	mg/kg	3.1	ND
Silver	1	mg/kg	0.31	ND
Thallium	1	mg/kg	0.62	ND

Sample ID: TB-112-03 Grab | **Collection Date: 3/25/2020**
Lab#: AD16382-006 | **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**73**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.22	mg/kg	0.0033	ND
1,1,2,2-Tetrachloroethane	1.22	mg/kg	0.0033	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.22	mg/kg	0.0033	ND
1,1,2-Trichloroethane	1.22	mg/kg	0.0033	ND
1,1-Dichloroethane	1.22	mg/kg	0.0033	ND
1,1-Dichloroethene	1.22	mg/kg	0.0033	ND
1,2,3-Trichlorobenzene	1.22	mg/kg	0.0033	ND
1,2,4-Trichlorobenzene	1.22	mg/kg	0.0033	ND
1,2-Dibromo-3-chloropropane	1.22	mg/kg	0.0033	ND
1,2-Dibromoethane	1.22	mg/kg	0.0017	ND
1,2-Dichlorobenzene	1.22	mg/kg	0.0033	ND
1,2-Dichloroethane	1.22	mg/kg	0.0026	ND
1,2-Dichloropropane	1.22	mg/kg	0.0033	ND
1,3-Dichlorobenzene	1.22	mg/kg	0.0033	ND
1,4-Dichlorobenzene	1.22	mg/kg	0.0033	ND
1,4-Dioxane	1.22	mg/kg	0.17	ND
2-Butanone	1.22	mg/kg	0.0033	ND
2-Hexanone	1.22	mg/kg	0.0033	ND
4-Methyl-2-pentanone	1.22	mg/kg	0.0033	ND
Acetone	**1.22**	**mg/kg**	**0.017**	**0.13**
Benzene	1.22	mg/kg	0.0017	ND
Bromochloromethane	1.22	mg/kg	0.0033	ND
Bromodichloromethane	1.22	mg/kg	0.0033	ND
Bromoform	1.22	mg/kg	0.0033	ND
Bromomethane	1.22	mg/kg	0.0033	ND
Carbon disulfide	**1.22**	**mg/kg**	**0.0033**	**0.036**
Carbon tetrachloride	1.22	mg/kg	0.0033	ND
Chlorobenzene	1.22	mg/kg	0.0033	ND
Chloroethane	1.22	mg/kg	0.0033	ND
Chloroform	1.22	mg/kg	0.0033	ND
Chloromethane	1.22	mg/kg	0.0033	ND
cis-1,2-Dichloroethene	1.22	mg/kg	0.0033	ND
cis-1,3-Dichloropropene	1.22	mg/kg	0.0033	ND
Cyclohexane	1.22	mg/kg	0.0033	ND
Dibromochloromethane	1.22	mg/kg	0.0033	ND
Dichlorodifluoromethane	1.22	mg/kg	0.0033	ND
Ethylbenzene	1.22	mg/kg	0.0017	ND
Isopropylbenzene	1.22	mg/kg	0.0017	ND
m&p-Xylenes	1.22	mg/kg	0.0017	ND
Methyl Acetate	1.22	mg/kg	0.0033	ND
Methylcyclohexane	1.22	mg/kg	0.0033	ND
Methylene chloride	**1.22**	**mg/kg**	**0.0033**	**0.0079**
Methyl-t-butyl ether	1.22	mg/kg	0.0017	ND
o-Xylene	1.22	mg/kg	0.0017	ND
Styrene	1.22	mg/kg	0.0033	ND
Tetrachloroethene	1.22	mg/kg	0.0033	ND
Toluene	**1.22**	**mg/kg**	**0.0017**	**0.0063**
trans-1,2-Dichloroethene	1.22	mg/kg	0.0033	ND
trans-1,3-Dichloropropene	1.22	mg/kg	0.0033	ND
Trichloroethene	1.22	mg/kg	0.0033	ND
Trichlorofluoromethane	1.22	mg/kg	0.0033	ND
Vinyl chloride	1.22	mg/kg	0.0033	ND
Xylenes (Total)	1.22	mg/kg	0.0017	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	27.56	30	68	122	92	
Dibromofluoromethane	32.62	30	63	140	109	
Bromofluorobenzene	32.65	30	64	129	109	
1,2-Dichloroethane-d4	32.93	30	63	143	110	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-03 Grab
Lab#: AD16382-006
Matrix: Soil/Terracore

Collection Date: 3/25/2020
Receipt Date: 3/25/2020

1-Pentene	1.22	mg/kg	3.51	0.020J
TotalVolatileTic	1.22	mg/kg	NA	0.02J

Sample ID: TB-112-04 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-007 **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**75**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.32	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0067	ND
Aldrin	1	mg/kg	0.0067	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0067	ND
delta-BHC	1	mg/kg	0.0067	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0067	ND
Endosulfan II	1	mg/kg	0.0067	ND
Endosulfan Sulfate	1	mg/kg	0.0067	ND
Endrin	1	mg/kg	0.0067	ND
Endrin Aldehyde	1	mg/kg	0.0067	ND
Endrin Ketone	1	mg/kg	0.0067	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0067	ND
Heptachlor Epoxide	1	mg/kg	0.0067	ND
Methoxychlor	1	mg/kg	0.0067	ND
p,p'-DDD	1	mg/kg	0.0033	ND
p,p'-DDE	1	mg/kg	0.0033	ND
p,p'-DDT	1	mg/kg	0.0033	ND
Toxaphene	1	mg/kg	0.033	ND
y-Chlordane	1	mg/kg	0.0067	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	87.10	100	37	141	87	
TCMX-Surrogate	90.93	100	37	141	91	
DCB-Surrogate	91.60	100	33	146	92	
DCB-Surrogate	90.04	100	33	146	90	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.033	ND
Aroclor-1016	1	mg/kg	0.033	ND
Aroclor-1221	1	mg/kg	0.033	ND
Aroclor-1232	1	mg/kg	0.033	ND
Aroclor-1242	1	mg/kg	0.033	ND
Aroclor-1248	1	mg/kg	0.033	ND
Aroclor-1254	1	mg/kg	0.033	ND
Aroclor-1260	1	mg/kg	0.033	ND
Aroclor-1262	1	mg/kg	0.033	ND
Aroclor-1268	1	mg/kg	0.033	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	97.93	100	37	141	98	
TCMX-Surrogate	95.98	100	37	141	96	
DCB-Surrogate	75.29	100	34	146	75	
DCB-Surrogate	72.87	100	34	146	73	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.044	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.044	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.044	ND
2,4,5-Trichlorophenol	1	mg/kg	0.044	ND

Sample ID: TB-112-04 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-007 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.044	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.044	ND
2,6-Dinitrotoluene	1	mg/kg	0.044	ND
2-Chloronaphthalene	1	mg/kg	0.044	ND
2-Chlorophenol	1	mg/kg	0.044	ND
2-Methylnaphthalene	1	mg/kg	0.044	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.044	ND
2-Nitrophenol	1	mg/kg	0.044	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.044	ND
3-Nitroaniline	1	mg/kg	0.044	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.044	ND
4-Chloro-3-methylphenol	1	mg/kg	0.044	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.044	ND
4-Nitroaniline	1	mg/kg	0.044	ND
4-Nitrophenol	1	mg/kg	0.044	ND
Acenaphthene	1	mg/kg	0.044	ND
Acenaphthylene	1	mg/kg	0.044	ND
Acetophenone	1	mg/kg	0.044	ND
Anthracene	1	mg/kg	0.044	ND
Atrazine	1	mg/kg	0.044	ND
Benzaldehyde	1	mg/kg	0.044	ND
Benzo[a]anthracene	1	mg/kg	0.044	ND
Benzo[a]pyrene	1	mg/kg	0.044	ND
Benzo[b]fluoranthene	1	mg/kg	0.044	ND
Benzo[g,h,i]perylene	1	mg/kg	0.044	ND
Benzo[k]fluoranthene	1	mg/kg	0.044	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.044	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.044	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.044	ND
Butylbenzylphthalate	1	mg/kg	0.044	ND
Caprolactam	1	mg/kg	0.044	ND
Carbazole	1	mg/kg	0.044	ND
Chrysene	1	mg/kg	0.044	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.044	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.044	ND
Dimethylphthalate	1	mg/kg	0.044	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.044	ND
Fluoranthene	1	mg/kg	0.044	ND
Fluorene	1	mg/kg	0.044	ND
Hexachlorobenzene	1	mg/kg	0.044	ND
Hexachlorobutadiene	1	mg/kg	0.044	ND
Hexachlorocyclopentadiene	1	mg/kg	0.044	ND
Hexachloroethane	1	mg/kg	0.044	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.044	ND
Isophorone	1	mg/kg	0.044	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.044	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.044	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.044	ND
Phenol	1	mg/kg	0.044	ND
Pyrene	1	mg/kg	0.044	ND

Sample ID: TB-112-04 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-007 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	46.87	50	58	148	94	
Phenol-d5	59.82	100	49	129	60	
Nitrobenzene-d5	35.07	50	52	129	70	
2-Fluorophenol	50.35	100	43	128	50	
2-Fluorobiphenyl	40.11	50	58	125	80	
2,4,6-Tribromophenol	91.21	100	54	145	91	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Phosphonic acid, dioctadecyl ester	**1**	**mg/kg**	**12.74**	**0.35J**
Phosphonic acid, dioctadecyl ester	**1**	**mg/kg**	**13.51**	**1.2J**
Cyclododecane	**1**	**mg/kg**	**14.31**	**0.14J**
Benzo[a]pyrene	**1**	**mg/kg**	**14.47**	**0.11J**
unknown	**1**	**mg/kg**	**15.68**	**0.12J**
unknown	**1**	**mg/kg**	**16.36**	**0.18J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.33**	**5.4JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.089J**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.42**	**0.097J**
Benzene, 1,2,3-trimethyl-	**1**	**mg/kg**	**5.71**	**0.13JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**7.8J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**270**	**4400**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.7**	**8.3**
Cobalt	1	mg/kg	3.3	ND
Copper	1	mg/kg	6.7	ND
Iron	**1**	**mg/kg**	**270**	**5600**
Lead	1	mg/kg	6.7	ND
Magnesium	**1**	**mg/kg**	**670**	**1200**
Manganese	**1**	**mg/kg**	**13**	**47**
Nickel	1	mg/kg	6.7	ND
Potassium	**1**	**mg/kg**	**670**	**710**
Sodium	**1**	**mg/kg**	**330**	**2800**
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	**1**	**mg/kg**	**0.27**	**3.0**
Beryllium	1	mg/kg	0.27	ND
Cadmium	1	mg/kg	0.53	ND
Selenium	1	mg/kg	2.7	ND
Silver	1	mg/kg	0.27	ND
Thallium	1	mg/kg	0.53	ND

Sample ID: TB-112-04 Grab | **Collection Date: 3/25/2020**
Lab#: AD16382-008 | **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**68**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.13	mg/kg	0.0033	ND
1,1,2,2-Tetrachloroethane	1.13	mg/kg	0.0033	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.13	mg/kg	0.0033	ND
1,1,2-Trichloroethane	1.13	mg/kg	0.0033	ND
1,1-Dichloroethane	1.13	mg/kg	0.0033	ND
1,1-Dichloroethene	1.13	mg/kg	0.0033	ND
1,2,3-Trichlorobenzene	1.13	mg/kg	0.0033	ND
1,2,4-Trichlorobenzene	1.13	mg/kg	0.0033	ND
1,2-Dibromo-3-chloropropane	1.13	mg/kg	0.0033	ND
1,2-Dibromoethane	1.13	mg/kg	0.0017	ND
1,2-Dichlorobenzene	1.13	mg/kg	0.0033	ND
1,2-Dichloroethane	1.13	mg/kg	0.0026	ND
1,2-Dichloropropane	1.13	mg/kg	0.0033	ND
1,3-Dichlorobenzene	1.13	mg/kg	0.0033	ND
1,4-Dichlorobenzene	1.13	mg/kg	0.0033	ND
1,4-Dioxane	1.13	mg/kg	0.17	ND
2-Butanone	1.13	mg/kg	0.0033	ND
2-Hexanone	1.13	mg/kg	0.0033	ND
4-Methyl-2-pentanone	1.13	mg/kg	0.0033	ND
Acetone	**1.13**	**mg/kg**	**0.017**	**0.13**
Benzene	1.13	mg/kg	0.0017	ND
Bromochloromethane	1.13	mg/kg	0.0033	ND
Bromodichloromethane	1.13	mg/kg	0.0033	ND
Bromoform	1.13	mg/kg	0.0033	ND
Bromomethane	1.13	mg/kg	0.0033	ND
Carbon disulfide	**1.13**	**mg/kg**	**0.0033**	**0.0083**
Carbon tetrachloride	1.13	mg/kg	0.0033	ND
Chlorobenzene	1.13	mg/kg	0.0033	ND
Chloroethane	1.13	mg/kg	0.0033	ND
Chloroform	1.13	mg/kg	0.0033	ND
Chloromethane	1.13	mg/kg	0.0033	ND
cis-1,2-Dichloroethene	1.13	mg/kg	0.0033	ND
cis-1,3-Dichloropropene	1.13	mg/kg	0.0033	ND
Cyclohexane	1.13	mg/kg	0.0033	ND
Dibromochloromethane	1.13	mg/kg	0.0033	ND
Dichlorodifluoromethane	1.13	mg/kg	0.0033	ND
Ethylbenzene	1.13	mg/kg	0.0017	ND
Isopropylbenzene	1.13	mg/kg	0.0017	ND
m&p-Xylenes	1.13	mg/kg	0.0017	ND
Methyl Acetate	1.13	mg/kg	0.0033	ND
Methylcyclohexane	1.13	mg/kg	0.0033	ND
Methylene chloride	**1.13**	**mg/kg**	**0.0033**	**0.0084**
Methyl-t-butyl ether	1.13	mg/kg	0.0017	ND
o-Xylene	1.13	mg/kg	0.0017	ND
Styrene	1.13	mg/kg	0.0033	ND
Tetrachloroethene	1.13	mg/kg	0.0033	ND
Toluene	**1.13**	**mg/kg**	**0.0017**	**0.0088**
trans-1,2-Dichloroethene	1.13	mg/kg	0.0033	ND
trans-1,3-Dichloropropene	1.13	mg/kg	0.0033	ND
Trichloroethene	1.13	mg/kg	0.0033	ND
Trichlorofluoromethane	1.13	mg/kg	0.0033	ND
Vinyl chloride	1.13	mg/kg	0.0033	ND
Xylenes (Total)	1.13	mg/kg	0.0017	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	28.20	30	68	122	94	
Dibromofluoromethane	32.63	30	63	140	109	
Bromofluorobenzene	35.15	30	64	129	117	
1,2-Dichloroethane-d4	32.87	30	63	143	110	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-04 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-008 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

1-Pentene	1.13	mg/kg	3.51	0.057J
TotalVolatileTic	1.13	mg/kg	NA	0.057J

Sample ID: TB-112-05 Comp | **Collection Date: 3/25/2020**
Lab#: AD16382-009 | **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**77**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0065	ND
Aldrin	1	mg/kg	0.0065	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0065	ND
delta-BHC	1	mg/kg	0.0065	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0065	ND
Endosulfan II	1	mg/kg	0.0065	ND
Endosulfan Sulfate	1	mg/kg	0.0065	ND
Endrin	1	mg/kg	0.0065	ND
Endrin Aldehyde	1	mg/kg	0.0065	ND
Endrin Ketone	1	mg/kg	0.0065	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0065	ND
Heptachlor Epoxide	1	mg/kg	0.0065	ND
Methoxychlor	1	mg/kg	0.0065	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0065	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	76.23	100	37	141	76	
TCMX-Surrogate	84.03	100	37	141	84	
DCB-Surrogate	78.25	100	33	146	78	
DCB-Surrogate	82.17	100	33	146	82	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	85.08	100	37	141	85	
TCMX-Surrogate	84.31	100	37	141	84	
DCB-Surrogate	64.26	100	34	146	64	
DCB-Surrogate	64.72	100	34	146	65	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND

Sample ID: TB-112-05 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-009 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Sample ID: TB-112-05 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-009 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	41.25	50	58	148	82	
Phenol-d5	65.33	100	49	129	65	
Nitrobenzene-d5	29.62	50	52	129	59	
2-Fluorophenol	54.40	100	43	128	54	
2-Fluorobiphenyl	35.21	50	58	125	70	
2,4,6-Tribromophenol	73.85	100	54	145	74	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Pyridine	**1**	**mg/kg**	**3.09**	**0.14J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**4.9JAB**
Benzene, 1-ethyl-4-methyl-	**1**	**mg/kg**	**5.41**	**0.11J**
unknown	**1**	**mg/kg**	**5.48**	**0.099J**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.67**	**0.16JB**
Cyclopentasiloxane, decamethyl-	**1**	**mg/kg**	**6.42**	**0.092J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**5.5J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**5400**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.5**	**11**
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.5	ND
Iron	**1**	**mg/kg**	**260**	**8300**
Lead	1	mg/kg	6.5	ND
Magnesium	**1**	**mg/kg**	**650**	**1300**
Manganese	**1**	**mg/kg**	**13**	**47**
Nickel	1	mg/kg	6.5	ND
Potassium	**1**	**mg/kg**	**650**	**790**
Sodium	**1**	**mg/kg**	**320**	**2600**
Vanadium	**1**	**mg/kg**	**13**	**15**
Zinc	**1**	**mg/kg**	**13**	**15**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**3.0**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID: TB-112-05 Grab | **Collection Date: 3/25/2020**
Lab#: AD16382-010 | **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**79**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.652	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.652	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.652	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.652	mg/kg	0.0017	ND
1,1-Dichloroethane	0.652	mg/kg	0.0017	ND
1,1-Dichloroethene	0.652	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.652	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.652	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.652	mg/kg	0.0017	ND
1,2-Dibromoethane	0.652	mg/kg	0.00083	ND
1,2-Dichlorobenzene	0.652	mg/kg	0.0017	ND
1,2-Dichloroethane	0.652	mg/kg	0.0013	ND
1,2-Dichloropropane	0.652	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.652	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.652	mg/kg	0.0017	ND
1,4-Dioxane	0.652	mg/kg	0.083	ND
2-Butanone	0.652	mg/kg	0.0017	ND
2-Hexanone	0.652	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.652	mg/kg	0.0017	ND
Acetone	0.652	mg/kg	0.0083	ND
Benzene	0.652	mg/kg	0.00083	ND
Bromochloromethane	0.652	mg/kg	0.0017	ND
Bromodichloromethane	0.652	mg/kg	0.0017	ND
Bromoform	0.652	mg/kg	0.0017	ND
Bromomethane	0.652	mg/kg	0.0017	ND
Carbon disulfide	**0.652**	**mg/kg**	**0.0017**	**0.0041**
Carbon tetrachloride	0.652	mg/kg	0.0017	ND
Chlorobenzene	0.652	mg/kg	0.0017	ND
Chloroethane	0.652	mg/kg	0.0017	ND
Chloroform	0.652	mg/kg	0.0017	ND
Chloromethane	0.652	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.652	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.652	mg/kg	0.0017	ND
Cyclohexane	0.652	mg/kg	0.0017	ND
Dibromochloromethane	0.652	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.652	mg/kg	0.0017	ND
Ethylbenzene	0.652	mg/kg	0.00083	ND
Isopropylbenzene	0.652	mg/kg	0.00083	ND
m&p-Xylenes	0.652	mg/kg	0.00083	ND
Methyl Acetate	0.652	mg/kg	0.0017	ND
Methylcyclohexane	0.652	mg/kg	0.0017	ND
Methylene chloride	**0.652**	**mg/kg**	**0.0017**	**0.0024**
Methyl-t-butyl ether	0.652	mg/kg	0.00083	ND
o-Xylene	0.652	mg/kg	0.00083	ND
Styrene	0.652	mg/kg	0.0017	ND
Tetrachloroethene	0.652	mg/kg	0.0017	ND
Toluene	**0.652**	**mg/kg**	**0.00083**	**0.0018**
trans-1,2-Dichloroethene	0.652	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.652	mg/kg	0.0017	ND
Trichloroethene	0.652	mg/kg	0.0017	ND
Trichlorofluoromethane	0.652	mg/kg	0.0017	ND
Vinyl chloride	0.652	mg/kg	0.0017	ND
Xylenes (Total)	0.652	mg/kg	0.00083	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.34	30	68	122	88	
Dibromofluoromethane	32.33	30	63	140	108	
Bromofluorobenzene	30.72	30	64	129	102	
1,2-Dichloroethane-d4	32.07	30	63	143	107	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

unknown	0.652	mg/kg	3.51	0.0044J
TotalVolatileTic	0.652	mg/kg	NA	0.0044J

Sample ID: TB-112-06 Comp | **Collection Date: 3/25/2020**
Lab#: AD16382-011 | **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**83**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0060	ND
Aldrin	1	mg/kg	0.0060	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0060	ND
delta-BHC	1	mg/kg	0.0060	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0060	ND
Endosulfan II	1	mg/kg	0.0060	ND
Endosulfan Sulfate	1	mg/kg	0.0060	ND
Endrin	1	mg/kg	0.0060	ND
Endrin Aldehyde	1	mg/kg	0.0060	ND
Endrin Ketone	1	mg/kg	0.0060	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0060	ND
Heptachlor Epoxide	1	mg/kg	0.0060	ND
Methoxychlor	1	mg/kg	0.0060	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0060	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	87.48	100	37	141	87	
TCMX-Surrogate	97.12	100	37	141	97	
DCB-Surrogate	93.25	100	33	146	93	
DCB-Surrogate	94.60	100	33	146	95	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	100.89	100	37	141	101	
TCMX-Surrogate	98.77	100	37	141	99	
DCB-Surrogate	76.70	100	34	146	77	
DCB-Surrogate	76.58	100	34	146	77	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.040	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.040	ND

