



Attachment 2.

West Lake Corridor Project Phase II Environmental Site Assessment



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Phase II Environmental Site Assessment Report

West Lake Corridor Project

Federal Transit Administration
and
Northern Indiana Commuter
Transportation District

March 2018



NORTHERN INDIANA COMMUTER
TRANSPORTATION DISTRICT

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Acronyms and Abbreviations

| | |
|---------------|---|
| AOC | area of concern |
| AST | aboveground storage tank |
| bgs | below ground surface |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CERCLIS | Comprehensive Environmental Response, Compensation, and Liability Information System |
| CERCLIS-NFRAP | Comprehensive Environmental Response, Compensation, and Liability Information System No Further Remedial Action Planned |
| CFR | Code of Federal Regulations |
| COC | contaminant of concern |
| CORRACTS | RCRA Corrective Action Sites |
| CREC | controlled REC |
| DEIS | Draft Environmental Impact Statement |
| Direct Push | Direct Push Analytical Corporation |
| ERC | Environmental Restrictive Covenant |
| ESA | Environmental Site Assessment |
| FEIS | Final Environmental Impact Statement |
| FTA | Federal Transit Administration |
| HASP | Health and Safety Plan |
| HMTR | <i>NICTD West Lake Corridor Project Hazardous Materials Technical Report</i> |
| HREC | historical REC |
| IDEM | Indiana Department of Environmental Management |
| IUPPS | Indiana Underground Plant Protection Service |
| LUST | leaking underground storage tank |
| Metric | Metric Environmental, LLC. |
| MGP | Manufactured Gas Plant |
| MTG | Migration to Groundwater |
| NEPA | National Environmental Policy Act |
| NFRAP | No Further Response Action Planned |
| NICTD | Northern Indiana Commuter Transportation District |
| OSHA | Occupational Safety and Health Administration |
| PAH | polycyclic aromatic hydrocarbon |
| PCB | polychlorinated biphenyl |
| PID | photoionization detector |
| PPE | personal protective equipment |



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| | |
|-------|---|
| ppm | part per million |
| PVC | polyvinyl chloride |
| RCG | Remediation Closure Guide |
| RCRA | Resource Conservation and Recovery Act |
| REC | recognized environmental condition |
| RSL | Regional Screening Level |
| SARA | Superfund Amendments and Reauthorization Act |
| SL | screening level |
| SQG | Small Quantity Generator |
| SSL | South Shore Line |
| TSCA | Toxic Substances Control Act |
| US | United States |
| USC | United States Code |
| USEPA | United States Environmental Protection Agency |
| UST | underground storage tank |
| VI | vapor intrusion |
| VOC | volatile organic compound |
| VRP | Voluntary Remediation Program |



Executive Summary

Metric Environmental, LLC (Metric) conducted a Phase II Environmental Site Assessment (ESA) for the Northern Indiana Commuter Transportation District (NICTD) West Lake Corridor Project (Project) located in Lake County, Indiana, and portions of Cook County, Illinois. The Project would involve the installation of a commuter rail line along an approximate 9-mile extension of the existing South Shore Line (SSL) between Dyer and Hammond, Indiana. Prior to commencement of the Phase II ESA, the Federal Transit Administration (FTA) and NICTD conducted an initial environmental review of the Project in accordance with the National Environmental Policy Act (NEPA). A Draft Environmental Impact Statement (DEIS) was prepared, with FTA as the Federal Lead Agency and NICTD as the Local Project Sponsor. A Final Environmental Impact Statement (FEIS) is currently being prepared as part of the process, which includes this Phase II ESA.

As part of the DEIS, AECOM conducted a limited-scope Phase I ESA for the Project to evaluate potential hazardous substance impacts, which could adversely affect design, scope, schedule, and/or budget of the Project. AECOM's findings were documented in the *NICTD West Lake Corridor Project Hazardous Materials Technical Report* (HMTR), dated November 2016. According to the HMTR, AECOM's assessment identified 68 recognized environmental conditions (RECs), 2 controlled RECs, and 3 historical RECs for the Project. Metric reviewed the HMTR to establish high priority areas of concern (AOCs) where subsurface investigations were needed to assess whether a release of hazardous substances and/or petroleum hydrocarbons had occurred within the Project footprint, and whether the release would adversely affect scope, schedule, and costs of the Project. Metric initially selected 17