Sample ID: TB-112-06 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-011 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.040	ND
2-Chlorophenol	1	mg/kg	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.040	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.040	ND
2-Nitrophenol	1	mg/kg	0.040	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.040	ND
3-Nitroaniline	1	mg/kg	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.040	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.040	ND
4-Nitroaniline	1	mg/kg	0.040	ND
4-Nitrophenol	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Acetophenone	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Atrazine	1	mg/kg	0.040	ND
Benzaldehyde	1	mg/kg	0.040	ND
Benzo[a]anthracene	1	mg/kg	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.040	ND
Caprolactam	1	mg/kg	0.040	ND
Carbazole	1	mg/kg	0.040	ND
Chrysene	1	mg/kg	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.040	ND
Dimethylphthalate	1	mg/kg	0.040	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.040	ND
Fluoranthene	1	mg/kg	0.040	ND
Fluorene	1	mg/kg	0.040	ND
Hexachlorobenzene	1	mg/kg	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.040	ND
Hexachloroethane	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Isophorone	1	mg/kg	0.040	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.040	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.040	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.040	ND
Phenol	1	mg/kg	0.040	ND
Pyrene	1	mg/kg	0.040	ND

Sample ID: TB-112-06 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-011 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	48.15	50	58	148	96	
Phenol-d5	47.38	100	49	129	47	Sa8
Nitrobenzene-d5	30.16	50	52	129	60	
2-Fluorophenol	43.67	100	43	128	44	
2-Fluorobiphenyl	38.28	50	58	125	77	
2,4,6-Tribromophenol	87.81	100	54	145	88	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.32**	**4.4JAB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.4J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**5700**
Barium	**1**	**mg/kg**	**12**	**13**
Calcium	1	mg/kg	1200	ND
Chromium	**1**	**mg/kg**	**6.0**	**11**
Cobalt	**1**	**mg/kg**	**3.0**	**4.1**
Copper	1	mg/kg	6.0	ND
Iron	**1**	**mg/kg**	**240**	**16000**
Lead	1	mg/kg	6.0	ND
Magnesium	1	mg/kg	600	ND
Manganese	**1**	**mg/kg**	**12**	**33**
Nickel	**1**	**mg/kg**	**6.0**	**6.5**
Potassium	1	mg/kg	600	ND
Sodium	1	mg/kg	300	ND
Vanadium	**1**	**mg/kg**	**12**	**17**
Zinc	**1**	**mg/kg**	**12**	**23**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.96	ND
Arsenic	**1**	**mg/kg**	**0.24**	**2.1**
Beryllium	**1**	**mg/kg**	**0.24**	**0.38**
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.48	ND

Sample ID: TB-112-06 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-012 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**88**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.782	mg/kg	0.0018	ND
1,1,2,2-Tetrachloroethane	0.782	mg/kg	0.0018	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.782	mg/kg	0.0018	ND
1,1,2-Trichloroethane	0.782	mg/kg	0.0018	ND
1,1-Dichloroethane	0.782	mg/kg	0.0018	ND
1,1-Dichloroethene	0.782	mg/kg	0.0018	ND
1,2,3-Trichlorobenzene	0.782	mg/kg	0.0018	ND
1,2,4-Trichlorobenzene	0.782	mg/kg	0.0018	ND
1,2-Dibromo-3-chloropropane	0.782	mg/kg	0.0018	ND
1,2-Dibromoethane	0.782	mg/kg	0.00089	ND
1,2-Dichlorobenzene	0.782	mg/kg	0.0018	ND
1,2-Dichloroethane	0.782	mg/kg	0.0014	ND
1,2-Dichloropropane	0.782	mg/kg	0.0018	ND
1,3-Dichlorobenzene	0.782	mg/kg	0.0018	ND
1,4-Dichlorobenzene	0.782	mg/kg	0.0018	ND
1,4-Dioxane	0.782	mg/kg	0.089	ND
2-Butanone	0.782	mg/kg	0.0018	ND
2-Hexanone	0.782	mg/kg	0.0018	ND
4-Methyl-2-pentanone	0.782	mg/kg	0.0018	ND
Acetone	0.782	mg/kg	0.0089	ND
Benzene	0.782	mg/kg	0.00089	ND
Bromochloromethane	0.782	mg/kg	0.0018	ND
Bromodichloromethane	0.782	mg/kg	0.0018	ND
Bromoform	0.782	mg/kg	0.0018	ND
Bromomethane	0.782	mg/kg	0.0018	ND
Carbon disulfide	**0.782**	**mg/kg**	**0.0018**	**0.0029**
Carbon tetrachloride	0.782	mg/kg	0.0018	ND
Chlorobenzene	0.782	mg/kg	0.0018	ND
Chloroethane	0.782	mg/kg	0.0018	ND
Chloroform	0.782	mg/kg	0.0018	ND
Chloromethane	0.782	mg/kg	0.0018	ND
cis-1,2-Dichloroethene	0.782	mg/kg	0.0018	ND
cis-1,3-Dichloropropene	0.782	mg/kg	0.0018	ND
Cyclohexane	0.782	mg/kg	0.0018	ND
Dibromochloromethane	0.782	mg/kg	0.0018	ND
Dichlorodifluoromethane	0.782	mg/kg	0.0018	ND
Ethylbenzene	0.782	mg/kg	0.00089	ND
Isopropylbenzene	0.782	mg/kg	0.00089	ND
m&p-Xylenes	0.782	mg/kg	0.00089	ND
Methyl Acetate	0.782	mg/kg	0.0018	ND
Methylcyclohexane	0.782	mg/kg	0.0018	ND
Methylene chloride	0.782	mg/kg	0.0018	ND
Methyl-t-butyl ether	0.782	mg/kg	0.00089	ND
o-Xylene	0.782	mg/kg	0.00089	ND
Styrene	0.782	mg/kg	0.0018	ND
Tetrachloroethene	0.782	mg/kg	0.0018	ND
Toluene	0.782	mg/kg	0.00089	ND
trans-1,2-Dichloroethene	0.782	mg/kg	0.0018	ND
trans-1,3-Dichloropropene	0.782	mg/kg	0.0018	ND
Trichloroethene	0.782	mg/kg	0.0018	ND
Trichlorofluoromethane	0.782	mg/kg	0.0018	ND
Vinyl chloride	0.782	mg/kg	0.0018	ND
Xylenes (Total)	0.782	mg/kg	0.00089	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.34	30	68	122	88	
Dibromofluoromethane	32.17	30	63	140	107	
Bromofluorobenzene	29.95	30	64	129	100	
1,2-Dichloroethane-d4	32.39	30	63	143	108	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-06 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-012 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

Octadecane	0.782	mg/kg	10.05	0.0041J
Nonane	0.782	mg/kg	6.85	0.0078J
unknown	0.782	mg/kg	6.89	0.0038J
2-Hexene, 3,4,4-trimethyl-	0.782	mg/kg	7.07	0.0059J
Nonane, 3-methyl-	0.782	mg/kg	7.12	0.0037J
Cyclohexane, propyl-	0.782	mg/kg	7.23	0.011J
Nonane, 4-methyl-	0.782	mg/kg	7.31	0.0061J
Decane	0.782	mg/kg	7.57	0.011J
unknown	0.782	mg/kg	7.6	0.0035J
Cyclohexane, butyl-	0.782	mg/kg	7.96	0.0061J
Naphthalene, decahydro-, trans-	0.782	mg/kg	8.28	0.0038J
Tridecane	0.782	mg/kg	8.88	0.0047J
Tridecane, 5-propyl-	0.782	mg/kg	9.32	0.0032J
Tridecane	0.782	mg/kg	9.48	0.010J
TotalVolatileTic	0.782	mg/kg	NA	0.085J

Sample ID: TB-112-07 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-013 **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**80**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0063	ND
Aldrin	1	mg/kg	0.0063	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0063	ND
delta-BHC	1	mg/kg	0.0063	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0063	ND
Endosulfan II	1	mg/kg	0.0063	ND
Endosulfan Sulfate	1	mg/kg	0.0063	ND
Endrin	1	mg/kg	0.0063	ND
Endrin Aldehyde	1	mg/kg	0.0063	ND
Endrin Ketone	1	mg/kg	0.0063	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0063	ND
Heptachlor Epoxide	1	mg/kg	0.0063	ND
Methoxychlor	1	mg/kg	0.0063	ND
p,p'-DDD	1	mg/kg	0.0031	ND
p,p'-DDE	1	mg/kg	0.0031	ND
p,p'-DDT	1	mg/kg	0.0031	ND
Toxaphene	1	mg/kg	0.031	ND
y-Chlordane	1	mg/kg	0.0063	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	100.07	100	37	141	100	
TCMX-Surrogate	110.26	100	37	141	110	
DCB-Surrogate	102.99	100	33	146	103	
DCB-Surrogate	106.30	100	33	146	106	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	112.82	100	37	141	113	
TCMX-Surrogate	110.42	100	37	141	110	
DCB-Surrogate	83.77	100	34	146	84	
DCB-Surrogate	83.75	100	34	146	84	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.042	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.042	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.042	ND
2,4,5-Trichlorophenol	1	mg/kg	0.042	ND

Sample ID: TB-112-07 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-013 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.042	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.042	ND
2,6-Dinitrotoluene	1	mg/kg	0.042	ND
2-Chloronaphthalene	1	mg/kg	0.042	ND
2-Chlorophenol	1	mg/kg	0.042	ND
2-Methylnaphthalene	1	mg/kg	0.042	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.042	ND
2-Nitrophenol	1	mg/kg	0.042	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.042	ND
3-Nitroaniline	1	mg/kg	0.042	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.042	ND
4-Chloro-3-methylphenol	1	mg/kg	0.042	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.042	ND
4-Nitroaniline	1	mg/kg	0.042	ND
4-Nitrophenol	1	mg/kg	0.042	ND
Acenaphthene	1	mg/kg	0.042	ND
Acenaphthylene	1	mg/kg	0.042	ND
Acetophenone	1	mg/kg	0.042	ND
Anthracene	1	mg/kg	0.042	ND
Atrazine	1	mg/kg	0.042	ND
Benzaldehyde	1	mg/kg	0.042	ND
Benzo[a]anthracene	1	mg/kg	0.042	ND
Benzo[a]pyrene	1	mg/kg	0.042	ND
Benzo[b]fluoranthene	1	mg/kg	0.042	ND
Benzo[g,h,i]perylene	1	mg/kg	0.042	ND
Benzo[k]fluoranthene	1	mg/kg	0.042	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.042	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.042	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.042	ND
Butylbenzylphthalate	1	mg/kg	0.042	ND
Caprolactam	1	mg/kg	0.042	ND
Carbazole	1	mg/kg	0.042	ND
Chrysene	1	mg/kg	0.042	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.042	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.042	ND
Dimethylphthalate	1	mg/kg	0.042	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.042	ND
Fluoranthene	1	mg/kg	0.042	ND
Fluorene	1	mg/kg	0.042	ND
Hexachlorobenzene	1	mg/kg	0.042	ND
Hexachlorobutadiene	1	mg/kg	0.042	ND
Hexachlorocyclopentadiene	1	mg/kg	0.042	ND
Hexachloroethane	1	mg/kg	0.042	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.042	ND
Isophorone	1	mg/kg	0.042	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.042	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.042	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.042	ND
Phenol	1	mg/kg	0.042	ND
Pyrene	1	mg/kg	0.042	ND

Sample ID: TB-112-07 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-013 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	42.10	50	58	148	84	
Phenol-d5	53.08	100	49	129	53	
Nitrobenzene-d5	31.23	50	52	129	62	
2-Fluorophenol	51.11	100	43	128	51	
2-Fluorobiphenyl	33.86	50	58	125	68	
2,4,6-Tribromophenol	82.33	100	54	145	82	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.33**	**4.1JAB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.42**	**0.41J**
Benzene, 1-ethyl-2-methyl-	**1**	**mg/kg**	**5.71**	**0.088J**
Hexadecane	**1**	**mg/kg**	**7.3**	**0.086J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.7J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**1000**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	**1**	**mg/kg**	**6.2**	**7.4**
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	ND
Iron	**1**	**mg/kg**	**250**	**2000**
Lead	1	mg/kg	6.2	ND
Magnesium	1	mg/kg	620	ND
Manganese	**1**	**mg/kg**	**12**	**25**
Nickel	1	mg/kg	6.2	ND
Potassium	1	mg/kg	620	ND
Sodium	**1**	**mg/kg**	**310**	**1100**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.25**	**0.35**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.50	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.50	ND

Sample ID: TB-112-07 Grab | **Collection Date: 3/25/2020**
Lab#: AD16382-014 | **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**80**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.904	mg/kg	0.0023	ND
1,1,2,2-Tetrachloroethane	0.904	mg/kg	0.0023	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.904	mg/kg	0.0023	ND
1,1,2-Trichloroethane	0.904	mg/kg	0.0023	ND
1,1-Dichloroethane	0.904	mg/kg	0.0023	ND
1,1-Dichloroethene	0.904	mg/kg	0.0023	ND
1,2,3-Trichlorobenzene	0.904	mg/kg	0.0023	ND
1,2,4-Trichlorobenzene	0.904	mg/kg	0.0023	ND
1,2-Dibromo-3-chloropropane	0.904	mg/kg	0.0023	ND
1,2-Dibromoethane	0.904	mg/kg	0.0011	ND
1,2-Dichlorobenzene	0.904	mg/kg	0.0023	ND
1,2-Dichloroethane	0.904	mg/kg	0.0018	ND
1,2-Dichloropropane	0.904	mg/kg	0.0023	ND
1,3-Dichlorobenzene	0.904	mg/kg	0.0023	ND
1,4-Dichlorobenzene	0.904	mg/kg	0.0023	ND
1,4-Dioxane	0.904	mg/kg	0.11	ND
2-Butanone	0.904	mg/kg	0.0023	ND
2-Hexanone	0.904	mg/kg	0.0023	ND
4-Methyl-2-pentanone	0.904	mg/kg	0.0023	ND
Acetone	**0.904**	**mg/kg**	**0.011**	**0.066**
Benzene	0.904	mg/kg	0.0011	ND
Bromochloromethane	0.904	mg/kg	0.0023	ND
Bromodichloromethane	0.904	mg/kg	0.0023	ND
Bromoform	0.904	mg/kg	0.0023	ND
Bromomethane	0.904	mg/kg	0.0023	ND
Carbon disulfide	0.904	mg/kg	0.0023	ND
Carbon tetrachloride	0.904	mg/kg	0.0023	ND
Chlorobenzene	0.904	mg/kg	0.0023	ND
Chloroethane	0.904	mg/kg	0.0023	ND
Chloroform	0.904	mg/kg	0.0023	ND
Chloromethane	0.904	mg/kg	0.0023	ND
cis-1,2-Dichloroethene	0.904	mg/kg	0.0023	ND
cis-1,3-Dichloropropene	0.904	mg/kg	0.0023	ND
Cyclohexane	0.904	mg/kg	0.0023	ND
Dibromochloromethane	0.904	mg/kg	0.0023	ND
Dichlorodifluoromethane	0.904	mg/kg	0.0023	ND
Ethylbenzene	0.904	mg/kg	0.0011	ND
Isopropylbenzene	0.904	mg/kg	0.0011	ND
m&p-Xylenes	0.904	mg/kg	0.0011	ND
Methyl Acetate	0.904	mg/kg	0.0023	ND
Methylcyclohexane	0.904	mg/kg	0.0023	ND
Methylene chloride	**0.904**	**mg/kg**	**0.0023**	**0.0045**
Methyl-t-butyl ether	0.904	mg/kg	0.0011	ND
o-Xylene	0.904	mg/kg	0.0011	ND
Styrene	0.904	mg/kg	0.0023	ND
Tetrachloroethene	0.904	mg/kg	0.0023	ND
Toluene	**0.904**	**mg/kg**	**0.0011**	**0.0029**
trans-1,2-Dichloroethene	0.904	mg/kg	0.0023	ND
trans-1,3-Dichloropropene	0.904	mg/kg	0.0023	ND
Trichloroethene	0.904	mg/kg	0.0023	ND
Trichlorofluoromethane	0.904	mg/kg	0.0023	ND
Vinyl chloride	0.904	mg/kg	0.0023	ND
Xylenes (Total)	0.904	mg/kg	0.0011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.38	30	68	122	88	
Dibromofluoromethane	33.06	30	63	140	110	
Bromofluorobenzene	30.65	30	64	129	102	
1,2-Dichloroethane-d4	33.05	30	63	143	110	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-07 Grab
Lab#: AD16382-014
Matrix: Soil/Terracore

Collection Date: 3/25/2020
Receipt Date: 3/25/2020

1-Pentene	0.904	mg/kg	3.51	0.010J
Decane	0.904	mg/kg	7.57	0.0046J
TotalVolatileTic	0.904	mg/kg	NA	0.015J

Sample ID: TB-112-08 Comp | **Collection Date: 3/25/2020**
Lab#: AD16382-015 | **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**77**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0065	ND
Aldrin	1	mg/kg	0.0065	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0065	ND
delta-BHC	1	mg/kg	0.0065	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0065	ND
Endosulfan II	1	mg/kg	0.0065	ND
Endosulfan Sulfate	1	mg/kg	0.0065	ND
Endrin	1	mg/kg	0.0065	ND
Endrin Aldehyde	1	mg/kg	0.0065	ND
Endrin Ketone	1	mg/kg	0.0065	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0065	ND
Heptachlor Epoxide	1	mg/kg	0.0065	ND
Methoxychlor	1	mg/kg	0.0065	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0065	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	87.88	100	37	141	88	
TCMX-Surrogate	95.58	100	37	141	96	
DCB-Surrogate	93.83	100	33	146	94	
DCB-Surrogate	94.95	100	33	146	95	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	101.28	100	37	141	101	
TCMX-Surrogate	99.62	100	37	141	100	
DCB-Surrogate	75.87	100	34	146	76	
DCB-Surrogate	76.67	100	34	146	77	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND

Sample ID: TB-112-08 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-015 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.22	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.22	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	1	mg/kg	0.011	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	1	mg/kg	0.011	ND
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	**1**	**mg/kg**	**0.011**	**0.013**
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.22	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Sample ID: TB-112-08 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-015 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	44.46	50	58	148	89	
Phenol-d5	54.37	100	49	129	54	
Nitrobenzene-d5	34.26	50	52	129	69	
2-Fluorophenol	48.71	100	43	128	49	
2-Fluorobiphenyl	38.20	50	58	125	76	
2,4,6-Tribromophenol	85.64	100	54	145	86	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
1,2-Propanediol	**1**	**mg/kg**	**3.05**	**0.38J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.32**	**5.2JAB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.42**	**0.28J**
Benzene, 1-ethyl-2-methyl-	**1**	**mg/kg**	**5.45**	**0.10J**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.71**	**0.16J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**6.1J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**2100**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.5**	**6.7**
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.5	ND
Iron	**1**	**mg/kg**	**260**	**2900**
Lead	1	mg/kg	6.5	ND
Magnesium	1	mg/kg	650	ND
Manganese	**1**	**mg/kg**	**13**	**26**
Nickel	1	mg/kg	6.5	ND
Potassium	1	mg/kg	650	ND
Sodium	**1**	**mg/kg**	**320**	**1700**
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**0.55**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID:	**TB-112-08 Grab**	**Collection Date:**	**3/25/2020**
Lab#:	**AD16382-016**	**Receipt Date:**	**3/25/2020**
Matrix:	**Soil/Terracore**		

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**80**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	1.03	mg/kg	0.0026	ND
1,1,2,2-Tetrachloroethane	1.03	mg/kg	0.0026	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	1.03	mg/kg	0.0026	ND
1,1,2-Trichloroethane	1.03	mg/kg	0.0026	ND
1,1-Dichloroethane	1.03	mg/kg	0.0026	ND
1,1-Dichloroethene	1.03	mg/kg	0.0026	ND
1,2,3-Trichlorobenzene	1.03	mg/kg	0.0026	ND
1,2,4-Trichlorobenzene	1.03	mg/kg	0.0026	ND
1,2-Dibromo-3-chloropropane	1.03	mg/kg	0.0026	ND
1,2-Dibromoethane	1.03	mg/kg	0.0013	ND
1,2-Dichlorobenzene	1.03	mg/kg	0.0026	ND
1,2-Dichloroethane	1.03	mg/kg	0.0020	ND
1,2-Dichloropropane	1.03	mg/kg	0.0026	ND
1,3-Dichlorobenzene	1.03	mg/kg	0.0026	ND
1,4-Dichlorobenzene	1.03	mg/kg	0.0026	ND
1,4-Dioxane	1.03	mg/kg	0.13	ND
2-Butanone	1.03	mg/kg	0.0026	ND
2-Hexanone	1.03	mg/kg	0.0026	ND
4-Methyl-2-pentanone	1.03	mg/kg	0.0026	ND
Acetone	1.03	mg/kg	0.013	ND
Benzene	1.03	mg/kg	0.0013	ND
Bromochloromethane	1.03	mg/kg	0.0026	ND
Bromodichloromethane	1.03	mg/kg	0.0026	ND
Bromoform	1.03	mg/kg	0.0026	ND
Bromomethane	1.03	mg/kg	0.0026	ND
Carbon disulfide	1.03	mg/kg	0.0026	ND
Carbon tetrachloride	1.03	mg/kg	0.0026	ND
Chlorobenzene	1.03	mg/kg	0.0026	ND
Chloroethane	1.03	mg/kg	0.0026	ND
Chloroform	1.03	mg/kg	0.0026	ND
Chloromethane	1.03	mg/kg	0.0026	ND
cis-1,2-Dichloroethene	1.03	mg/kg	0.0026	ND
cis-1,3-Dichloropropene	1.03	mg/kg	0.0026	ND
Cyclohexane	1.03	mg/kg	0.0026	ND
Dibromochloromethane	1.03	mg/kg	0.0026	ND
Dichlorodifluoromethane	1.03	mg/kg	0.0026	ND
Ethylbenzene	1.03	mg/kg	0.0013	ND
Isopropylbenzene	1.03	mg/kg	0.0013	ND
m&p-Xylenes	1.03	mg/kg	0.0013	ND
Methyl Acetate	1.03	mg/kg	0.0026	ND
Methylcyclohexane	1.03	mg/kg	0.0026	ND
Methylene chloride	1.03	mg/kg	0.0026	ND
Methyl-t-butyl ether	1.03	mg/kg	0.0013	ND
o-Xylene	1.03	mg/kg	0.0013	ND
Styrene	1.03	mg/kg	0.0026	ND
Tetrachloroethene	1.03	mg/kg	0.0026	ND
Toluene	1.03	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	1.03	mg/kg	0.0026	ND
trans-1,3-Dichloropropene	1.03	mg/kg	0.0026	ND
Trichloroethene	1.03	mg/kg	0.0026	ND
Trichlorofluoromethane	1.03	mg/kg	0.0026	ND
Vinyl chloride	1.03	mg/kg	0.0026	ND
Xylenes (Total)	1.03	mg/kg	0.0013	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.25	30	68	122	87	
Dibromofluoromethane	32.28	30	63	140	108	
Bromofluorobenzene	30.63	30	64	129	102	
1,2-Dichloroethane-d4	33.16	30	63	143	111	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-08 Grab
Lab#: AD16382-016
Matrix: Soil/Terracore

Collection Date: 3/25/2020
Receipt Date: 3/25/2020

Nonane	1.03	mg/kg	6.85	0.0045J
Nonane, 4-methyl-	1.03	mg/kg	7.31	0.0040J
Decane	1.03	mg/kg	7.57	0.0074J
Tridecane	1.03	mg/kg	9.48	0.0070J
TotalVolatileTic	1.03	mg/kg	NA	0.023J

Sample ID: TB-112-09 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-017 **Receipt Date: 3/25/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**84**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.099	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0060	ND
Aldrin	1	mg/kg	0.0060	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0060	ND
delta-BHC	1	mg/kg	0.0060	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0060	ND
Endosulfan II	1	mg/kg	0.0060	ND
Endosulfan Sulfate	1	mg/kg	0.0060	ND
Endrin	1	mg/kg	0.0060	ND
Endrin Aldehyde	1	mg/kg	0.0060	ND
Endrin Ketone	1	mg/kg	0.0060	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0060	ND
Heptachlor Epoxide	1	mg/kg	0.0060	ND
Methoxychlor	1	mg/kg	0.0060	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0060	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	69.53	100	37	141	70	
TCMX-Surrogate	74.50	100	37	141	74	
DCB-Surrogate	73.70	100	33	146	74	
DCB-Surrogate	73.13	100	33	146	73	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	72.28	100	37	141	72	
TCMX-Surrogate	70.91	100	37	141	71	
DCB-Surrogate	54.51	100	34	146	55	
DCB-Surrogate	54.63	100	34	146	55	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.040	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.040	ND

Sample ID: TB-112-09 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-017 **Receipt Date: 3/25/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.0099	ND
2,4-Dimethylphenol	1	mg/kg	0.0099	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.040	ND
2-Chlorophenol	1	mg/kg	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.040	ND
2-Methylphenol	1	mg/kg	0.0099	ND
2-Nitroaniline	1	mg/kg	0.040	ND
2-Nitrophenol	1	mg/kg	0.040	ND
3&4-Methylphenol	1	mg/kg	0.0099	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.040	ND
3-Nitroaniline	1	mg/kg	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.040	ND
4-Chloroaniline	1	mg/kg	0.0099	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.040	ND
4-Nitroaniline	1	mg/kg	0.040	ND
4-Nitrophenol	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Acetophenone	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Atrazine	1	mg/kg	0.040	ND
Benzaldehyde	1	mg/kg	0.040	ND
Benzo[a]anthracene	1	mg/kg	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0099	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.040	ND
Caprolactam	1	mg/kg	0.040	ND
Carbazole	1	mg/kg	0.040	ND
Chrysene	1	mg/kg	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Dibenzofuran	1	mg/kg	0.0099	ND
Diethylphthalate	1	mg/kg	0.040	ND
Dimethylphthalate	1	mg/kg	0.040	ND
Di-n-butylphthalate	1	mg/kg	0.0099	ND
Di-n-octylphthalate	1	mg/kg	0.040	ND
Fluoranthene	1	mg/kg	0.040	ND
Fluorene	1	mg/kg	0.040	ND
Hexachlorobenzene	1	mg/kg	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.040	ND
Hexachloroethane	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Isophorone	1	mg/kg	0.040	ND
Naphthalene	1	mg/kg	0.0099	ND
Nitrobenzene	1	mg/kg	0.040	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0099	ND
N-Nitrosodiphenylamine	1	mg/kg	0.040	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.040	ND
Phenol	1	mg/kg	0.040	ND
Pyrene	1	mg/kg	0.040	ND

Sample ID: TB-112-09 Comp **Collection Date: 3/25/2020**
Lab#: AD16382-017 **Receipt Date: 3/25/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	55.56	50	58	148	111	
Phenol-d5	81.18	100	49	129	81	
Nitrobenzene-d5	38.10	50	52	129	76	
2-Fluorophenol	70.69	100	43	128	71	
2-Fluorobiphenyl	45.79	50	58	125	92	
2,4,6-Tribromophenol	93.18	100	54	145	93	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
1,2-Propanediol	**1**	**mg/kg**	**2.99**	**0.43J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**5.7JAB**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.38**	**0.41J**
Benzene, 1-ethyl-3-methyl-	**1**	**mg/kg**	**5.41**	**0.10J**
Benzene, 1,2,3-trimethyl-	**1**	**mg/kg**	**5.67**	**0.13J**
Ethanol, 2,2'-[1,2-ethanediylbis(oxy)]b	**1**	**mg/kg**	**6.91**	**0.11J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**6.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**760**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.0	ND
Cobalt	1	mg/kg	3.0	ND
Copper	1	mg/kg	6.0	ND
Iron	**1**	**mg/kg**	**240**	**1500**
Lead	1	mg/kg	6.0	ND
Magnesium	1	mg/kg	600	ND
Manganese	**1**	**mg/kg**	**12**	**24**
Nickel	1	mg/kg	6.0	ND
Potassium	1	mg/kg	600	ND
Sodium	**1**	**mg/kg**	**300**	**1400**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.95	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.38**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.48	ND

Sample ID:	**TB-112-09 Grab**	**Collection Date:**	**3/25/2020**
Lab#:	**AD16382-018**	**Receipt Date:**	**3/25/2020**
Matrix:	**Soil/Terracore**		

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**85**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.649	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.649	mg/kg	0.0015	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.649	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.649	mg/kg	0.0015	ND
1,1-Dichloroethane	0.649	mg/kg	0.0015	ND
1,1-Dichloroethene	0.649	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.649	mg/kg	0.0015	ND
1,2,4-Trichlorobenzene	0.649	mg/kg	0.0015	ND
1,2-Dibromo-3-chloropropane	0.649	mg/kg	0.0015	ND
1,2-Dibromoethane	0.649	mg/kg	0.00076	ND
1,2-Dichlorobenzene	0.649	mg/kg	0.0015	ND
1,2-Dichloroethane	0.649	mg/kg	0.0012	ND
1,2-Dichloropropane	0.649	mg/kg	0.0015	ND
1,3-Dichlorobenzene	0.649	mg/kg	0.0015	ND
1,4-Dichlorobenzene	0.649	mg/kg	0.0015	ND
1,4-Dioxane	0.649	mg/kg	0.076	ND
2-Butanone	0.649	mg/kg	0.0015	ND
2-Hexanone	0.649	mg/kg	0.0015	ND
4-Methyl-2-pentanone	0.649	mg/kg	0.0015	ND
Acetone	0.649	mg/kg	0.0076	ND
Benzene	0.649	mg/kg	0.00076	ND
Bromochloromethane	0.649	mg/kg	0.0015	ND
Bromodichloromethane	0.649	mg/kg	0.0015	ND
Bromoform	0.649	mg/kg	0.0015	ND
Bromomethane	0.649	mg/kg	0.0015	ND
Carbon disulfide	**0.649**	**mg/kg**	**0.0015**	**0.0041**
Carbon tetrachloride	0.649	mg/kg	0.0015	ND
Chlorobenzene	0.649	mg/kg	0.0015	ND
Chloroethane	0.649	mg/kg	0.0015	ND
Chloroform	0.649	mg/kg	0.0015	ND
Chloromethane	0.649	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.649	mg/kg	0.0015	ND
cis-1,3-Dichloropropene	0.649	mg/kg	0.0015	ND
Cyclohexane	0.649	mg/kg	0.0015	ND
Dibromochloromethane	0.649	mg/kg	0.0015	ND
Dichlorodifluoromethane	0.649	mg/kg	0.0015	ND
Ethylbenzene	0.649	mg/kg	0.00076	ND
Isopropylbenzene	0.649	mg/kg	0.00076	ND
m&p-Xylenes	0.649	mg/kg	0.00076	ND
Methyl Acetate	0.649	mg/kg	0.0015	ND
Methylcyclohexane	0.649	mg/kg	0.0015	ND
Methylene chloride	**0.649**	**mg/kg**	**0.0015**	**0.0015**
Methyl-t-butyl ether	0.649	mg/kg	0.00076	ND
o-Xylene	0.649	mg/kg	0.00076	ND
Styrene	0.649	mg/kg	0.0015	ND
Tetrachloroethene	0.649	mg/kg	0.0015	ND
Toluene	**0.649**	**mg/kg**	**0.00076**	**0.00095**
trans-1,2-Dichloroethene	0.649	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.649	mg/kg	0.0015	ND
Trichloroethene	0.649	mg/kg	0.0015	ND
Trichlorofluoromethane	0.649	mg/kg	0.0015	ND
Vinyl chloride	0.649	mg/kg	0.0015	ND
Xylenes (Total)	0.649	mg/kg	0.00076	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	26.09	30	68	122	87	
Dibromofluoromethane	32.44	30	63	140	108	
Bromofluorobenzene	30.81	30	64	129	103	
1,2-Dichloroethane-d4	32.74	30	63	143	109	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-112-09 Grab **Collection Date: 3/25/2020**
Lab#: AD16382-018 **Receipt Date: 3/25/2020**
Matrix: Soil/Terracore

Nonane	0.649	mg/kg	6.85	0.011J
2-Hexene, 3,4,4-trimethyl-	0.649	mg/kg	6.89	0.0058J
2-Hexene, 3,4,4-trimethyl-	0.649	mg/kg	7.07	0.0093J
Nonane, 3-methyl-	0.649	mg/kg	7.12	0.0051J
Cyclohexane, propyl-	0.649	mg/kg	7.23	0.016J
Nonane, 4-methyl-	0.649	mg/kg	7.31	0.0086J
Decane	0.649	mg/kg	7.57	0.016J
unknown	0.649	mg/kg	7.6	0.0049J
Cyclohexane, 1,1'-(1,4-butanediyl)bis-	0.649	mg/kg	7.96	0.0095J
Tridecane	0.649	mg/kg	8.24	0.0037J
Naphthalene, decahydro-	0.649	mg/kg	8.28	0.0058J
Dodecane	0.649	mg/kg	8.88	0.0060J
Naphthalene, decahydro-2,6-dimethyl-	0.649	mg/kg	9.1	0.0038J
Tridecane	0.649	mg/kg	9.48	0.012J
TotalVolatileTic	0.649	mg/kg	NA	0.12J

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A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): 00326601

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ (NY) PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
(5) Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 days		Other:_____

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: Arcadis
Address: 17-17 Route 208 N
Fair Lawn, NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmore@arcadis.com
1d) Send Report to: Max.Gadskin@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Rich Gilmore
2c) Project Location (City/State): NY
2d) Quote/PO # (If Applicable): 30016015.00010

FOR LAB USE ONLY ↓

Batch # AD16382

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air
GW - Ground Water, SL - Sludge
WW - Waste Water, OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA 15	TCL SVOC-BNA 15	TAL Metals	TAL CN	TCL PCB	TCL Pest	8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	TB-112-01	S	3/25/20	1200	X	X	X	X	X	X	X	X	4	1							
003/004	TB-112-02	S	↓	1210	X	X	X	X	X	X	X	X	4	1							
005/006	TB-112-03	S		1220	X	X	X	X	X	X	X	X	4	1							
007/008	TB-112-04	S		1235	X	X	X	X	X	X	X	X	4	1							
009/010	TB-112-05	S		1250	X	X	X	X	X	X	X	X	4	1							
011/012	TB-112-06	S		1315	X	X	X	X	X	X	X	X	4	1							
013/014	TB-112-07	S		1350	X	X	X	X	X	X	X	X	4	1							
015/016	TB-112-08	S		1420	X	X	X	X	X	X	X	X	4	1							
017/018	TB-112-09	S	↓	1445	X	X	X	X	X	X	X	X	4	1							
													~~4~~	~~1~~							

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	3/25/20	17:29

11) Sampler (print name): Jessica Denzler-Annavaulik Date: 3/25/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.7°C

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke Report Of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0022603

Sample ID: TB-116-1 Comp
Lab#: AD15926-001
Matrix: Soil

Collection Date: 2/25/2020
Receipt Date: 2/26/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		83

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0060	ND
Aldrin	1	mg/kg	0.0060	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0060	ND
delta-BHC	1	mg/kg	0.0060	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0060	ND
Endosulfan II	1	mg/kg	0.0060	ND
Endosulfan Sulfate	1	mg/kg	0.0060	ND
Endrin	1	mg/kg	0.0060	ND
Endrin Aldehyde	1	mg/kg	0.0060	ND
Endrin Ketone	1	mg/kg	0.0060	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0060	ND
Heptachlor Epoxide	1	mg/kg	0.0060	ND
Methoxychlor	1	mg/kg	0.0060	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0060	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	122.22	100	37	141	122	
TCMX-Surrogate	122.68	100	37	141	123	
DCB-Surrogate	109.18	100	33	146	109	
DCB-Surrogate	116.72	100	33	146	117	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Sample ID: TB-116-1 Comp **Collection Date: 2/25/2020**
Lab#: AD15926-001 **Receipt Date: 2/26/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	112.81	100	37	141	113	
TCMX-Surrogate	114.17	100	37	141	114	
DCB-Surrogate	103.00	100	34	146	103	
DCB-Surrogate	111.14	100	34	146	111	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.040	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.040	ND
2,4,6-Trichlorophenol	1	mg/kg	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.040	ND
2-Chlorophenol	1	mg/kg	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.040	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.040	ND
2-Nitrophenol	1	mg/kg	0.040	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.040	ND
3-Nitroaniline	1	mg/kg	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.040	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.040	ND
4-Nitroaniline	1	mg/kg	0.040	ND
4-Nitrophenol	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Acetophenone	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Atrazine	1	mg/kg	0.040	ND
Benzaldehyde	1	mg/kg	0.040	ND
Benzo[a]anthracene	1	mg/kg	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.040	ND
Caprolactam	1	mg/kg	0.040	ND
Carbazole	1	mg/kg	0.040	ND
Chrysene	1	mg/kg	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.040	ND
Dimethylphthalate	1	mg/kg	0.040	ND
Di-n-butylphthalate	**1**	**mg/kg**	**0.010**	**0.032**
Di-n-octylphthalate	1	mg/kg	0.040	ND
Fluoranthene	1	mg/kg	0.040	ND
Fluorene	1	mg/kg	0.040	ND
Hexachlorobenzene	1	mg/kg	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.040	ND
Hexachloroethane	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Isophorone	1	mg/kg	0.040	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.040	ND

Sample ID: TB-116-1 Comp **Collection Date: 2/25/2020**
Lab#: AD15926-001 **Receipt Date: 2/26/2020**
Matrix: Soil

N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.040	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.040	ND
Phenol	1	mg/kg	0.040	ND
Pyrene	1	mg/kg	0.040	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	56.10	50	58	148	112	
Phenol-d5	78.10	100	49	129	78	
Nitrobenzene-d5	36.98	50	52	129	74	
2-Fluorophenol	64.19	100	43	128	64	
2-Fluorobiphenyl	42.75	50	58	125	85	
2,4,6-Tribromophenol	91.19	100	54	145	91	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.29**	**3.8JAB**
unknown	**1**	**mg/kg**	**4.86**	**0.097J**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.22**	**0.097J**
Ethanol, 2,2'-oxybis-	**1**	**mg/kg**	**5.39**	**0.24J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.2J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**1300**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.0	ND
Cobalt	1	mg/kg	3.0	ND
Copper	1	mg/kg	6.0	ND
Iron	**1**	**mg/kg**	**240**	**1500**
Lead	1	mg/kg	6.0	ND
Magnesium	1	mg/kg	600	ND
Manganese	**1**	**mg/kg**	**12**	**33**
Nickel	1	mg/kg	6.0	ND
Potassium	1	mg/kg	600	ND
Sodium	**1**	**mg/kg**	**300**	**970**
Vanadium	**1**	**mg/kg**	**12**	**16**
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.96	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.52**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.48	ND

Sample ID: TB-116-1 Grab | **Collection Date: 2/25/2020**
Lab#: AD15926-002 | **Receipt Date: 2/26/2020**
Matrix: Soil/Terracore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**85**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.967	mg/kg	0.0023	ND
1,1,2,2-Tetrachloroethane	0.967	mg/kg	0.0023	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.967	mg/kg	0.0023	ND
1,1,2-Trichloroethane	0.967	mg/kg	0.0023	ND
1,1-Dichloroethane	0.967	mg/kg	0.0023	ND
1,1-Dichloroethene	0.967	mg/kg	0.0023	ND
1,2,3-Trichlorobenzene	0.967	mg/kg	0.0023	ND
1,2,4-Trichlorobenzene	0.967	mg/kg	0.0023	ND
1,2-Dibromo-3-chloropropane	0.967	mg/kg	0.0023	ND
1,2-Dibromoethane	0.967	mg/kg	0.0011	ND
1,2-Dichlorobenzene	0.967	mg/kg	0.0023	ND
1,2-Dichloroethane	0.967	mg/kg	0.0018	ND
1,2-Dichloropropane	0.967	mg/kg	0.0023	ND
1,3-Dichlorobenzene	0.967	mg/kg	0.0023	ND
1,4-Dichlorobenzene	0.967	mg/kg	0.0023	ND
1,4-Dioxane	0.967	mg/kg	0.11	ND
2-Butanone	0.967	mg/kg	0.0023	ND
2-Hexanone	0.967	mg/kg	0.0023	ND
4-Methyl-2-pentanone	0.967	mg/kg	0.0023	ND
Acetone	**0.967**	**mg/kg**	**0.011**	**0.16**
Benzene	0.967	mg/kg	0.0011	ND
Bromochloromethane	0.967	mg/kg	0.0023	ND
Bromodichloromethane	0.967	mg/kg	0.0023	ND
Bromoform	0.967	mg/kg	0.0023	ND
Bromomethane	0.967	mg/kg	0.0023	ND
Carbon disulfide	0.967	mg/kg	0.0023	ND
Carbon tetrachloride	0.967	mg/kg	0.0023	ND
Chlorobenzene	0.967	mg/kg	0.0023	ND
Chloroethane	0.967	mg/kg	0.0023	ND
Chloroform	0.967	mg/kg	0.0023	ND
Chloromethane	0.967	mg/kg	0.0023	ND
cis-1,2-Dichloroethene	0.967	mg/kg	0.0023	ND
cis-1,3-Dichloropropene	0.967	mg/kg	0.0023	ND
Cyclohexane	0.967	mg/kg	0.0023	ND
Dibromochloromethane	0.967	mg/kg	0.0023	ND
Dichlorodifluoromethane	0.967	mg/kg	0.0023	ND
Ethylbenzene	0.967	mg/kg	0.0011	ND
Isopropylbenzene	0.967	mg/kg	0.0011	ND
m&p-Xylenes	0.967	mg/kg	0.0011	ND
Methyl Acetate	0.967	mg/kg	0.0023	ND
Methylcyclohexane	0.967	mg/kg	0.0023	ND
Methylene chloride	0.967	mg/kg	0.0023	ND
Methyl-t-butyl ether	0.967	mg/kg	0.0011	ND
o-Xylene	0.967	mg/kg	0.0011	ND
Styrene	0.967	mg/kg	0.0023	ND
Tetrachloroethene	0.967	mg/kg	0.0023	ND
Toluene	**0.967**	**mg/kg**	**0.0011**	**0.015**
trans-1,2-Dichloroethene	0.967	mg/kg	0.0023	ND
trans-1,3-Dichloropropene	0.967	mg/kg	0.0023	ND
Trichloroethene	0.967	mg/kg	0.0023	ND
Trichlorofluoromethane	0.967	mg/kg	0.0023	ND
Vinyl chloride	0.967	mg/kg	0.0023	ND
Xylenes (Total)	0.967	mg/kg	0.0011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.38	30	68	122	98	
Dibromofluoromethane	29.83	30	63	140	99	
Bromofluorobenzene	29.55	30	64	129	99	
1,2-Dichloroethane-d4	33.16	30	63	143	111	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-116-1 Grab
Lab#: AD15926-002
Matrix: Soil/Terracore

Collection Date: 2/25/2020
Receipt Date: 2/26/2020

1-Pentene	0.967	mg/kg	3.51	0.0092J
TotalVolatileTic	0.967	mg/kg	NA	0.0092J

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

CHAIN OF CUSTODY RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): 0022603

Page 1 of 1

Customer Information

1a) Customer: Arcadis
Address: 17-17 St Rt 208 N, Fair Lawn NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmour@arcadis.com
1d) Send Report to: Max.goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 3001615.00040

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AD15926

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type Composite (C)	Sample Type Grab (G)	TCL VOA+15	TCL SVOC-BNA+15	TAL Metals	TAL CN	TCL PCB	TCL Pest	8) # of Bottles None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
002/001	TB-116-1	S	2/25/10	0830	X	X	X	X	X	X	X	X	4	1							

10) Relinquished by:	Accepted by:	Date	Time
Max Goldstein	[signature]	2/25/10	10:45
[signature]	[signature]	2/26/10	11:10

11) Sampler (print name): M. Goldstein Date: 2/25/10

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 3.0°

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke Report Of Analysis

Client: ARCADIS
Project: Long Beach

HC Project #: 0021318

Sample ID: TB-117-1 COMP
Lab#: AD15687-001
Matrix: Soil

Collection Date: 2/12/2020
Receipt Date: 2/13/2020

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**90**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.27	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	**1**	**mg/kg**	**0.093**	**0.22**

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	**1**	**mg/kg**	**0.0056**	**0.030**
Aldrin	1	mg/kg	0.0056	ND
Alpha-BHC	1	mg/kg	0.0011	ND
beta-BHC	1	mg/kg	0.0011	ND
Chlordane (Total)	**1**	**mg/kg**	**0.0056**	**0.042**
delta-BHC	1	mg/kg	0.0056	ND
Dieldrin	**1**	**mg/kg**	**0.0011**	**0.0018d**
Endosulfan I	1	mg/kg	0.0056	ND
Endosulfan II	1	mg/kg	0.0056	ND
Endosulfan Sulfate	1	mg/kg	0.0056	ND
Endrin	1	mg/kg	0.0056	ND
Endrin Aldehyde	1	mg/kg	0.0056	ND
Endrin Ketone	1	mg/kg	0.0056	ND
gamma-BHC	1	mg/kg	0.0011	ND
Heptachlor	1	mg/kg	0.0056	ND
Heptachlor Epoxide	1	mg/kg	0.0056	ND
Methoxychlor	1	mg/kg	0.0056	ND
p,p'-DDD	**1**	**mg/kg**	**0.0028**	**0.0032d**
p,p'-DDE	**1**	**mg/kg**	**0.0028**	**0.023**
p,p'-DDT	**1**	**mg/kg**	**0.0028**	**0.015d**
Toxaphene	1	mg/kg	0.028	ND
y-Chlordane	**1**	**mg/kg**	**0.0056**	**0.012**

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	121.06	100	37	141	121	
TCMX-Surrogate	113.17	100	37	141	113	
DCB-Surrogate	113.72	100	33	146	114	
DCB-Surrogate	120.15	100	33	146	120	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.028	ND
Aroclor-1016	1	mg/kg	0.028	ND
Aroclor-1221	1	mg/kg	0.028	ND
Aroclor-1232	1	mg/kg	0.028	ND
Aroclor-1242	1	mg/kg	0.028	ND
Aroclor-1248	1	mg/kg	0.028	ND
Aroclor-1254	1	mg/kg	0.028	ND
Aroclor-1260	1	mg/kg	0.028	ND
Aroclor-1262	1	mg/kg	0.028	ND
Aroclor-1268	1	mg/kg	0.028	ND

Sample ID: TB-117-1 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-001 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	112.06	100	37	141	112	
TCMX-Surrogate	105.07	100	37	141	105	
DCB-Surrogate	101.53	100	34	146	102	
DCB-Surrogate	90.13	100	34	146	90	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	3	mg/kg	0.11	ND
1,2,4,5-Tetrachlorobenzene	3	mg/kg	0.11	ND
2,3,4,6-Tetrachlorophenol	3	mg/kg	0.11	ND
2,4,5-Trichlorophenol	3	mg/kg	0.11	ND
2,4,6-Trichlorophenol	3	mg/kg	0.11	ND
2,4-Dichlorophenol	3	mg/kg	0.028	ND
2,4-Dimethylphenol	3	mg/kg	0.028	ND
2,4-Dinitrophenol	3	mg/kg	0.56	ND
2,4-Dinitrotoluene	3	mg/kg	0.11	ND
2,6-Dinitrotoluene	3	mg/kg	0.11	ND
2-Chloronaphthalene	3	mg/kg	0.11	ND
2-Chlorophenol	3	mg/kg	0.11	ND
2-Methylnaphthalene	3	mg/kg	0.11	ND
2-Methylphenol	3	mg/kg	0.028	ND
2-Nitroaniline	3	mg/kg	0.11	ND
2-Nitrophenol	3	mg/kg	0.11	ND
3&4-Methylphenol	3	mg/kg	0.028	ND
3,3'-Dichlorobenzidine	3	mg/kg	0.11	ND
3-Nitroaniline	3	mg/kg	0.11	ND
4,6-Dinitro-2-methylphenol	3	mg/kg	0.56	ND
4-Bromophenyl-phenylether	3	mg/kg	0.11	ND
4-Chloro-3-methylphenol	3	mg/kg	0.11	ND
4-Chloroaniline	3	mg/kg	0.028	ND
4-Chlorophenyl-phenylether	3	mg/kg	0.11	ND
4-Nitroaniline	3	mg/kg	0.11	ND
4-Nitrophenol	3	mg/kg	0.11	ND
Acenaphthene	3	mg/kg	0.11	ND
Acenaphthylene	3	mg/kg	0.11	ND
Acetophenone	3	mg/kg	0.11	ND
Anthracene	3	mg/kg	0.11	ND
Atrazine	3	mg/kg	0.11	ND
Benzaldehyde	3	mg/kg	0.11	ND
Benzo[a]anthracene	**3**	**mg/kg**	**0.11**	**0.22**
Benzo[a]pyrene	**3**	**mg/kg**	**0.11**	**0.24**
Benzo[b]fluoranthene	**3**	**mg/kg**	**0.11**	**0.33**
Benzo[g,h,i]perylene	**3**	**mg/kg**	**0.11**	**0.17**
Benzo[k]fluoranthene	3	mg/kg	0.11	ND
bis(2-Chloroethoxy)methane	3	mg/kg	0.11	ND
bis(2-Chloroethyl)ether	3	mg/kg	0.028	ND
bis(2-Chloroisopropyl)ether	3	mg/kg	0.11	ND
bis(2-Ethylhexyl)phthalate	3	mg/kg	0.11	ND
Butylbenzylphthalate	3	mg/kg	0.11	ND
Caprolactam	3	mg/kg	0.11	ND
Carbazole	3	mg/kg	0.11	ND
Chrysene	**3**	**mg/kg**	**0.11**	**0.22**
Dibenzo[a,h]anthracene	3	mg/kg	0.11	ND
Dibenzofuran	3	mg/kg	0.028	ND
Diethylphthalate	3	mg/kg	0.11	ND
Dimethylphthalate	3	mg/kg	0.11	ND
Di-n-butylphthalate	3	mg/kg	0.028	ND
Di-n-octylphthalate	3	mg/kg	0.11	ND
Fluoranthene	**3**	**mg/kg**	**0.11**	**0.36**
Fluorene	3	mg/kg	0.11	ND
Hexachlorobenzene	3	mg/kg	0.11	ND
Hexachlorobutadiene	3	mg/kg	0.11	ND
Hexachlorocyclopentadiene	3	mg/kg	0.11	ND
Hexachloroethane	3	mg/kg	0.11	ND
Indeno[1,2,3-cd]pyrene	**3**	**mg/kg**	**0.11**	**0.14**
Isophorone	3	mg/kg	0.11	ND
Naphthalene	3	mg/kg	0.028	ND
Nitrobenzene	3	mg/kg	0.11	ND

N-Nitroso-di-n-propylamine	3	mg/kg	0.028	ND
N-Nitrosodiphenylamine	3	mg/kg	0.11	ND
Pentachlorophenol	3	mg/kg	0.56	ND
Phenanthrene	**3**	**mg/kg**	**0.11**	**0.15**
Phenol	3	mg/kg	0.11	ND
Pyrene	**3**	**mg/kg**	**0.11**	**0.37**

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	15.35	50	58	148	92	
Phenol-d5	28.21	100	49	129	85	
Nitrobenzene-d5	12.76	50	52	129	77	
2-Fluorophenol	28.02	100	43	128	84	
2-Fluorobiphenyl	13.42	50	58	125	81	
2,4,6-Tribromophenol	28.20	100	54	145	85	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Cyclotetracosane	**3**	**mg/kg**	**13.42**	**0.29J**
1-Cyclohexene-1-butanal, .alpha.,2,6,6-	**3**	**mg/kg**	**13.53**	**0.44J**
Triacontane	**3**	**mg/kg**	**14.13**	**0.57J**
Coronene	**3**	**mg/kg**	**14.52**	**0.53J**
Nonacosane	**3**	**mg/kg**	**14.89**	**0.50J**
1H-3a,7-Methanoazulene, octahydro-1,9,9	**3**	**mg/kg**	**15.85**	**0.62J**
Stigmast-5-en-3-ol, (3.beta.,24S)-	**3**	**mg/kg**	**16.19**	**0.54J**
2-Pentanone, 4-hydroxy-4-methyl-	**3**	**mg/kg**	**4.3**	**4.2JAB**
4-TOLUENESULFONAMIDE	**3**	**mg/kg**	**9.02**	**0.25J**
TotalSemiVolatileTic	**3**	**mg/kg**	**NA**	**7.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**220**	**4200**
Barium	**1**	**mg/kg**	**11**	**34**
Calcium	**1**	**mg/kg**	**1100**	**9700**
Chromium	**1**	**mg/kg**	**5.6**	**16**
Cobalt	1	mg/kg	2.8	ND
Copper	**1**	**mg/kg**	**5.6**	**24**
Iron	**1**	**mg/kg**	**220**	**6600**
Lead	**1**	**mg/kg**	**5.6**	**30**
Magnesium	**1**	**mg/kg**	**560**	**2800**
Manganese	**1**	**mg/kg**	**11**	**95**
Nickel	**1**	**mg/kg**	**5.6**	**6.2**
Potassium	1	mg/kg	560	ND
Sodium	1	mg/kg	280	ND
Vanadium	**1**	**mg/kg**	**11**	**12**
Zinc	**1**	**mg/kg**	**11**	**45**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.89	ND
Arsenic	**1**	**mg/kg**	**0.22**	**4.6**
Beryllium	1	mg/kg	0.22	ND
Cadmium	**1**	**mg/kg**	**0.44**	**1.2**
Selenium	1	mg/kg	2.2	ND
Silver	**1**	**mg/kg**	**0.22**	**1.5**
Thallium	1	mg/kg	0.44	ND

Sample ID: TB-117-1 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-002 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**92**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.951	mg/kg	0.0021	ND
1,1,2,2-Tetrachloroethane	0.951	mg/kg	0.0021	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.951	mg/kg	0.0021	ND
1,1,2-Trichloroethane	0.951	mg/kg	0.0021	ND
1,1-Dichloroethane	0.951	mg/kg	0.0021	ND
1,1-Dichloroethene	0.951	mg/kg	0.0021	ND
1,2,3-Trichlorobenzene	0.951	mg/kg	0.0021	ND
1,2,4-Trichlorobenzene	0.951	mg/kg	0.0021	ND
1,2-Dibromo-3-chloropropane	0.951	mg/kg	0.0021	ND
1,2-Dibromoethane	0.951	mg/kg	0.00081	ND
1,2-Dichlorobenzene	0.951	mg/kg	0.0021	ND
1,2-Dichloroethane	0.951	mg/kg	0.0021	ND
1,2-Dichloropropane	0.951	mg/kg	0.0021	ND
1,3-Dichlorobenzene	0.951	mg/kg	0.0021	ND
1,4-Dichlorobenzene	0.951	mg/kg	0.0021	ND
1,4-Dioxane	0.951	mg/kg	0.10	ND
2-Butanone	0.951	mg/kg	0.0021	ND
2-Hexanone	0.951	mg/kg	0.0021	ND
4-Methyl-2-pentanone	0.951	mg/kg	0.0021	ND
Acetone	0.951	mg/kg	0.010	ND
Benzene	0.951	mg/kg	0.0010	ND
Bromochloromethane	0.951	mg/kg	0.0021	ND
Bromodichloromethane	0.951	mg/kg	0.0021	ND
Bromoform	0.951	mg/kg	0.0021	ND
Bromomethane	0.951	mg/kg	0.0021	ND
Carbon disulfide	0.951	mg/kg	0.0021	ND
Carbon tetrachloride	0.951	mg/kg	0.0021	ND
Chlorobenzene	0.951	mg/kg	0.0021	ND
Chloroethane	0.951	mg/kg	0.0021	ND
Chloroform	0.951	mg/kg	0.0021	ND
Chloromethane	0.951	mg/kg	0.0021	ND
cis-1,2-Dichloroethene	0.951	mg/kg	0.0021	ND
cis-1,3-Dichloropropene	0.951	mg/kg	0.0021	ND
Cyclohexane	0.951	mg/kg	0.0021	ND
Dibromochloromethane	0.951	mg/kg	0.0021	ND
Dichlorodifluoromethane	0.951	mg/kg	0.0021	ND
Ethylbenzene	0.951	mg/kg	0.0010	ND
Isopropylbenzene	0.951	mg/kg	0.0010	ND
m&p-Xylenes	0.951	mg/kg	0.0010	ND
Methyl Acetate	0.951	mg/kg	0.0021	ND
Methylcyclohexane	0.951	mg/kg	0.0021	ND
Methylene chloride	**0.951**	**mg/kg**	**0.0021**	**0.016**
Methyl-t-butyl ether	0.951	mg/kg	0.0010	ND
o-Xylene	0.951	mg/kg	0.0010	ND
Styrene	0.951	mg/kg	0.0021	ND
Tetrachloroethene	0.951	mg/kg	0.0021	ND
Toluene	0.951	mg/kg	0.0010	ND
trans-1,2-Dichloroethene	0.951	mg/kg	0.0021	ND
trans-1,3-Dichloropropene	0.951	mg/kg	0.0021	ND
Trichloroethene	0.951	mg/kg	0.0021	ND
Trichlorofluoromethane	0.951	mg/kg	0.0021	ND
Vinyl chloride	0.951	mg/kg	0.0021	ND
Xylenes (Total)	0.951	mg/kg	0.0010	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	31.83	30	68	122	106	
Dibromofluoromethane	32.07	30	63	140	107	
Bromofluorobenzene	34.90	30	64	129	116	
1,2-Dichloroethane-d4	30.67	30	63	143	102	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-1 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-002 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

No Unknown Compounds Detected	0.951	mg/kg	NA	ND
TotalVolatileTic	0.951	mg/kg	NA	ND

Sample ID: TB-117-2 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-003 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**84**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.099	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0060	ND
Aldrin	1	mg/kg	0.0060	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0060	ND
delta-BHC	1	mg/kg	0.0060	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0060	ND
Endosulfan II	1	mg/kg	0.0060	ND
Endosulfan Sulfate	1	mg/kg	0.0060	ND
Endrin	1	mg/kg	0.0060	ND
Endrin Aldehyde	1	mg/kg	0.0060	ND
Endrin Ketone	1	mg/kg	0.0060	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0060	ND
Heptachlor Epoxide	1	mg/kg	0.0060	ND
Methoxychlor	1	mg/kg	0.0060	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0060	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	96.28	100	37	141	96	
TCMX-Surrogate	91.13	100	37	141	91	
DCB-Surrogate	93.47	100	33	146	93	
DCB-Surrogate	96.08	100	33	146	96	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	103.82	100	37	141	104	
TCMX-Surrogate	96.19	100	37	141	96	
DCB-Surrogate	94.91	100	34	146	95	
DCB-Surrogate	85.43	100	34	146	85	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.040	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.040	ND

Sample ID: TB-117-2 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-003 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.0099	ND
2,4-Dimethylphenol	1	mg/kg	0.0099	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.040	ND
2-Chlorophenol	1	mg/kg	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.040	ND
2-Methylphenol	1	mg/kg	0.0099	ND
2-Nitroaniline	1	mg/kg	0.040	ND
2-Nitrophenol	1	mg/kg	0.040	ND
3&4-Methylphenol	1	mg/kg	0.0099	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.040	ND
3-Nitroaniline	1	mg/kg	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.040	ND
4-Chloroaniline	1	mg/kg	0.0099	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.040	ND
4-Nitroaniline	1	mg/kg	0.040	ND
4-Nitrophenol	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Acetophenone	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Atrazine	1	mg/kg	0.040	ND
Benzaldehyde	1	mg/kg	0.040	ND
Benzo[a]anthracene	1	mg/kg	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0099	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.040	ND
Caprolactam	1	mg/kg	0.040	ND
Carbazole	1	mg/kg	0.040	ND
Chrysene	1	mg/kg	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Dibenzofuran	1	mg/kg	0.0099	ND
Diethylphthalate	1	mg/kg	0.040	ND
Dimethylphthalate	1	mg/kg	0.040	ND
Di-n-butylphthalate	1	mg/kg	0.0099	ND
Di-n-octylphthalate	1	mg/kg	0.040	ND
Fluoranthene	1	mg/kg	0.040	ND
Fluorene	1	mg/kg	0.040	ND
Hexachlorobenzene	1	mg/kg	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.040	ND
Hexachloroethane	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Isophorone	1	mg/kg	0.040	ND
Naphthalene	1	mg/kg	0.0099	ND
Nitrobenzene	1	mg/kg	0.040	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0099	ND
N-Nitrosodiphenylamine	1	mg/kg	0.040	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.040	ND
Phenol	1	mg/kg	0.040	ND
Pyrene	1	mg/kg	0.040	ND

Sample ID: TB-117-2 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-003 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	41.63	50	58	148	83	
Phenol-d5	74.09	100	49	129	74	
Nitrobenzene-d5	32.54	50	52	129	65	
2-Fluorophenol	69.18	100	43	128	69	
2-Fluorobiphenyl	34.83	50	58	125	70	
2,4,6-Tribromophenol	86.72	100	54	145	87	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Eicosane	**1**	**mg/kg**	**14.18**	**0.082J**
(+,-)-.beta.-Himachalene	**1**	**mg/kg**	**15.96**	**0.085J**
unknown	**1**	**mg/kg**	**16.38**	**0.11J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.33**	**2.9JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.081JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.3J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**5000**
Barium	**1**	**mg/kg**	**12**	**16**
Calcium	**1**	**mg/kg**	**1200**	**3700**
Chromium	**1**	**mg/kg**	**6.0**	**19**
Cobalt	**1**	**mg/kg**	**3.0**	**3.6**
Copper	**1**	**mg/kg**	**6.0**	**11**
Iron	**1**	**mg/kg**	**240**	**14000**
Lead	**1**	**mg/kg**	**6.0**	**6.6**
Magnesium	**1**	**mg/kg**	**600**	**3100**
Manganese	**1**	**mg/kg**	**12**	**73**
Nickel	**1**	**mg/kg**	**6.0**	**7.6**
Potassium	**1**	**mg/kg**	**600**	**810**
Sodium	1	mg/kg	300	ND
Vanadium	**1**	**mg/kg**	**12**	**20**
Zinc	**1**	**mg/kg**	**12**	**29**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.95	ND
Arsenic	**1**	**mg/kg**	**0.24**	**4.2**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.48	ND

Sample ID: TB-117-2 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-004 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**87**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.727	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.727	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.727	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.727	mg/kg	0.0017	ND
1,1-Dichloroethane	0.727	mg/kg	0.0017	ND
1,1-Dichloroethene	0.727	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.727	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.727	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.727	mg/kg	0.0017	ND
1,2-Dibromoethane	0.727	mg/kg	0.00065	ND
1,2-Dichlorobenzene	0.727	mg/kg	0.0017	ND
1,2-Dichloroethane	0.727	mg/kg	0.0017	ND
1,2-Dichloropropane	0.727	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.727	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.727	mg/kg	0.0017	ND
1,4-Dioxane	0.727	mg/kg	0.084	ND
2-Butanone	0.727	mg/kg	0.0017	ND
2-Hexanone	0.727	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.727	mg/kg	0.0017	ND
Acetone	0.727	mg/kg	0.0084	ND
Benzene	0.727	mg/kg	0.00084	ND
Bromochloromethane	0.727	mg/kg	0.0017	ND
Bromodichloromethane	0.727	mg/kg	0.0017	ND
Bromoform	0.727	mg/kg	0.0017	ND
Bromomethane	0.727	mg/kg	0.0017	ND
Carbon disulfide	0.727	mg/kg	0.0017	ND
Carbon tetrachloride	0.727	mg/kg	0.0017	ND
Chlorobenzene	0.727	mg/kg	0.0017	ND
Chloroethane	0.727	mg/kg	0.0017	ND
Chloroform	0.727	mg/kg	0.0017	ND
Chloromethane	0.727	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.727	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.727	mg/kg	0.0017	ND
Cyclohexane	0.727	mg/kg	0.0017	ND
Dibromochloromethane	0.727	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.727	mg/kg	0.0017	ND
Ethylbenzene	0.727	mg/kg	0.00084	ND
Isopropylbenzene	0.727	mg/kg	0.00084	ND
m&p-Xylenes	0.727	mg/kg	0.00084	ND
Methyl Acetate	0.727	mg/kg	0.0017	ND
Methylcyclohexane	0.727	mg/kg	0.0017	ND
Methylene chloride	**0.727**	**mg/kg**	**0.0017**	**0.0047**
Methyl-t-butyl ether	0.727	mg/kg	0.00084	ND
o-Xylene	0.727	mg/kg	0.00084	ND
Styrene	0.727	mg/kg	0.0017	ND
Tetrachloroethene	0.727	mg/kg	0.0017	ND
Toluene	0.727	mg/kg	0.00084	ND
trans-1,2-Dichloroethene	0.727	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.727	mg/kg	0.0017	ND
Trichloroethene	0.727	mg/kg	0.0017	ND
Trichlorofluoromethane	0.727	mg/kg	0.0017	ND
Vinyl chloride	0.727	mg/kg	0.0017	ND
Xylenes (Total)	0.727	mg/kg	0.00084	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	31.39	30	68	122	105	
Dibromofluoromethane	38.80	30	63	140	129	
Bromofluorobenzene	33.15	30	64	129	111	
1,2-Dichloroethane-d4	31.44	30	63	143	105	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-2 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-004 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

No Unknown Compounds Detected	0.727	mg/kg	NA	ND
TotalVolatileTic	0.727	mg/kg	NA	ND

Sample ID: TB-117-3 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-005 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**83**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0060	ND
Aldrin	1	mg/kg	0.0060	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0060	ND
delta-BHC	1	mg/kg	0.0060	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0060	ND
Endosulfan II	1	mg/kg	0.0060	ND
Endosulfan Sulfate	1	mg/kg	0.0060	ND
Endrin	1	mg/kg	0.0060	ND
Endrin Aldehyde	1	mg/kg	0.0060	ND
Endrin Ketone	1	mg/kg	0.0060	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0060	ND
Heptachlor Epoxide	1	mg/kg	0.0060	ND
Methoxychlor	1	mg/kg	0.0060	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0060	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	99.01	100	37	141	99	
TCMX-Surrogate	96.12	100	37	141	96	
DCB-Surrogate	87.33	100	33	146	87	
DCB-Surrogate	101.09	100	33	146	101	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	**1**	**mg/kg**	**0.030**	**0.15**
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	**1**	**mg/kg**	**0.030**	**0.15**
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	104.77	100	37	141	105	
TCMX-Surrogate	96.30	100	37	141	96	
DCB-Surrogate	95.44	100	34	146	95	
DCB-Surrogate	95.35	100	34	146	95	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.040	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.040	ND

Sample ID: TB-117-3 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-005 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.040	ND
2-Chlorophenol	1	mg/kg	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.040	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.040	ND
2-Nitrophenol	1	mg/kg	0.040	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.040	ND
3-Nitroaniline	1	mg/kg	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.040	ND
4-Chloroaniline	**1**	**mg/kg**	**0.010**	**0.049**
4-Chlorophenyl-phenylether	1	mg/kg	0.040	ND
4-Nitroaniline	1	mg/kg	0.040	ND
4-Nitrophenol	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Acetophenone	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Atrazine	1	mg/kg	0.040	ND
Benzaldehyde	1	mg/kg	0.040	ND
Benzo[a]anthracene	1	mg/kg	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.040	ND
Caprolactam	1	mg/kg	0.040	ND
Carbazole	1	mg/kg	0.040	ND
Chrysene	1	mg/kg	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.040	ND
Dimethylphthalate	1	mg/kg	0.040	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.040	ND
Fluoranthene	1	mg/kg	0.040	ND
Fluorene	1	mg/kg	0.040	ND
Hexachlorobenzene	1	mg/kg	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.040	ND
Hexachloroethane	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Isophorone	1	mg/kg	0.040	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.040	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.040	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.040	ND
Phenol	1	mg/kg	0.040	ND
Pyrene	1	mg/kg	0.040	ND

Sample ID: TB-117-3 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-005 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	50.97	50	58	148	102	
Phenol-d5	84.22	100	49	129	84	
Nitrobenzene-d5	38.87	50	52	129	78	
2-Fluorophenol	80.36	100	43	128	80	
2-Fluorobiphenyl	41.55	50	58	125	83	
2,4,6-Tribromophenol	99.22	100	54	145	99	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Hexadecanoic acid	**1**	**mg/kg**	**10.3**	**0.10J**
1-Octadecene	**1**	**mg/kg**	**12.63**	**0.18J**
Tricosane	**1**	**mg/kg**	**13.42**	**0.24J**
Hentriacontane	**1**	**mg/kg**	**14.13**	**0.30J**
Heptacosane	**1**	**mg/kg**	**14.89**	**0.18J**
unknown	**1**	**mg/kg**	**15.05**	**0.45J**
unknown	**1**	**mg/kg**	**15.43**	**0.22J**
Estra-1,3,5(10)-trien-17-one, 3,15-bis(	**1**	**mg/kg**	**15.91**	**0.17J**
unknown	**1**	**mg/kg**	**16.01**	**0.26J**
2-Propanol	**1**	**mg/kg**	**3.02**	**0.15J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.3**	**4.2JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.24**	**0.17JB**
Sulfur, mol. (S8)	**1**	**mg/kg**	**8.53**	**0.53J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**7.2J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**1400**
Barium	**1**	**mg/kg**	**12**	**14**
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.0	ND
Cobalt	1	mg/kg	3.0	ND
Copper	1	mg/kg	6.0	ND
Iron	**1**	**mg/kg**	**240**	**2400**
Lead	1	mg/kg	6.0	ND
Magnesium	1	mg/kg	600	ND
Manganese	**1**	**mg/kg**	**12**	**18**
Nickel	1	mg/kg	6.0	ND
Potassium	1	mg/kg	600	ND
Sodium	1	mg/kg	300	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.96	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.76**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.48	ND

Sample ID: TB-117-3 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-006 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**79**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.99	mg/kg	0.0025	ND
1,1,2,2-Tetrachloroethane	0.99	mg/kg	0.0025	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.99	mg/kg	0.0025	ND
1,1,2-Trichloroethane	0.99	mg/kg	0.0025	ND
1,1-Dichloroethane	0.99	mg/kg	0.0025	ND
1,1-Dichloroethene	0.99	mg/kg	0.0025	ND
1,2,3-Trichlorobenzene	0.99	mg/kg	0.0025	ND
1,2,4-Trichlorobenzene	0.99	mg/kg	0.0025	ND
1,2-Dibromo-3-chloropropane	0.99	mg/kg	0.0025	ND
1,2-Dibromoethane	0.99	mg/kg	0.00098	ND
1,2-Dichlorobenzene	0.99	mg/kg	0.0025	ND
1,2-Dichloroethane	0.99	mg/kg	0.0025	ND
1,2-Dichloropropane	0.99	mg/kg	0.0025	ND
1,3-Dichlorobenzene	0.99	mg/kg	0.0025	ND
1,4-Dichlorobenzene	0.99	mg/kg	0.0025	ND
1,4-Dioxane	0.99	mg/kg	0.13	ND
2-Butanone	**0.99**	**mg/kg**	**0.0025**	**0.0077**
2-Hexanone	0.99	mg/kg	0.0025	ND
4-Methyl-2-pentanone	0.99	mg/kg	0.0025	ND
Acetone	**0.99**	**mg/kg**	**0.013**	**0.10**
Benzene	0.99	mg/kg	0.0013	ND
Bromochloromethane	0.99	mg/kg	0.0025	ND
Bromodichloromethane	0.99	mg/kg	0.0025	ND
Bromoform	0.99	mg/kg	0.0025	ND
Bromomethane	0.99	mg/kg	0.0025	ND
Carbon disulfide	**0.99**	**mg/kg**	**0.0025**	**0.0054**
Carbon tetrachloride	0.99	mg/kg	0.0025	ND
Chlorobenzene	0.99	mg/kg	0.0025	ND
Chloroethane	0.99	mg/kg	0.0025	ND
Chloroform	0.99	mg/kg	0.0025	ND
Chloromethane	0.99	mg/kg	0.0025	ND
cis-1,2-Dichloroethene	0.99	mg/kg	0.0025	ND
cis-1,3-Dichloropropene	0.99	mg/kg	0.0025	ND
Cyclohexane	0.99	mg/kg	0.0025	ND
Dibromochloromethane	0.99	mg/kg	0.0025	ND
Dichlorodifluoromethane	0.99	mg/kg	0.0025	ND
Ethylbenzene	0.99	mg/kg	0.0013	ND
Isopropylbenzene	0.99	mg/kg	0.0013	ND
m&p-Xylenes	0.99	mg/kg	0.0013	ND
Methyl Acetate	**0.99**	**mg/kg**	**0.0025**	**0.020**
Methylcyclohexane	0.99	mg/kg	0.0025	ND
Methylene chloride	**0.99**	**mg/kg**	**0.0025**	**0.0052**
Methyl-t-butyl ether	0.99	mg/kg	0.0013	ND
o-Xylene	0.99	mg/kg	0.0013	ND
Styrene	0.99	mg/kg	0.0025	ND
Tetrachloroethene	0.99	mg/kg	0.0025	ND
Toluene	0.99	mg/kg	0.0013	ND
trans-1,2-Dichloroethene	0.99	mg/kg	0.0025	ND
trans-1,3-Dichloropropene	0.99	mg/kg	0.0025	ND
Trichloroethene	0.99	mg/kg	0.0025	ND
Trichlorofluoromethane	0.99	mg/kg	0.0025	ND
Vinyl chloride	0.99	mg/kg	0.0025	ND
Xylenes (Total)	0.99	mg/kg	0.0013	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.40	30	68	122	101	
Dibromofluoromethane	29.15	30	63	140	97	
Bromofluorobenzene	32.23	30	64	129	107	
1,2-Dichloroethane-d4	31.27	30	63	143	104	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-3 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-006 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

unknown	0.99	mg/kg	4.57	0.0041J
TotalVolatileTic	0.99	mg/kg	NA	0.0041J

Sample ID: TB-117-4 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-007 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**78**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.31	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0064	ND
Aldrin	1	mg/kg	0.0064	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0064	ND
delta-BHC	1	mg/kg	0.0064	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0064	ND
Endosulfan II	1	mg/kg	0.0064	ND
Endosulfan Sulfate	1	mg/kg	0.0064	ND
Endrin	1	mg/kg	0.0064	ND
Endrin Aldehyde	1	mg/kg	0.0064	ND
Endrin Ketone	1	mg/kg	0.0064	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0064	ND
Heptachlor Epoxide	1	mg/kg	0.0064	ND
Methoxychlor	1	mg/kg	0.0064	ND
p,p'-DDD	1	mg/kg	0.0032	ND
p,p'-DDE	1	mg/kg	0.0032	ND
p,p'-DDT	1	mg/kg	0.0032	ND
Toxaphene	1	mg/kg	0.032	ND
y-Chlordane	1	mg/kg	0.0064	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	100.90	100	37	141	101	
TCMX-Surrogate	106.85	100	37	141	107	
DCB-Surrogate	93.27	100	33	146	93	
DCB-Surrogate	97.31	100	33	146	97	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.032	ND
Aroclor-1016	1	mg/kg	0.032	ND
Aroclor-1221	1	mg/kg	0.032	ND
Aroclor-1232	1	mg/kg	0.032	ND
Aroclor-1242	1	mg/kg	0.032	ND
Aroclor-1248	1	mg/kg	0.032	ND
Aroclor-1254	1	mg/kg	0.032	ND
Aroclor-1260	1	mg/kg	0.032	ND
Aroclor-1262	1	mg/kg	0.032	ND
Aroclor-1268	1	mg/kg	0.032	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	111.04	100	37	141	111	
TCMX-Surrogate	102.76	100	37	141	103	
DCB-Surrogate	100.95	100	34	146	101	
DCB-Surrogate	93.59	100	34	146	94	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.043	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.043	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.043	ND
2,4,5-Trichlorophenol	1	mg/kg	0.043	ND

Sample ID: TB-117-4 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-007 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.043	ND
2,4-Dichlorophenol	1	mg/kg	0.011	ND
2,4-Dimethylphenol	1	mg/kg	0.011	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.043	ND
2,6-Dinitrotoluene	1	mg/kg	0.043	ND
2-Chloronaphthalene	1	mg/kg	0.043	ND
2-Chlorophenol	1	mg/kg	0.043	ND
2-Methylnaphthalene	1	mg/kg	0.043	ND
2-Methylphenol	1	mg/kg	0.011	ND
2-Nitroaniline	1	mg/kg	0.043	ND
2-Nitrophenol	1	mg/kg	0.043	ND
3&4-Methylphenol	1	mg/kg	0.011	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.043	ND
3-Nitroaniline	1	mg/kg	0.043	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.043	ND
4-Chloro-3-methylphenol	1	mg/kg	0.043	ND
4-Chloroaniline	**1**	**mg/kg**	**0.011**	**0.016**
4-Chlorophenyl-phenylether	1	mg/kg	0.043	ND
4-Nitroaniline	1	mg/kg	0.043	ND
4-Nitrophenol	1	mg/kg	0.043	ND
Acenaphthene	1	mg/kg	0.043	ND
Acenaphthylene	1	mg/kg	0.043	ND
Acetophenone	1	mg/kg	0.043	ND
Anthracene	1	mg/kg	0.043	ND
Atrazine	1	mg/kg	0.043	ND
Benzaldehyde	1	mg/kg	0.043	ND
Benzo[a]anthracene	1	mg/kg	0.043	ND
Benzo[a]pyrene	1	mg/kg	0.043	ND
Benzo[b]fluoranthene	1	mg/kg	0.043	ND
Benzo[g,h,i]perylene	1	mg/kg	0.043	ND
Benzo[k]fluoranthene	1	mg/kg	0.043	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.043	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.011	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.043	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.043	ND
Butylbenzylphthalate	1	mg/kg	0.043	ND
Caprolactam	1	mg/kg	0.043	ND
Carbazole	1	mg/kg	0.043	ND
Chrysene	1	mg/kg	0.043	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.043	ND
Dibenzofuran	**1**	**mg/kg**	**0.011**	**0.014**
Diethylphthalate	1	mg/kg	0.043	ND
Dimethylphthalate	1	mg/kg	0.043	ND
Di-n-butylphthalate	1	mg/kg	0.011	ND
Di-n-octylphthalate	1	mg/kg	0.043	ND
Fluoranthene	1	mg/kg	0.043	ND
Fluorene	1	mg/kg	0.043	ND
Hexachlorobenzene	1	mg/kg	0.043	ND
Hexachlorobutadiene	1	mg/kg	0.043	ND
Hexachlorocyclopentadiene	1	mg/kg	0.043	ND
Hexachloroethane	1	mg/kg	0.043	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.043	ND
Isophorone	1	mg/kg	0.043	ND
Naphthalene	1	mg/kg	0.011	ND
Nitrobenzene	1	mg/kg	0.043	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.011	ND
N-Nitrosodiphenylamine	1	mg/kg	0.043	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.043	ND
Phenol	1	mg/kg	0.043	ND
Pyrene	1	mg/kg	0.043	ND

Sample ID: TB-117-4 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-007 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	41.26	50	58	148	83	
Phenol-d5	76.54	100	49	129	77	
Nitrobenzene-d5	34.94	50	52	129	70	
2-Fluorophenol	74.76	100	43	128	75	
2-Fluorobiphenyl	36.05	50	58	125	72	
2,4,6-Tribromophenol	85.71	100	54	145	86	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
Eicosane	**1**	**mg/kg**	**13.47**	**0.15J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.33**	**3.2JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.13JB**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.5J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**260**	**1600**
Barium	1	mg/kg	13	ND
Calcium	1	mg/kg	1300	ND
Chromium	**1**	**mg/kg**	**6.4**	**9.7**
Cobalt	1	mg/kg	3.2	ND
Copper	**1**	**mg/kg**	**6.4**	**8.2**
Iron	**1**	**mg/kg**	**260**	**3000**
Lead	1	mg/kg	6.4	ND
Magnesium	1	mg/kg	640	ND
Manganese	**1**	**mg/kg**	**13**	**27**
Nickel	1	mg/kg	6.4	ND
Potassium	1	mg/kg	640	ND
Sodium	1	mg/kg	320	ND
Vanadium	1	mg/kg	13	ND
Zinc	**1**	**mg/kg**	**13**	**19**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.26**	**0.82**
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.51	ND
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.51	ND

Sample ID: TB-117-4 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-008 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**81**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.885	mg/kg	0.0022	ND
1,1,2,2-Tetrachloroethane	0.885	mg/kg	0.0022	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.885	mg/kg	0.0022	ND
1,1,2-Trichloroethane	0.885	mg/kg	0.0022	ND
1,1-Dichloroethane	0.885	mg/kg	0.0022	ND
1,1-Dichloroethene	0.885	mg/kg	0.0022	ND
1,2,3-Trichlorobenzene	0.885	mg/kg	0.0022	ND
1,2,4-Trichlorobenzene	0.885	mg/kg	0.0022	ND
1,2-Dibromo-3-chloropropane	0.885	mg/kg	0.0022	ND
1,2-Dibromoethane	0.885	mg/kg	0.00085	ND
1,2-Dichlorobenzene	0.885	mg/kg	0.0022	ND
1,2-Dichloroethane	0.885	mg/kg	0.0022	ND
1,2-Dichloropropane	0.885	mg/kg	0.0022	ND
1,3-Dichlorobenzene	0.885	mg/kg	0.0022	ND
1,4-Dichlorobenzene	0.885	mg/kg	0.0022	ND
1,4-Dioxane	0.885	mg/kg	0.11	ND
2-Butanone	0.885	mg/kg	0.0022	ND
2-Hexanone	0.885	mg/kg	0.0022	ND
4-Methyl-2-pentanone	0.885	mg/kg	0.0022	ND
Acetone	0.885	mg/kg	0.011	ND
Benzene	0.885	mg/kg	0.0011	ND
Bromochloromethane	0.885	mg/kg	0.0022	ND
Bromodichloromethane	0.885	mg/kg	0.0022	ND
Bromoform	0.885	mg/kg	0.0022	ND
Bromomethane	0.885	mg/kg	0.0022	ND
Carbon disulfide	**0.885**	**mg/kg**	**0.0022**	**0.0041**
Carbon tetrachloride	0.885	mg/kg	0.0022	ND
Chlorobenzene	0.885	mg/kg	0.0022	ND
Chloroethane	0.885	mg/kg	0.0022	ND
Chloroform	0.885	mg/kg	0.0022	ND
Chloromethane	0.885	mg/kg	0.0022	ND
cis-1,2-Dichloroethene	0.885	mg/kg	0.0022	ND
cis-1,3-Dichloropropene	0.885	mg/kg	0.0022	ND
Cyclohexane	0.885	mg/kg	0.0022	ND
Dibromochloromethane	0.885	mg/kg	0.0022	ND
Dichlorodifluoromethane	0.885	mg/kg	0.0022	ND
Ethylbenzene	0.885	mg/kg	0.0011	ND
Isopropylbenzene	0.885	mg/kg	0.0011	ND
m&p-Xylenes	0.885	mg/kg	0.0011	ND
Methyl Acetate	0.885	mg/kg	0.0022	ND
Methylcyclohexane	0.885	mg/kg	0.0022	ND
Methylene chloride	**0.885**	**mg/kg**	**0.0022**	**0.0026**
Methyl-t-butyl ether	0.885	mg/kg	0.0011	ND
o-Xylene	0.885	mg/kg	0.0011	ND
Styrene	0.885	mg/kg	0.0022	ND
Tetrachloroethene	0.885	mg/kg	0.0022	ND
Toluene	0.885	mg/kg	0.0011	ND
trans-1,2-Dichloroethene	0.885	mg/kg	0.0022	ND
trans-1,3-Dichloropropene	0.885	mg/kg	0.0022	ND
Trichloroethene	0.885	mg/kg	0.0022	ND
Trichlorofluoromethane	0.885	mg/kg	0.0022	ND
Vinyl chloride	0.885	mg/kg	0.0022	ND
Xylenes (Total)	0.885	mg/kg	0.0011	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.15	30	68	122	100	
Dibromofluoromethane	37.68	30	63	140	126	
Bromofluorobenzene	31.09	30	64	129	104	
1,2-Dichloroethane-d4	38.53	30	63	143	128	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-4 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-008 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

No Unknown Compounds Detected	0.885	mg/kg	NA	ND
TotalVolatileTic	0.885	mg/kg	NA	ND

Sample ID: TB-117-5 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-009 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**80**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0063	ND
Aldrin	1	mg/kg	0.0063	ND
Alpha-BHC	1	mg/kg	0.0013	ND
beta-BHC	1	mg/kg	0.0013	ND
Chlordane (Total)	1	mg/kg	0.0063	ND
delta-BHC	1	mg/kg	0.0063	ND
Dieldrin	1	mg/kg	0.0013	ND
Endosulfan I	1	mg/kg	0.0063	ND
Endosulfan II	1	mg/kg	0.0063	ND
Endosulfan Sulfate	1	mg/kg	0.0063	ND
Endrin	1	mg/kg	0.0063	ND
Endrin Aldehyde	1	mg/kg	0.0063	ND
Endrin Ketone	1	mg/kg	0.0063	ND
gamma-BHC	1	mg/kg	0.0013	ND
Heptachlor	1	mg/kg	0.0063	ND
Heptachlor Epoxide	1	mg/kg	0.0063	ND
Methoxychlor	1	mg/kg	0.0063	ND
p,p'-DDD	1	mg/kg	0.0031	ND
p,p'-DDE	1	mg/kg	0.0031	ND
p,p'-DDT	1	mg/kg	0.0031	ND
Toxaphene	1	mg/kg	0.031	ND
y-Chlordane	1	mg/kg	0.0063	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	88.15	100	37	141	88	
TCMX-Surrogate	92.81	100	37	141	93	
DCB-Surrogate	81.24	100	33	146	81	
DCB-Surrogate	83.74	100	33	146	84	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	92.81	100	37	141	93	
TCMX-Surrogate	87.85	100	37	141	88	
DCB-Surrogate	86.38	100	34	146	86	
DCB-Surrogate	97.89	100	34	146	98	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.042	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.042	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.042	ND
2,4,5-Trichlorophenol	1	mg/kg	0.042	ND

Sample ID: TB-117-5 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-009 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.042	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.042	ND
2,6-Dinitrotoluene	1	mg/kg	0.042	ND
2-Chloronaphthalene	1	mg/kg	0.042	ND
2-Chlorophenol	1	mg/kg	0.042	ND
2-Methylnaphthalene	1	mg/kg	0.042	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.042	ND
2-Nitrophenol	1	mg/kg	0.042	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.042	ND
3-Nitroaniline	1	mg/kg	0.042	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.042	ND
4-Chloro-3-methylphenol	1	mg/kg	0.042	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.042	ND
4-Nitroaniline	1	mg/kg	0.042	ND
4-Nitrophenol	1	mg/kg	0.042	ND
Acenaphthene	1	mg/kg	0.042	ND
Acenaphthylene	1	mg/kg	0.042	ND
Acetophenone	1	mg/kg	0.042	ND
Anthracene	1	mg/kg	0.042	ND
Atrazine	1	mg/kg	0.042	ND
Benzaldehyde	1	mg/kg	0.042	ND
Benzo[a]anthracene	1	mg/kg	0.042	ND
Benzo[a]pyrene	1	mg/kg	0.042	ND
Benzo[b]fluoranthene	1	mg/kg	0.042	ND
Benzo[g,h,i]perylene	1	mg/kg	0.042	ND
Benzo[k]fluoranthene	1	mg/kg	0.042	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.042	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.042	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.042	ND
Butylbenzylphthalate	1	mg/kg	0.042	ND
Caprolactam	1	mg/kg	0.042	ND
Carbazole	1	mg/kg	0.042	ND
Chrysene	1	mg/kg	0.042	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.042	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.042	ND
Dimethylphthalate	1	mg/kg	0.042	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.042	ND
Fluoranthene	1	mg/kg	0.042	ND
Fluorene	1	mg/kg	0.042	ND
Hexachlorobenzene	1	mg/kg	0.042	ND
Hexachlorobutadiene	1	mg/kg	0.042	ND
Hexachlorocyclopentadiene	1	mg/kg	0.042	ND
Hexachloroethane	1	mg/kg	0.042	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.042	ND
Isophorone	1	mg/kg	0.042	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.042	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.042	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.042	ND
Phenol	1	mg/kg	0.042	ND
Pyrene	1	mg/kg	0.042	ND

Sample ID: TB-117-5 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-009 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	41.11	50	58	148	82	
Phenol-d5	70.45	100	49	129	70	
Nitrobenzene-d5	32.33	50	52	129	65	
2-Fluorophenol	68.55	100	43	128	69	
2-Fluorobiphenyl	33.79	50	58	125	68	
2,4,6-Tribromophenol	84.68	100	54	145	85	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.34**	**4.2JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.14JB**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.72**	**0.11J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.4J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**480**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.2	ND
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	ND
Iron	**1**	**mg/kg**	**250**	**1100**
Lead	1	mg/kg	6.2	ND
Magnesium	1	mg/kg	620	ND
Manganese	1	mg/kg	12	ND
Nickel	1	mg/kg	6.2	ND
Potassium	1	mg/kg	620	ND
Sodium	1	mg/kg	310	ND
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	**1**	**mg/kg**	**0.25**	**0.29**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.50	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.50	ND

Sample ID: TB-117-5 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-010 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**77**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.617	mg/kg	0.0016	ND
1,1,2,2-Tetrachloroethane	0.617	mg/kg	0.0016	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.617	mg/kg	0.0016	ND
1,1,2-Trichloroethane	0.617	mg/kg	0.0016	ND
1,1-Dichloroethane	0.617	mg/kg	0.0016	ND
1,1-Dichloroethene	0.617	mg/kg	0.0016	ND
1,2,3-Trichlorobenzene	0.617	mg/kg	0.0016	ND
1,2,4-Trichlorobenzene	0.617	mg/kg	0.0016	ND
1,2-Dibromo-3-chloropropane	0.617	mg/kg	0.0016	ND
1,2-Dibromoethane	0.617	mg/kg	0.00062	ND
1,2-Dichlorobenzene	0.617	mg/kg	0.0016	ND
1,2-Dichloroethane	0.617	mg/kg	0.0016	ND
1,2-Dichloropropane	0.617	mg/kg	0.0016	ND
1,3-Dichlorobenzene	0.617	mg/kg	0.0016	ND
1,4-Dichlorobenzene	0.617	mg/kg	0.0016	ND
1,4-Dioxane	0.617	mg/kg	0.080	ND
2-Butanone	0.617	mg/kg	0.0016	ND
2-Hexanone	0.617	mg/kg	0.0016	ND
4-Methyl-2-pentanone	**0.617**	**mg/kg**	**0.0016**	**0.0019**
Acetone	0.617	mg/kg	0.0080	ND
Benzene	0.617	mg/kg	0.00080	ND
Bromochloromethane	0.617	mg/kg	0.0016	ND
Bromodichloromethane	0.617	mg/kg	0.0016	ND
Bromoform	0.617	mg/kg	0.0016	ND
Bromomethane	0.617	mg/kg	0.0016	ND
Carbon disulfide	**0.617**	**mg/kg**	**0.0016**	**0.0022**
Carbon tetrachloride	0.617	mg/kg	0.0016	ND
Chlorobenzene	0.617	mg/kg	0.0016	ND
Chloroethane	0.617	mg/kg	0.0016	ND
Chloroform	0.617	mg/kg	0.0016	ND
Chloromethane	0.617	mg/kg	0.0016	ND
cis-1,2-Dichloroethene	0.617	mg/kg	0.0016	ND
cis-1,3-Dichloropropene	0.617	mg/kg	0.0016	ND
Cyclohexane	0.617	mg/kg	0.0016	ND
Dibromochloromethane	0.617	mg/kg	0.0016	ND
Dichlorodifluoromethane	0.617	mg/kg	0.0016	ND
Ethylbenzene	0.617	mg/kg	0.00080	ND
Isopropylbenzene	0.617	mg/kg	0.00080	ND
m&p-Xylenes	0.617	mg/kg	0.00080	ND
Methyl Acetate	0.617	mg/kg	0.0016	ND
Methylcyclohexane	0.617	mg/kg	0.0016	ND
Methylene chloride	0.617	mg/kg	0.0016	ND
Methyl-t-butyl ether	0.617	mg/kg	0.00080	ND
o-Xylene	0.617	mg/kg	0.00080	ND
Styrene	0.617	mg/kg	0.0016	ND
Tetrachloroethene	0.617	mg/kg	0.0016	ND
Toluene	0.617	mg/kg	0.00080	ND
trans-1,2-Dichloroethene	0.617	mg/kg	0.0016	ND
trans-1,3-Dichloropropene	0.617	mg/kg	0.0016	ND
Trichloroethene	0.617	mg/kg	0.0016	ND
Trichlorofluoromethane	0.617	mg/kg	0.0016	ND
Vinyl chloride	0.617	mg/kg	0.0016	ND
Xylenes (Total)	0.617	mg/kg	0.00080	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.53	30	68	122	102	
Dibromofluoromethane	39.13	30	63	140	130	
Bromofluorobenzene	31.24	30	64	129	104	
1,2-Dichloroethane-d4	36.28	30	63	143	121	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-5 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-010 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

Cyclohexane, 1-ethyl-2-methyl-, cis-	0.617	mg/kg	7.28	0.0027J
Decane	0.617	mg/kg	7.78	0.0047J
1-Hexanol, 2-ethyl-	0.617	mg/kg	8.3	0.0036J
TotalVolatileTic	0.617	mg/kg	NA	0.011J

Sample ID: TB-117-6 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-011 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**63**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.38	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.13	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0079	ND
Aldrin	1	mg/kg	0.0079	ND
Alpha-BHC	1	mg/kg	0.0016	ND
beta-BHC	1	mg/kg	0.0016	ND
Chlordane (Total)	1	mg/kg	0.0079	ND
delta-BHC	1	mg/kg	0.0079	ND
Dieldrin	1	mg/kg	0.0016	ND
Endosulfan I	1	mg/kg	0.0079	ND
Endosulfan II	1	mg/kg	0.0079	ND
Endosulfan Sulfate	1	mg/kg	0.0079	ND
Endrin	1	mg/kg	0.0079	ND
Endrin Aldehyde	1	mg/kg	0.0079	ND
Endrin Ketone	1	mg/kg	0.0079	ND
gamma-BHC	1	mg/kg	0.0016	ND
Heptachlor	1	mg/kg	0.0079	ND
Heptachlor Epoxide	1	mg/kg	0.0079	ND
Methoxychlor	1	mg/kg	0.0079	ND
p,p'-DDD	1	mg/kg	0.0040	ND
p,p'-DDE	1	mg/kg	0.0040	ND
p,p'-DDT	1	mg/kg	0.0040	ND
Toxaphene	1	mg/kg	0.040	ND
y-Chlordane	1	mg/kg	0.0079	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	87.40	100	37	141	87	
TCMX-Surrogate	86.24	100	37	141	86	
DCB-Surrogate	93.27	100	33	146	93	
DCB-Surrogate	99.86	100	33	146	100	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.040	ND
Aroclor-1016	1	mg/kg	0.040	ND
Aroclor-1221	1	mg/kg	0.040	ND
Aroclor-1232	1	mg/kg	0.040	ND
Aroclor-1242	1	mg/kg	0.040	ND
Aroclor-1248	1	mg/kg	0.040	ND
Aroclor-1254	1	mg/kg	0.040	ND
Aroclor-1260	1	mg/kg	0.040	ND
Aroclor-1262	1	mg/kg	0.040	ND
Aroclor-1268	1	mg/kg	0.040	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	86.43	100	37	141	86	
TCMX-Surrogate	81.45	100	37	141	81	
DCB-Surrogate	87.17	100	34	146	87	
DCB-Surrogate	84.51	100	34	146	85	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.053	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.053	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.053	ND
2,4,5-Trichlorophenol	1	mg/kg	0.053	ND

Sample ID: TB-117-6 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-011 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.053	ND
2,4-Dichlorophenol	1	mg/kg	0.013	ND
2,4-Dimethylphenol	1	mg/kg	0.013	ND
2,4-Dinitrophenol	1	mg/kg	0.26	ND
2,4-Dinitrotoluene	1	mg/kg	0.053	ND
2,6-Dinitrotoluene	1	mg/kg	0.053	ND
2-Chloronaphthalene	1	mg/kg	0.053	ND
2-Chlorophenol	1	mg/kg	0.053	ND
2-Methylnaphthalene	1	mg/kg	0.053	ND
2-Methylphenol	1	mg/kg	0.013	ND
2-Nitroaniline	1	mg/kg	0.053	ND
2-Nitrophenol	1	mg/kg	0.053	ND
3&4-Methylphenol	1	mg/kg	0.013	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.053	ND
3-Nitroaniline	1	mg/kg	0.053	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.26	ND
4-Bromophenyl-phenylether	1	mg/kg	0.053	ND
4-Chloro-3-methylphenol	1	mg/kg	0.053	ND
4-Chloroaniline	1	mg/kg	0.013	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.053	ND
4-Nitroaniline	1	mg/kg	0.053	ND
4-Nitrophenol	1	mg/kg	0.053	ND
Acenaphthene	1	mg/kg	0.053	ND
Acenaphthylene	1	mg/kg	0.053	ND
Acetophenone	1	mg/kg	0.053	ND
Anthracene	1	mg/kg	0.053	ND
Atrazine	1	mg/kg	0.053	ND
Benzaldehyde	1	mg/kg	0.053	ND
Benzo[a]anthracene	1	mg/kg	0.053	ND
Benzo[a]pyrene	1	mg/kg	0.053	ND
Benzo[b]fluoranthene	1	mg/kg	0.053	ND
Benzo[g,h,i]perylene	1	mg/kg	0.053	ND
Benzo[k]fluoranthene	1	mg/kg	0.053	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.053	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.013	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.053	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.053	ND
Butylbenzylphthalate	1	mg/kg	0.053	ND
Caprolactam	1	mg/kg	0.053	ND
Carbazole	1	mg/kg	0.053	ND
Chrysene	1	mg/kg	0.053	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.053	ND
Dibenzofuran	1	mg/kg	0.013	ND
Diethylphthalate	1	mg/kg	0.053	ND
Dimethylphthalate	1	mg/kg	0.053	ND
Di-n-butylphthalate	1	mg/kg	0.013	ND
Di-n-octylphthalate	1	mg/kg	0.053	ND
Fluoranthene	1	mg/kg	0.053	ND
Fluorene	1	mg/kg	0.053	ND
Hexachlorobenzene	1	mg/kg	0.053	ND
Hexachlorobutadiene	1	mg/kg	0.053	ND
Hexachlorocyclopentadiene	1	mg/kg	0.053	ND
Hexachloroethane	1	mg/kg	0.053	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.053	ND
Isophorone	1	mg/kg	0.053	ND
Naphthalene	1	mg/kg	0.013	ND
Nitrobenzene	1	mg/kg	0.053	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.013	ND
N-Nitrosodiphenylamine	1	mg/kg	0.053	ND
Pentachlorophenol	1	mg/kg	0.26	ND
Phenanthrene	1	mg/kg	0.053	ND
Phenol	1	mg/kg	0.053	ND
Pyrene	1	mg/kg	0.053	ND

Sample ID: TB-117-6 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-011 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	41.40	50	58	148	83	
Phenol-d5	69.79	100	49	129	70	
Nitrobenzene-d5	33.58	50	52	129	67	
2-Fluorophenol	63.53	100	43	128	64	
2-Fluorobiphenyl	33.61	50	58	125	67	
2,4,6-Tribromophenol	72.66	100	54	145	73	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
unknown	**1**	**mg/kg**	**12.63**	**0.36J**
Octadecane	**1**	**mg/kg**	**13.41**	**0.16J**
Nonacosane	**1**	**mg/kg**	**14.13**	**0.25J**
Eicosane	**1**	**mg/kg**	**14.89**	**0.13J**
7- and 10-Hydroxyxantho[2,3-b]-5,6,7,8-	**1**	**mg/kg**	**14.94**	**0.22J**
.beta.-Patchoulane	**1**	**mg/kg**	**15.58**	**0.35J**
Stigmast-5-en-3-ol, (3.beta.,24S)-	**1**	**mg/kg**	**16.2**	**0.15J**
D-Friedoolean-14-en-3-one	**1**	**mg/kg**	**16.25**	**0.26J**
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.3**	**8.1JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.24**	**0.32JB**
Hexanoic acid	**1**	**mg/kg**	**5.48**	**0.13J**
Benzene, 1,2,3-trimethyl-	**1**	**mg/kg**	**5.68**	**0.19J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**11J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**320**	**5300**
Barium	**1**	**mg/kg**	**16**	**23**
Calcium	1	mg/kg	1600	ND
Chromium	**1**	**mg/kg**	**7.9**	**14**
Cobalt	1	mg/kg	4.0	ND
Copper	1	mg/kg	7.9	ND
Iron	**1**	**mg/kg**	**320**	**10000**
Lead	1	mg/kg	7.9	ND
Magnesium	**1**	**mg/kg**	**790**	**2300**
Manganese	**1**	**mg/kg**	**16**	**81**
Nickel	**1**	**mg/kg**	**7.9**	**8.5**
Potassium	**1**	**mg/kg**	**790**	**1400**
Sodium	**1**	**mg/kg**	**400**	**550**
Vanadium	**1**	**mg/kg**	**16**	**20**
Zinc	**1**	**mg/kg**	**16**	**25**

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.3	ND
Arsenic	**1**	**mg/kg**	**0.32**	**3.5**
Beryllium	1	mg/kg	0.32	ND
Cadmium	1	mg/kg	0.63	ND
Selenium	1	mg/kg	3.2	ND
Silver	1	mg/kg	0.32	ND
Thallium	1	mg/kg	0.63	ND

Sample ID: TB-117-6 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-012 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**78**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.789	mg/kg	0.0020	ND
1,1,2,2-Tetrachloroethane	0.789	mg/kg	0.0020	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.789	mg/kg	0.0020	ND
1,1,2-Trichloroethane	0.789	mg/kg	0.0020	ND
1,1-Dichloroethane	0.789	mg/kg	0.0020	ND
1,1-Dichloroethene	0.789	mg/kg	0.0020	ND
1,2,3-Trichlorobenzene	0.789	mg/kg	0.0020	ND
1,2,4-Trichlorobenzene	0.789	mg/kg	0.0020	ND
1,2-Dibromo-3-chloropropane	0.789	mg/kg	0.0020	ND
1,2-Dibromoethane	0.789	mg/kg	0.00079	ND
1,2-Dichlorobenzene	0.789	mg/kg	0.0020	ND
1,2-Dichloroethane	0.789	mg/kg	0.0020	ND
1,2-Dichloropropane	0.789	mg/kg	0.0020	ND
1,3-Dichlorobenzene	0.789	mg/kg	0.0020	ND
1,4-Dichlorobenzene	0.789	mg/kg	0.0020	ND
1,4-Dioxane	0.789	mg/kg	0.10	ND
2-Butanone	0.789	mg/kg	0.0020	ND
2-Hexanone	0.789	mg/kg	0.0020	ND
4-Methyl-2-pentanone	0.789	mg/kg	0.0020	ND
Acetone	0.789	mg/kg	0.010	ND
Benzene	0.789	mg/kg	0.0010	ND
Bromochloromethane	0.789	mg/kg	0.0020	ND
Bromodichloromethane	0.789	mg/kg	0.0020	ND
Bromoform	0.789	mg/kg	0.0020	ND
Bromomethane	0.789	mg/kg	0.0020	ND
Carbon disulfide	**0.789**	**mg/kg**	**0.0020**	**0.0070**
Carbon tetrachloride	0.789	mg/kg	0.0020	ND
Chlorobenzene	0.789	mg/kg	0.0020	ND
Chloroethane	0.789	mg/kg	0.0020	ND
Chloroform	0.789	mg/kg	0.0020	ND
Chloromethane	0.789	mg/kg	0.0020	ND
cis-1,2-Dichloroethene	0.789	mg/kg	0.0020	ND
cis-1,3-Dichloropropene	0.789	mg/kg	0.0020	ND
Cyclohexane	0.789	mg/kg	0.0020	ND
Dibromochloromethane	0.789	mg/kg	0.0020	ND
Dichlorodifluoromethane	0.789	mg/kg	0.0020	ND
Ethylbenzene	0.789	mg/kg	0.0010	ND
Isopropylbenzene	0.789	mg/kg	0.0010	ND
m&p-Xylenes	0.789	mg/kg	0.0010	ND
Methyl Acetate	0.789	mg/kg	0.0020	ND
Methylcyclohexane	0.789	mg/kg	0.0020	ND
Methylene chloride	**0.789**	**mg/kg**	**0.0020**	**0.0022**
Methyl-t-butyl ether	0.789	mg/kg	0.0010	ND
o-Xylene	0.789	mg/kg	0.0010	ND
Styrene	0.789	mg/kg	0.0020	ND
Tetrachloroethene	0.789	mg/kg	0.0020	ND
Toluene	0.789	mg/kg	0.0010	ND
trans-1,2-Dichloroethene	0.789	mg/kg	0.0020	ND
trans-1,3-Dichloropropene	0.789	mg/kg	0.0020	ND
Trichloroethene	0.789	mg/kg	0.0020	ND
Trichlorofluoromethane	0.789	mg/kg	0.0020	ND
Vinyl chloride	0.789	mg/kg	0.0020	ND
Xylenes (Total)	0.789	mg/kg	0.0010	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.97	30	68	122	103	
Dibromofluoromethane	37.31	30	63	140	124	
Bromofluorobenzene	33.51	30	64	129	112	
1,2-Dichloroethane-d4	29.10	30	63	143	97	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-6 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-012 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

No Unknown Compounds Detected	0.789	mg/kg	NA	ND
TotalVolatileTic	0.789	mg/kg	NA	ND

Sample ID: TB-117-7 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-013 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**83**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.29	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0060	ND
Aldrin	1	mg/kg	0.0060	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0060	ND
delta-BHC	1	mg/kg	0.0060	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0060	ND
Endosulfan II	1	mg/kg	0.0060	ND
Endosulfan Sulfate	1	mg/kg	0.0060	ND
Endrin	1	mg/kg	0.0060	ND
Endrin Aldehyde	1	mg/kg	0.0060	ND
Endrin Ketone	1	mg/kg	0.0060	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0060	ND
Heptachlor Epoxide	1	mg/kg	0.0060	ND
Methoxychlor	1	mg/kg	0.0060	ND
p,p'-DDD	1	mg/kg	0.0030	ND
p,p'-DDE	1	mg/kg	0.0030	ND
p,p'-DDT	1	mg/kg	0.0030	ND
Toxaphene	1	mg/kg	0.030	ND
y-Chlordane	1	mg/kg	0.0060	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	90.42	100	37	141	90	
TCMX-Surrogate	92.38	100	37	141	92	
DCB-Surrogate	84.28	100	33	146	84	
DCB-Surrogate	87.32	100	33	146	87	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.030	ND
Aroclor-1016	1	mg/kg	0.030	ND
Aroclor-1221	1	mg/kg	0.030	ND
Aroclor-1232	1	mg/kg	0.030	ND
Aroclor-1242	1	mg/kg	0.030	ND
Aroclor-1248	1	mg/kg	0.030	ND
Aroclor-1254	1	mg/kg	0.030	ND
Aroclor-1260	1	mg/kg	0.030	ND
Aroclor-1262	1	mg/kg	0.030	ND
Aroclor-1268	1	mg/kg	0.030	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	117.52	100	37	141	118	
TCMX-Surrogate	110.26	100	37	141	110	
DCB-Surrogate	107.46	100	34	146	107	
DCB-Surrogate	96.69	100	34	146	97	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.040	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.040	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.040	ND
2,4,5-Trichlorophenol	1	mg/kg	0.040	ND

Sample ID: TB-117-7 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-013 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.040	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.20	ND
2,4-Dinitrotoluene	1	mg/kg	0.040	ND
2,6-Dinitrotoluene	1	mg/kg	0.040	ND
2-Chloronaphthalene	1	mg/kg	0.040	ND
2-Chlorophenol	1	mg/kg	0.040	ND
2-Methylnaphthalene	1	mg/kg	0.040	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.040	ND
2-Nitrophenol	1	mg/kg	0.040	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.040	ND
3-Nitroaniline	1	mg/kg	0.040	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.20	ND
4-Bromophenyl-phenylether	1	mg/kg	0.040	ND
4-Chloro-3-methylphenol	1	mg/kg	0.040	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.040	ND
4-Nitroaniline	1	mg/kg	0.040	ND
4-Nitrophenol	1	mg/kg	0.040	ND
Acenaphthene	1	mg/kg	0.040	ND
Acenaphthylene	1	mg/kg	0.040	ND
Acetophenone	1	mg/kg	0.040	ND
Anthracene	1	mg/kg	0.040	ND
Atrazine	1	mg/kg	0.040	ND
Benzaldehyde	1	mg/kg	0.040	ND
Benzo[a]anthracene	1	mg/kg	0.040	ND
Benzo[a]pyrene	1	mg/kg	0.040	ND
Benzo[b]fluoranthene	1	mg/kg	0.040	ND
Benzo[g,h,i]perylene	1	mg/kg	0.040	ND
Benzo[k]fluoranthene	1	mg/kg	0.040	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.040	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.040	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.040	ND
Butylbenzylphthalate	1	mg/kg	0.040	ND
Caprolactam	1	mg/kg	0.040	ND
Carbazole	1	mg/kg	0.040	ND
Chrysene	1	mg/kg	0.040	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.040	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.040	ND
Dimethylphthalate	1	mg/kg	0.040	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.040	ND
Fluoranthene	1	mg/kg	0.040	ND
Fluorene	1	mg/kg	0.040	ND
Hexachlorobenzene	1	mg/kg	0.040	ND
Hexachlorobutadiene	1	mg/kg	0.040	ND
Hexachlorocyclopentadiene	1	mg/kg	0.040	ND
Hexachloroethane	1	mg/kg	0.040	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.040	ND
Isophorone	1	mg/kg	0.040	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.040	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.040	ND
Pentachlorophenol	1	mg/kg	0.20	ND
Phenanthrene	1	mg/kg	0.040	ND
Phenol	1	mg/kg	0.040	ND
Pyrene	1	mg/kg	0.040	ND

Sample ID: TB-117-7 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-013 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	38.04	50	58	148	76	
Phenol-d5	68.08	100	49	129	68	
Nitrobenzene-d5	32.85	50	52	129	66	
2-Fluorophenol	67.10	100	43	128	67	
2-Fluorobiphenyl	33.69	50	58	125	67	
2,4,6-Tribromophenol	75.08	100	54	145	75	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.34**	**4.4JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.10JB**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.71**	**0.087J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**4.6J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**240**	**2100**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.0	ND
Cobalt	1	mg/kg	3.0	ND
Copper	1	mg/kg	6.0	ND
Iron	**1**	**mg/kg**	**240**	**2500**
Lead	1	mg/kg	6.0	ND
Magnesium	1	mg/kg	600	ND
Manganese	**1**	**mg/kg**	**12**	**15**
Nickel	1	mg/kg	6.0	ND
Potassium	1	mg/kg	600	ND
Sodium	**1**	**mg/kg**	**300**	**800**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.96	ND
Arsenic	**1**	**mg/kg**	**0.24**	**0.57**
Beryllium	1	mg/kg	0.24	ND
Cadmium	1	mg/kg	0.48	ND
Selenium	1	mg/kg	2.4	ND
Silver	1	mg/kg	0.24	ND
Thallium	1	mg/kg	0.48	ND

Sample ID: TB-117-7 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-014 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**82**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.685	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.685	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.685	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.685	mg/kg	0.0017	ND
1,1-Dichloroethane	0.685	mg/kg	0.0017	ND
1,1-Dichloroethene	0.685	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.685	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.685	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.685	mg/kg	0.0017	ND
1,2-Dibromoethane	0.685	mg/kg	0.00065	ND
1,2-Dichlorobenzene	0.685	mg/kg	0.0017	ND
1,2-Dichloroethane	0.685	mg/kg	0.0017	ND
1,2-Dichloropropane	0.685	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.685	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.685	mg/kg	0.0017	ND
1,4-Dioxane	0.685	mg/kg	0.084	ND
2-Butanone	0.685	mg/kg	0.0017	ND
2-Hexanone	0.685	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.685	mg/kg	0.0017	ND
Acetone	0.685	mg/kg	0.0084	ND
Benzene	0.685	mg/kg	0.00084	ND
Bromochloromethane	0.685	mg/kg	0.0017	ND
Bromodichloromethane	0.685	mg/kg	0.0017	ND
Bromoform	0.685	mg/kg	0.0017	ND
Bromomethane	0.685	mg/kg	0.0017	ND
Carbon disulfide	0.685	mg/kg	0.0017	ND
Carbon tetrachloride	0.685	mg/kg	0.0017	ND
Chlorobenzene	0.685	mg/kg	0.0017	ND
Chloroethane	0.685	mg/kg	0.0017	ND
Chloroform	0.685	mg/kg	0.0017	ND
Chloromethane	0.685	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.685	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.685	mg/kg	0.0017	ND
Cyclohexane	0.685	mg/kg	0.0017	ND
Dibromochloromethane	0.685	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.685	mg/kg	0.0017	ND
Ethylbenzene	0.685	mg/kg	0.00084	ND
Isopropylbenzene	0.685	mg/kg	0.00084	ND
m&p-Xylenes	0.685	mg/kg	0.00084	ND
Methyl Acetate	0.685	mg/kg	0.0017	ND
Methylcyclohexane	0.685	mg/kg	0.0017	ND
Methylene chloride	**0.685**	**mg/kg**	**0.0017**	**0.0021**
Methyl-t-butyl ether	0.685	mg/kg	0.00084	ND
o-Xylene	0.685	mg/kg	0.00084	ND
Styrene	0.685	mg/kg	0.0017	ND
Tetrachloroethene	0.685	mg/kg	0.0017	ND
Toluene	0.685	mg/kg	0.00084	ND
trans-1,2-Dichloroethene	0.685	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.685	mg/kg	0.0017	ND
Trichloroethene	0.685	mg/kg	0.0017	ND
Trichlorofluoromethane	0.685	mg/kg	0.0017	ND
Vinyl chloride	0.685	mg/kg	0.0017	ND
Xylenes (Total)	0.685	mg/kg	0.00084	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.14	30	68	122	100	
Dibromofluoromethane	38.42	30	63	140	128	
Bromofluorobenzene	31.50	30	64	129	105	
1,2-Dichloroethane-d4	29.64	30	63	143	99	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-7 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-014 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

No Unknown Compounds Detected	0.685	mg/kg	NA	ND
TotalVolatileTic	0.685	mg/kg	NA	ND

Sample ID: TB-117-8 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-015 **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**81**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0062	ND
Aldrin	1	mg/kg	0.0062	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0062	ND
delta-BHC	1	mg/kg	0.0062	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0062	ND
Endosulfan II	1	mg/kg	0.0062	ND
Endosulfan Sulfate	1	mg/kg	0.0062	ND
Endrin	1	mg/kg	0.0062	ND
Endrin Aldehyde	1	mg/kg	0.0062	ND
Endrin Ketone	1	mg/kg	0.0062	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0062	ND
Heptachlor Epoxide	1	mg/kg	0.0062	ND
Methoxychlor	1	mg/kg	0.0062	ND
p,p'-DDD	1	mg/kg	0.0031	ND
p,p'-DDE	1	mg/kg	0.0031	ND
p,p'-DDT	1	mg/kg	0.0031	ND
Toxaphene	1	mg/kg	0.031	ND
y-Chlordane	1	mg/kg	0.0062	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	93.78	100	37	141	94	
TCMX-Surrogate	96.17	100	37	141	96	
DCB-Surrogate	88.95	100	33	146	89	
DCB-Surrogate	91.12	100	33	146	91	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	92.34	100	37	141	92	
TCMX-Surrogate	88.22	100	37	141	88	
DCB-Surrogate	88.74	100	34	146	89	
DCB-Surrogate	85.03	100	34	146	85	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND

Sample ID: TB-117-8 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-015 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.041	ND
2-Chlorophenol	1	mg/kg	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.041	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.041	ND
2-Nitrophenol	1	mg/kg	0.041	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.041	ND
3-Nitroaniline	1	mg/kg	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.041	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.041	ND
4-Nitroaniline	1	mg/kg	0.041	ND
4-Nitrophenol	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Acetophenone	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Atrazine	1	mg/kg	0.041	ND
Benzaldehyde	1	mg/kg	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.041	ND
Butylbenzylphthalate	1	mg/kg	0.041	ND
Caprolactam	1	mg/kg	0.041	ND
Carbazole	1	mg/kg	0.041	ND
Chrysene	1	mg/kg	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.041	ND
Dimethylphthalate	1	mg/kg	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.041	ND
Fluoranthene	1	mg/kg	0.041	ND
Fluorene	1	mg/kg	0.041	ND
Hexachlorobenzene	1	mg/kg	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.041	ND
Hexachloroethane	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND
Isophorone	1	mg/kg	0.041	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.041	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.041	ND
Phenol	1	mg/kg	0.041	ND
Pyrene	1	mg/kg	0.041	ND

Sample ID: TB-117-8 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-015 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	42.50	50	58	148	85	
Phenol-d5	78.52	100	49	129	79	
Nitrobenzene-d5	36.19	50	52	129	72	
2-Fluorophenol	73.59	100	43	128	74	
2-Fluorobiphenyl	37.26	50	58	125	75	
2,4,6-Tribromophenol	86.26	100	54	145	86	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.34**	**3.6JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.15JB**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.72**	**0.13J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**2200**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.2	ND
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	ND
Iron	**1**	**mg/kg**	**250**	**3100**
Lead	1	mg/kg	6.2	ND
Magnesium	1	mg/kg	620	ND
Manganese	**1**	**mg/kg**	**12**	**18**
Nickel	1	mg/kg	6.2	ND
Potassium	1	mg/kg	620	ND
Sodium	**1**	**mg/kg**	**310**	**430**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.99	ND
Arsenic	**1**	**mg/kg**	**0.25**	**0.35**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.49	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: TB-117-8 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-016 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**84**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.623	mg/kg	0.0015	ND
1,1,2,2-Tetrachloroethane	0.623	mg/kg	0.0015	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.623	mg/kg	0.0015	ND
1,1,2-Trichloroethane	0.623	mg/kg	0.0015	ND
1,1-Dichloroethane	0.623	mg/kg	0.0015	ND
1,1-Dichloroethene	0.623	mg/kg	0.0015	ND
1,2,3-Trichlorobenzene	0.623	mg/kg	0.0015	ND
1,2,4-Trichlorobenzene	0.623	mg/kg	0.0015	ND
1,2-Dibromo-3-chloropropane	0.623	mg/kg	0.0015	ND
1,2-Dibromoethane	0.623	mg/kg	0.00058	ND
1,2-Dichlorobenzene	0.623	mg/kg	0.0015	ND
1,2-Dichloroethane	0.623	mg/kg	0.0015	ND
1,2-Dichloropropane	0.623	mg/kg	0.0015	ND
1,3-Dichlorobenzene	0.623	mg/kg	0.0015	ND
1,4-Dichlorobenzene	0.623	mg/kg	0.0015	ND
1,4-Dioxane	0.623	mg/kg	0.074	ND
2-Butanone	0.623	mg/kg	0.0015	ND
2-Hexanone	0.623	mg/kg	0.0015	ND
4-Methyl-2-pentanone	0.623	mg/kg	0.0015	ND
Acetone	0.623	mg/kg	0.0074	ND
Benzene	0.623	mg/kg	0.00074	ND
Bromochloromethane	0.623	mg/kg	0.0015	ND
Bromodichloromethane	0.623	mg/kg	0.0015	ND
Bromoform	0.623	mg/kg	0.0015	ND
Bromomethane	0.623	mg/kg	0.0015	ND
Carbon disulfide	0.623	mg/kg	0.0015	ND
Carbon tetrachloride	0.623	mg/kg	0.0015	ND
Chlorobenzene	0.623	mg/kg	0.0015	ND
Chloroethane	0.623	mg/kg	0.0015	ND
Chloroform	0.623	mg/kg	0.0015	ND
Chloromethane	0.623	mg/kg	0.0015	ND
cis-1,2-Dichloroethene	0.623	mg/kg	0.0015	ND
cis-1,3-Dichloropropene	0.623	mg/kg	0.0015	ND
Cyclohexane	0.623	mg/kg	0.0015	ND
Dibromochloromethane	0.623	mg/kg	0.0015	ND
Dichlorodifluoromethane	0.623	mg/kg	0.0015	ND
Ethylbenzene	0.623	mg/kg	0.00074	ND
Isopropylbenzene	0.623	mg/kg	0.00074	ND
m&p-Xylenes	0.623	mg/kg	0.00074	ND
Methyl Acetate	0.623	mg/kg	0.0015	ND
Methylcyclohexane	0.623	mg/kg	0.0015	ND
Methylene chloride	**0.623**	**mg/kg**	**0.0015**	**0.0038**
Methyl-t-butyl ether	0.623	mg/kg	0.00074	ND
o-Xylene	0.623	mg/kg	0.00074	ND
Styrene	0.623	mg/kg	0.0015	ND
Tetrachloroethene	0.623	mg/kg	0.0015	ND
Toluene	0.623	mg/kg	0.00074	ND
trans-1,2-Dichloroethene	0.623	mg/kg	0.0015	ND
trans-1,3-Dichloropropene	0.623	mg/kg	0.0015	ND
Trichloroethene	0.623	mg/kg	0.0015	ND
Trichlorofluoromethane	0.623	mg/kg	0.0015	ND
Vinyl chloride	0.623	mg/kg	0.0015	ND
Xylenes (Total)	0.623	mg/kg	0.00074	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.28	30	68	122	101	
Dibromofluoromethane	37.55	30	63	140	125	
Bromofluorobenzene	31.35	30	64	129	105	
1,2-Dichloroethane-d4	37.06	30	63	143	124	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-8 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-016 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

No Unknown Compounds Detected	0.623	mg/kg	NA	ND
TotalVolatileTic	0.623	mg/kg	NA	ND

Sample ID: TB-117-9 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-017 **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**81**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.30	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0062	ND
Aldrin	1	mg/kg	0.0062	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0062	ND
delta-BHC	1	mg/kg	0.0062	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0062	ND
Endosulfan II	1	mg/kg	0.0062	ND
Endosulfan Sulfate	1	mg/kg	0.0062	ND
Endrin	1	mg/kg	0.0062	ND
Endrin Aldehyde	1	mg/kg	0.0062	ND
Endrin Ketone	1	mg/kg	0.0062	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0062	ND
Heptachlor Epoxide	1	mg/kg	0.0062	ND
Methoxychlor	1	mg/kg	0.0062	ND
p,p'-DDD	1	mg/kg	0.0031	ND
p,p'-DDE	1	mg/kg	0.0031	ND
p,p'-DDT	1	mg/kg	0.0031	ND
Toxaphene	1	mg/kg	0.031	ND
y-Chlordane	1	mg/kg	0.0062	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	82.80	100	37	141	83	
TCMX-Surrogate	84.82	100	37	141	85	
DCB-Surrogate	83.56	100	33	146	84	
DCB-Surrogate	85.48	100	33	146	85	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.031	ND
Aroclor-1016	1	mg/kg	0.031	ND
Aroclor-1221	1	mg/kg	0.031	ND
Aroclor-1232	1	mg/kg	0.031	ND
Aroclor-1242	1	mg/kg	0.031	ND
Aroclor-1248	1	mg/kg	0.031	ND
Aroclor-1254	1	mg/kg	0.031	ND
Aroclor-1260	1	mg/kg	0.031	ND
Aroclor-1262	1	mg/kg	0.031	ND
Aroclor-1268	1	mg/kg	0.031	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	133.08	100	37	141	133	
TCMX-Surrogate	126.14	100	37	141	126	
DCB-Surrogate	129.03	100	34	146	129	
DCB-Surrogate	116.11	100	34	146	116	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.041	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.041	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.041	ND
2,4,5-Trichlorophenol	1	mg/kg	0.041	ND

Sample ID: TB-117-9 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-017 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.041	ND
2,4-Dichlorophenol	1	mg/kg	0.010	ND
2,4-Dimethylphenol	1	mg/kg	0.010	ND
2,4-Dinitrophenol	1	mg/kg	0.21	ND
2,4-Dinitrotoluene	1	mg/kg	0.041	ND
2,6-Dinitrotoluene	1	mg/kg	0.041	ND
2-Chloronaphthalene	1	mg/kg	0.041	ND
2-Chlorophenol	1	mg/kg	0.041	ND
2-Methylnaphthalene	1	mg/kg	0.041	ND
2-Methylphenol	1	mg/kg	0.010	ND
2-Nitroaniline	1	mg/kg	0.041	ND
2-Nitrophenol	1	mg/kg	0.041	ND
3&4-Methylphenol	1	mg/kg	0.010	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.041	ND
3-Nitroaniline	1	mg/kg	0.041	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.21	ND
4-Bromophenyl-phenylether	1	mg/kg	0.041	ND
4-Chloro-3-methylphenol	1	mg/kg	0.041	ND
4-Chloroaniline	1	mg/kg	0.010	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.041	ND
4-Nitroaniline	1	mg/kg	0.041	ND
4-Nitrophenol	1	mg/kg	0.041	ND
Acenaphthene	1	mg/kg	0.041	ND
Acenaphthylene	1	mg/kg	0.041	ND
Acetophenone	1	mg/kg	0.041	ND
Anthracene	1	mg/kg	0.041	ND
Atrazine	1	mg/kg	0.041	ND
Benzaldehyde	1	mg/kg	0.041	ND
Benzo[a]anthracene	1	mg/kg	0.041	ND
Benzo[a]pyrene	1	mg/kg	0.041	ND
Benzo[b]fluoranthene	1	mg/kg	0.041	ND
Benzo[g,h,i]perylene	1	mg/kg	0.041	ND
Benzo[k]fluoranthene	1	mg/kg	0.041	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.041	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.010	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.041	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.041	ND
Butylbenzylphthalate	1	mg/kg	0.041	ND
Caprolactam	1	mg/kg	0.041	ND
Carbazole	1	mg/kg	0.041	ND
Chrysene	1	mg/kg	0.041	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.041	ND
Dibenzofuran	1	mg/kg	0.010	ND
Diethylphthalate	1	mg/kg	0.041	ND
Dimethylphthalate	1	mg/kg	0.041	ND
Di-n-butylphthalate	1	mg/kg	0.010	ND
Di-n-octylphthalate	1	mg/kg	0.041	ND
Fluoranthene	1	mg/kg	0.041	ND
Fluorene	1	mg/kg	0.041	ND
Hexachlorobenzene	1	mg/kg	0.041	ND
Hexachlorobutadiene	1	mg/kg	0.041	ND
Hexachlorocyclopentadiene	1	mg/kg	0.041	ND
Hexachloroethane	1	mg/kg	0.041	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.041	ND
Isophorone	1	mg/kg	0.041	ND
Naphthalene	1	mg/kg	0.010	ND
Nitrobenzene	1	mg/kg	0.041	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.010	ND
N-Nitrosodiphenylamine	1	mg/kg	0.041	ND
Pentachlorophenol	1	mg/kg	0.21	ND
Phenanthrene	1	mg/kg	0.041	ND
Phenol	1	mg/kg	0.041	ND
Pyrene	1	mg/kg	0.041	ND

Sample ID: TB-117-9 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-017 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	42.74	50	58	148	85	
Phenol-d5	72.77	100	49	129	73	
Nitrobenzene-d5	32.97	50	52	129	66	
2-Fluorophenol	65.93	100	43	128	66	
2-Fluorobiphenyl	34.60	50	58	125	69	
2,4,6-Tribromophenol	77.99	100	54	145	78	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.34**	**3.6JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.17JB**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.71**	**0.13J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**250**	**790**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	1	mg/kg	6.2	ND
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	ND
Iron	**1**	**mg/kg**	**250**	**2100**
Lead	1	mg/kg	6.2	ND
Magnesium	1	mg/kg	620	ND
Manganese	1	mg/kg	12	ND
Nickel	1	mg/kg	6.2	ND
Potassium	1	mg/kg	620	ND
Sodium	**1**	**mg/kg**	**310**	**420**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.99	ND
Arsenic	**1**	**mg/kg**	**0.25**	**0.36**
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.49	ND
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: TB-117-9 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-018 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**84**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.724	mg/kg	0.0017	ND
1,1,2,2-Tetrachloroethane	0.724	mg/kg	0.0017	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.724	mg/kg	0.0017	ND
1,1,2-Trichloroethane	0.724	mg/kg	0.0017	ND
1,1-Dichloroethane	0.724	mg/kg	0.0017	ND
1,1-Dichloroethene	0.724	mg/kg	0.0017	ND
1,2,3-Trichlorobenzene	0.724	mg/kg	0.0017	ND
1,2,4-Trichlorobenzene	0.724	mg/kg	0.0017	ND
1,2-Dibromo-3-chloropropane	0.724	mg/kg	0.0017	ND
1,2-Dibromoethane	0.724	mg/kg	0.00067	ND
1,2-Dichlorobenzene	0.724	mg/kg	0.0017	ND
1,2-Dichloroethane	0.724	mg/kg	0.0017	ND
1,2-Dichloropropane	0.724	mg/kg	0.0017	ND
1,3-Dichlorobenzene	0.724	mg/kg	0.0017	ND
1,4-Dichlorobenzene	0.724	mg/kg	0.0017	ND
1,4-Dioxane	0.724	mg/kg	0.086	ND
2-Butanone	0.724	mg/kg	0.0017	ND
2-Hexanone	0.724	mg/kg	0.0017	ND
4-Methyl-2-pentanone	0.724	mg/kg	0.0017	ND
Acetone	0.724	mg/kg	0.0086	ND
Benzene	0.724	mg/kg	0.00086	ND
Bromochloromethane	0.724	mg/kg	0.0017	ND
Bromodichloromethane	0.724	mg/kg	0.0017	ND
Bromoform	0.724	mg/kg	0.0017	ND
Bromomethane	0.724	mg/kg	0.0017	ND
Carbon disulfide	0.724	mg/kg	0.0017	ND
Carbon tetrachloride	0.724	mg/kg	0.0017	ND
Chlorobenzene	0.724	mg/kg	0.0017	ND
Chloroethane	0.724	mg/kg	0.0017	ND
Chloroform	0.724	mg/kg	0.0017	ND
Chloromethane	0.724	mg/kg	0.0017	ND
cis-1,2-Dichloroethene	0.724	mg/kg	0.0017	ND
cis-1,3-Dichloropropene	0.724	mg/kg	0.0017	ND
Cyclohexane	0.724	mg/kg	0.0017	ND
Dibromochloromethane	0.724	mg/kg	0.0017	ND
Dichlorodifluoromethane	0.724	mg/kg	0.0017	ND
Ethylbenzene	0.724	mg/kg	0.00086	ND
Isopropylbenzene	0.724	mg/kg	0.00086	ND
m&p-Xylenes	0.724	mg/kg	0.00086	ND
Methyl Acetate	0.724	mg/kg	0.0017	ND
Methylcyclohexane	0.724	mg/kg	0.0017	ND
Methylene chloride	**0.724**	**mg/kg**	**0.0017**	**0.0030**
Methyl-t-butyl ether	0.724	mg/kg	0.00086	ND
o-Xylene	0.724	mg/kg	0.00086	ND
Styrene	0.724	mg/kg	0.0017	ND
Tetrachloroethene	0.724	mg/kg	0.0017	ND
Toluene	0.724	mg/kg	0.00086	ND
trans-1,2-Dichloroethene	0.724	mg/kg	0.0017	ND
trans-1,3-Dichloropropene	0.724	mg/kg	0.0017	ND
Trichloroethene	0.724	mg/kg	0.0017	ND
Trichlorofluoromethane	0.724	mg/kg	0.0017	ND
Vinyl chloride	0.724	mg/kg	0.0017	ND
Xylenes (Total)	0.724	mg/kg	0.00086	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	29.82	30	68	122	99	
Dibromofluoromethane	37.98	30	63	140	127	
Bromofluorobenzene	31.36	30	64	129	105	
1,2-Dichloroethane-d4	38.34	30	63	143	128	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-9 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-018 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

1-Pentene	0.724	mg/kg	3.84	0.0027J
TotalVolatileTic	0.724	mg/kg	NA	0.0027J

Sample ID: TB-117-10 COMP | **Collection Date: 2/12/2020**
Lab#: AD15687-019 | **Receipt Date: 2/13/2020**
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**86**

Cyanide (Soil/Waste) 9012B

Analyte	DF	Units	RL	Result
Cyanide	1	mg/kg	0.28	ND

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	ND

Organochlorine Pesticides 8081

Analyte	DF	Units	RL	Result
a-Chlordane	1	mg/kg	0.0058	ND
Aldrin	1	mg/kg	0.0058	ND
Alpha-BHC	1	mg/kg	0.0012	ND
beta-BHC	1	mg/kg	0.0012	ND
Chlordane (Total)	1	mg/kg	0.0058	ND
delta-BHC	1	mg/kg	0.0058	ND
Dieldrin	1	mg/kg	0.0012	ND
Endosulfan I	1	mg/kg	0.0058	ND
Endosulfan II	1	mg/kg	0.0058	ND
Endosulfan Sulfate	1	mg/kg	0.0058	ND
Endrin	1	mg/kg	0.0058	ND
Endrin Aldehyde	1	mg/kg	0.0058	ND
Endrin Ketone	1	mg/kg	0.0058	ND
gamma-BHC	1	mg/kg	0.0012	ND
Heptachlor	1	mg/kg	0.0058	ND
Heptachlor Epoxide	1	mg/kg	0.0058	ND
Methoxychlor	1	mg/kg	0.0058	ND
p,p'-DDD	1	mg/kg	0.0029	ND
p,p'-DDE	1	mg/kg	0.0029	ND
p,p'-DDT	1	mg/kg	0.0029	ND
Toxaphene	1	mg/kg	0.029	ND
y-Chlordane	1	mg/kg	0.0058	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	99.55	100	37	141	100	
TCMX-Surrogate	103.13	100	37	141	103	
DCB-Surrogate	94.38	100	33	146	94	
DCB-Surrogate	96.33	100	33	146	96	

PCB 8082

Analyte	DF	Units	RL	Result
Aroclor (Total)	1	mg/kg	0.029	ND
Aroclor-1016	1	mg/kg	0.029	ND
Aroclor-1221	1	mg/kg	0.029	ND
Aroclor-1232	1	mg/kg	0.029	ND
Aroclor-1242	1	mg/kg	0.029	ND
Aroclor-1248	1	mg/kg	0.029	ND
Aroclor-1254	1	mg/kg	0.029	ND
Aroclor-1260	1	mg/kg	0.029	ND
Aroclor-1262	1	mg/kg	0.029	ND
Aroclor-1268	1	mg/kg	0.029	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
TCMX-Surrogate	106.87	100	37	141	107	
TCMX-Surrogate	103.70	100	37	141	104	
DCB-Surrogate	98.26	100	34	146	98	
DCB-Surrogate	95.14	100	34	146	95	

Semivolatile Organics + 15 (8270)

Analyte	DF	Units	RL	Result
1,1'-Biphenyl	1	mg/kg	0.039	ND
1,2,4,5-Tetrachlorobenzene	1	mg/kg	0.039	ND
2,3,4,6-Tetrachlorophenol	1	mg/kg	0.039	ND
2,4,5-Trichlorophenol	1	mg/kg	0.039	ND

Sample ID: TB-117-10 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-019 **Receipt Date: 2/13/2020**
Matrix: Soil

2,4,6-Trichlorophenol	1	mg/kg	0.039	ND
2,4-Dichlorophenol	1	mg/kg	0.0097	ND
2,4-Dimethylphenol	1	mg/kg	0.0097	ND
2,4-Dinitrophenol	1	mg/kg	0.19	ND
2,4-Dinitrotoluene	1	mg/kg	0.039	ND
2,6-Dinitrotoluene	1	mg/kg	0.039	ND
2-Chloronaphthalene	1	mg/kg	0.039	ND
2-Chlorophenol	1	mg/kg	0.039	ND
2-Methylnaphthalene	1	mg/kg	0.039	ND
2-Methylphenol	1	mg/kg	0.0097	ND
2-Nitroaniline	1	mg/kg	0.039	ND
2-Nitrophenol	1	mg/kg	0.039	ND
3&4-Methylphenol	1	mg/kg	0.0097	ND
3,3'-Dichlorobenzidine	1	mg/kg	0.039	ND
3-Nitroaniline	1	mg/kg	0.039	ND
4,6-Dinitro-2-methylphenol	1	mg/kg	0.19	ND
4-Bromophenyl-phenylether	1	mg/kg	0.039	ND
4-Chloro-3-methylphenol	1	mg/kg	0.039	ND
4-Chloroaniline	1	mg/kg	0.0097	ND
4-Chlorophenyl-phenylether	1	mg/kg	0.039	ND
4-Nitroaniline	1	mg/kg	0.039	ND
4-Nitrophenol	1	mg/kg	0.039	ND
Acenaphthene	1	mg/kg	0.039	ND
Acenaphthylene	1	mg/kg	0.039	ND
Acetophenone	1	mg/kg	0.039	ND
Anthracene	1	mg/kg	0.039	ND
Atrazine	1	mg/kg	0.039	ND
Benzaldehyde	1	mg/kg	0.039	ND
Benzo[a]anthracene	1	mg/kg	0.039	ND
Benzo[a]pyrene	1	mg/kg	0.039	ND
Benzo[b]fluoranthene	1	mg/kg	0.039	ND
Benzo[g,h,i]perylene	1	mg/kg	0.039	ND
Benzo[k]fluoranthene	1	mg/kg	0.039	ND
bis(2-Chloroethoxy)methane	1	mg/kg	0.039	ND
bis(2-Chloroethyl)ether	1	mg/kg	0.0097	ND
bis(2-Chloroisopropyl)ether	1	mg/kg	0.039	ND
bis(2-Ethylhexyl)phthalate	1	mg/kg	0.039	ND
Butylbenzylphthalate	1	mg/kg	0.039	ND
Caprolactam	1	mg/kg	0.039	ND
Carbazole	1	mg/kg	0.039	ND
Chrysene	1	mg/kg	0.039	ND
Dibenzo[a,h]anthracene	1	mg/kg	0.039	ND
Dibenzofuran	1	mg/kg	0.0097	ND
Diethylphthalate	**1**	**mg/kg**	**0.039**	**0.041**
Dimethylphthalate	1	mg/kg	0.039	ND
Di-n-butylphthalate	1	mg/kg	0.0097	ND
Di-n-octylphthalate	1	mg/kg	0.039	ND
Fluoranthene	1	mg/kg	0.039	ND
Fluorene	1	mg/kg	0.039	ND
Hexachlorobenzene	1	mg/kg	0.039	ND
Hexachlorobutadiene	1	mg/kg	0.039	ND
Hexachlorocyclopentadiene	1	mg/kg	0.039	ND
Hexachloroethane	1	mg/kg	0.039	ND
Indeno[1,2,3-cd]pyrene	1	mg/kg	0.039	ND
Isophorone	1	mg/kg	0.039	ND
Naphthalene	1	mg/kg	0.0097	ND
Nitrobenzene	1	mg/kg	0.039	ND
N-Nitroso-di-n-propylamine	1	mg/kg	0.0097	ND
N-Nitrosodiphenylamine	1	mg/kg	0.039	ND
Pentachlorophenol	1	mg/kg	0.19	ND
Phenanthrene	1	mg/kg	0.039	ND
Phenol	1	mg/kg	0.039	ND
Pyrene	1	mg/kg	0.039	ND

Sample ID: TB-117-10 COMP **Collection Date: 2/12/2020**
Lab#: AD15687-019 **Receipt Date: 2/13/2020**
Matrix: Soil

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Terphenyl-d14	41.07	50	58	148	82	
Phenol-d5	76.99	100	49	129	77	
Nitrobenzene-d5	34.69	50	52	129	69	
2-Fluorophenol	70.84	100	43	128	71	
2-Fluorobiphenyl	36.35	50	58	125	73	
2,4,6-Tribromophenol	80.28	100	54	145	80	

Semivolatile Organics + 15 (8270) Library Searches

Analyte	DF	Units	RT	Result
2-Pentanone, 4-hydroxy-4-methyl-	**1**	**mg/kg**	**4.33**	**3.6JAB**
2-Propanol, 1-butoxy-	**1**	**mg/kg**	**5.27**	**0.14JB**
Benzene, 1,2,4-trimethyl-	**1**	**mg/kg**	**5.71**	**0.12J**
TotalSemiVolatileTic	**1**	**mg/kg**	**NA**	**3.9J**

TAL Metals 6010D

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**230**	**1700**
Barium	1	mg/kg	12	ND
Calcium	1	mg/kg	1200	ND
Chromium	**1**	**mg/kg**	**5.8**	**9.6**
Cobalt	1	mg/kg	2.9	ND
Copper	1	mg/kg	5.8	ND
Iron	**1**	**mg/kg**	**230**	**5100**
Lead	1	mg/kg	5.8	ND
Magnesium	1	mg/kg	580	ND
Manganese	**1**	**mg/kg**	**12**	**13**
Nickel	1	mg/kg	5.8	ND
Potassium	1	mg/kg	580	ND
Sodium	**1**	**mg/kg**	**290**	**870**
Vanadium	1	mg/kg	12	ND
Zinc	1	mg/kg	12	ND

TAL Metals 6020B

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.93	ND
Arsenic	**1**	**mg/kg**	**0.23**	**0.50**
Beryllium	1	mg/kg	0.23	ND
Cadmium	1	mg/kg	0.47	ND
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND
Thallium	1	mg/kg	0.47	ND

Sample ID: TB-117-10 GRAB | **Collection Date: 2/12/2020**
Lab#: AD15687-020 | **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**91**

Volatile Organics + 15 (8260)

Analyte	DF	Units	RL	Result
1,1,1-Trichloroethane	0.59	mg/kg	0.0013	ND
1,1,2,2-Tetrachloroethane	0.59	mg/kg	0.0013	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59	mg/kg	0.0013	ND
1,1,2-Trichloroethane	0.59	mg/kg	0.0013	ND
1,1-Dichloroethane	0.59	mg/kg	0.0013	ND
1,1-Dichloroethene	0.59	mg/kg	0.0013	ND
1,2,3-Trichlorobenzene	0.59	mg/kg	0.0013	ND
1,2,4-Trichlorobenzene	0.59	mg/kg	0.0013	ND
1,2-Dibromo-3-chloropropane	0.59	mg/kg	0.0013	ND
1,2-Dibromoethane	0.59	mg/kg	0.00051	ND
1,2-Dichlorobenzene	0.59	mg/kg	0.0013	ND
1,2-Dichloroethane	0.59	mg/kg	0.0013	ND
1,2-Dichloropropane	0.59	mg/kg	0.0013	ND
1,3-Dichlorobenzene	0.59	mg/kg	0.0013	ND
1,4-Dichlorobenzene	0.59	mg/kg	0.0013	ND
1,4-Dioxane	0.59	mg/kg	0.065	ND
2-Butanone	0.59	mg/kg	0.0013	ND
2-Hexanone	0.59	mg/kg	0.0013	ND
4-Methyl-2-pentanone	**0.59**	**mg/kg**	**0.0013**	**0.0028**
Acetone	**0.59**	**mg/kg**	**0.0065**	**0.029**
Benzene	0.59	mg/kg	0.00065	ND
Bromochloromethane	0.59	mg/kg	0.0013	ND
Bromodichloromethane	0.59	mg/kg	0.0013	ND
Bromoform	0.59	mg/kg	0.0013	ND
Bromomethane	0.59	mg/kg	0.0013	ND
Carbon disulfide	0.59	mg/kg	0.0013	ND
Carbon tetrachloride	0.59	mg/kg	0.0013	ND
Chlorobenzene	0.59	mg/kg	0.0013	ND
Chloroethane	0.59	mg/kg	0.0013	ND
Chloroform	0.59	mg/kg	0.0013	ND
Chloromethane	0.59	mg/kg	0.0013	ND
cis-1,2-Dichloroethene	0.59	mg/kg	0.0013	ND
cis-1,3-Dichloropropene	0.59	mg/kg	0.0013	ND
Cyclohexane	0.59	mg/kg	0.0013	ND
Dibromochloromethane	0.59	mg/kg	0.0013	ND
Dichlorodifluoromethane	0.59	mg/kg	0.0013	ND
Ethylbenzene	0.59	mg/kg	0.00065	ND
Isopropylbenzene	0.59	mg/kg	0.00065	ND
m&p-Xylenes	0.59	mg/kg	0.00065	ND
Methyl Acetate	**0.59**	**mg/kg**	**0.0013**	**0.012**
Methylcyclohexane	0.59	mg/kg	0.0013	ND
Methylene chloride	0.59	mg/kg	0.0013	ND
Methyl-t-butyl ether	0.59	mg/kg	0.00065	ND
o-Xylene	0.59	mg/kg	0.00065	ND
Styrene	0.59	mg/kg	0.0013	ND
Tetrachloroethene	**0.59**	**mg/kg**	**0.0013**	**0.0032**
Toluene	0.59	mg/kg	0.00065	ND
trans-1,2-Dichloroethene	0.59	mg/kg	0.0013	ND
trans-1,3-Dichloropropene	0.59	mg/kg	0.0013	ND
Trichloroethene	0.59	mg/kg	0.0013	ND
Trichlorofluoromethane	0.59	mg/kg	0.0013	ND
Vinyl chloride	0.59	mg/kg	0.0013	ND
Xylenes (Total)	0.59	mg/kg	0.00065	ND

Surrogate	Conc.	Spike	Low Limit	High Limit	Recovery	Flags
Toluene-d8	30.74	30	68	122	102	
Dibromofluoromethane	36.85	30	63	140	123	
Bromofluorobenzene	31.59	30	64	129	105	
1,2-Dichloroethane-d4	29.83	30	63	143	99	

Volatile Organics + 15 (8260) Library Searches

Analyte	DF	Units	RT	Result

Sample ID: TB-117-10 GRAB **Collection Date: 2/12/2020**
Lab#: AD15687-020 **Receipt Date: 2/13/2020**
Matrix: Soil/Encore

unknown	0.59	mg/kg	4.56	0.0049J
TotalVolatileTic	0.59	mg/kg	NA	0.0049J

Hampton-Clarke, Inc. (WBE/DBE/SBE)
175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

CHAIN OF CUSTODY RECORD

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

Project # (Lab Use Only): 0021318

Page 1 of 1

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [X] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other: 5 Day TAT		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: Arcadis
Address: 17-17 St Route 208 N, Fair Lawn, NJ
1b) Email/Cell/Fax/Ph: Christopher.Goldsmith@arcadis.com
1c) Send Invoice to: Richard.Gilmour@arcadis.com
1d) Send Report to: Max.Goldstein@arcadis.com

Project Information

2a) Project: Long Beach
2b) Project Mgr: Richard Gilmour
2c) Project Location (City/State):
2d) Quote/PO # (If Applicable): 3001615.00040

FOR LAB USE ONLY ↓

Batch # 401568

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water, S - Soil, A - Air, GW - Ground Water, SL - Sludge, WW - Waste Water, OL - Oil, OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Composite (C)	Grab (G)	TCL VOA	TCL SVOC-BNA	TAL Metals	TAL CN, PCB	TCL Pest	React CN	React Sulfide	Ignitability, pH	TCLP VOC	TCLP SVOC/BNA	TCLP Metals	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001/002	TB-117-1	So	2/12/20	0900	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							VOC = grab
003/004	TB-117-2			0905	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
005/006	TB-117-3			0910	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
007/008	TB-117-4			0915	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
009/010	TB-117-5			0950	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
011/012	TB-117-6			1030	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
013/014	TB-117-7			1100	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
015/016	TB-117-8			1110	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
017/018	TB-117-9			1130	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							
019/020	TB-117-10	↓	↓	1200	X	X	X	X	X	X	X	X	X	X	X	X	X	2	3							

10) Relinquished by:	Accepted by:	Date	Time
Max Goldstein	[signature]	2/13/20	11:00
[signature]	[signature]	2/13/20	12:24

11) Sampler (print name): Max Goldstein Date: 2/12/20

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-8

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

APPENDIX B

Soil Sampling Logs

Hazen ARCADIS
A JOINT VENTURE

Soil Sample Log

Boring/Well TB-101 Project/No Long Beach WPCP Consolidation Geotechnical /30046675.003 Page 1 of 1

Site Location Long Beach, Long Island New York

Drilling Started 2/13/2020 Drilling Completed 2/13/2020

Total Depth Drilled 107 Feet Hole Diameter 2 inches

Type(s) of Sample Coring Device: Terracore and Composite/Split-Spoon

Length and Diameter of Coring Device

Drilling Method Direct Push

Drilling Contractor

Prepared By M.Goldstein

Sample/Core Depth (feet below land surface)

From	To	Sample Description
0	3	TB-101-1 GRAB (1.0-1.5), TB-101-1 COMP (0-3)
4	6	TB-101-2 GRAB (5.0-5.5), TB-101-2 COMP (4.0-6.0)
8	10	TB-101-3 GRAB (8.0-8.5), TB-101-3 COMP (8.0-10.0)
14	16	TB-101-4 GRAB (15.0.0-15.5), TB-101-4 COMP (14.0-16.0), (16.0-18.0)
25	27	TB-101-5 GRAB (25.0.0-25.5), TB-101-5 COMP (25.0-27.0), (20.0-22.0)
35	37	TB-101-6 GRAB (35.0.0-35.5), TB-101-6 COMP (35.0-37.0)
45	47	TB-101-7 GRAB (45.0.0-45.5), TB-101-7 COMP (45.0-47.0), (40.0-42.0)
55	57	TB-101-8 GRAB (55.0.0-55.5), TB-101-8 COMP (55.0-57.0), (50.0-52.0)
65	67	TB-101-9 GRAB (65.0.0-65.5), TB-101-9 COMP (65.0-67.0)
75	77	TB-101-10 GRAB (75.0.0-75.5), TB-101-10 COMP (75.0-77.0)
85	87	TB-101-11 GRAB (85.0.0-85.5), TB-101-11 COMP (85.0-87.0)
95	97	TB-101-12 GRAB (95.0.0-95.5), TB-101-12 COMP (95.0-97.0)
105	107	TB-101-13 GRAB (105.0-105.5), TB-101-13 COMP (105.0-107.0)

Hazen ARCADIS
A JOINT VENTURE

Soil Sample Log

Boring/Well TB-106 Project/No Long Beach WPCP Consolidation Geotechnical /30046675.003 Page 1 of1

Site Location Long Beach, Long Island New York

Drilling Started 3/19/2020 Drilling Completed 3/19/2020

Total Depth Drilled 102 Feet Hole Diameter 2 inches

Type(s) of Sample Coring Device: Terracore and Composite/Split Spoon

Length and Diameter of Coring Device

Drilling Method Direct Push

Drilling Contractor

Prepared By A..Vaculik, J. Denzler

Sample/Core Depth
(feet below land surface)

From	To	Sample Description
0	4	TB-106-01 GRAB (1.5-2.0), TB-106-01 COMP (0.0-2.0), (2.0-2.4)
13	15	TB-106-02 GRAB (14.5-15.0), TB-106-01 COMP (13.0-15.0)
20	27	TB-106-03 GRAB (21.5-22.0), TB-106-01 COMP (20.0-22.0), (25.0-27.0)
30	37	TB-106-04 GRAB (31.5-32.0), TB-106-01 COMP (30.0-32.0), (35.0-37.0)
40	42	TB-106-05 GRAB (41.0-41.5), TB-106-01 COMP (40.0-42.0)
50	57	TB-106-06 GRAB (51.5-52.0), TB-106-06 COMP (50.0-52.0), (55.0-57.0)
60	67	TB-106-07 GRAB (61.0-61.5), TB-106-07 COMP (60.0-62.0), (65.0-67.0)
70	72	TB-106-08 GRAB (71.0-71.5), TB-106-08 COMP (70.0-72.0)
80	87	TB-106-09 GRAB (81.5-82.0), TB-106-09 COMP (80.0-82.0), (85.0-87.0)
90	92	TB-106-10 GRAB (91.5-92.0), TB-106-10 COMP (90.0-92.0)
100	102	TB-106-11 GRAB (101.0-101.5), TB-106-11 COMP (100.0-102.0)

Hazen ARCADIS
A JOINT VENTURE

Soil Sample Log

Boring/Well TB-112 Project/No Long Beach WPCP Consolidation Geotechnical /30046675.003 Page 1 of1

Site Location Long Beach, Long Island New York

Drilling Started 3/25/2020 Drilling Completed 3/25/2020

Total Depth Drilled 72 Feet Hole Diameter 2 inches

Type(s) of Sample Coring Device: Terracore and Composite/Split-Spoon

Length and Diameter of Coring Device

Drilling Method Direct Push

Drilling Contractor

Prepared By A.Vaculik, J.Denzler

Sample/Core Depth
(feet below land surface)

From	To	Sample Description
4	6	TB-112-01 GRAB (5.0-5.5), TB-112-01 COMP (4.0-6.0)
8	10	TB-112-02 GRAB (9.0-9.5), TB-112-02 COMP (8.0-10.0)
15	17	TB-112-03 GRAB (16.0-16.5), TB-112-03 COMP (15.0-17.0)
20	22	TB-112-04 GRAB (21.0-21.5), TB-112-04 COMP (20.0-22.0)
30	37	TB-112-05 GRAB (31.0-31.5), TB-112-05 COMP (30.0-32.0), (35.0-37.0)
40	47	TB-112-06 GRAB (41.0-41.5), TB-112-06 COMP (40.0-42.0), (45.0-47.0)
50	57	TB-112-07 GRAB (51.0-51.5), TB-112-07 COMP (50.0-52.0), (55.0-57.0)
60	67	TB-112-08 GRAB (61.0-61.5), TB-112-08 COMP (60.0-62.0), (65.0-67.0)
70	72	TB-112-09 GRAB (71.0-71.5), TB-112-09 COMP (70.0-72.0)

Hazen ARCADIS
A JOINT VENTURE

Soil Sample Log

Boring/Well TB-117 Project/No Long Beach WPCP Consolidation Geotechnical /30046675.003 Page 1 of 1

Site Location Long Beach, Long Island New York

Drilling Started 2/12/2020 Drilling Completed 2/12/2020

Total Depth Drilled 75.5 Feet Hole Diameter 2 inches

Type(s) of Sample Coring Device: Terracore and Composite/Split-Spoon

Length and Diameter of Coring Device

Drilling Method Direct Push

Drilling Contractor

Prepared By M.Goldstein

Sample/Core Depth (feet below land surface)

From	To	Sample Description
0	3	TB-117-1 GRAB (1.0-1.5), TB-117-1 COMP (0.0-3.0)
4	6	TB-117-2 GRAB (5.5-6.0), TB-117-1 COMP (4.0-6.0)
8	10	TB-117-3 GRAB (8.0-8.5), TB-117-3 COMP (8.0-10.0)
14	16	TB-117-4 GRAB (15.0-15.5), TB-117-4 COMP (14.0-16.0)
25	27	TB-117-5 GRAB (25.0-25.5), TB-117-5 COMP (25.0-27.0)
30	35.5	TB-117-6 GRAB (35.0-35.5), TB-117-6 COMP (30.0-32.0) (20.0-22.0)
40	45.5	TB-117-7 GRAB (45.0-45.5), TB-117-7 COMP (40.0-42.0) (35.0-37.0)
50	55.5	TB-117-8 GRAB (55.0-55.5), TB-117-8 COMP (50.0-52.0) (45.0-47.0)
60	65.5	TB-117-9 GRAB (65.0-65.5), TB-117-9 COMP (60.0-62.0) (55.0-57.0)
70	75.5	TB-117-10 GRAB (75.0-75.5), TB-117-9 COMP (70.0-72.0)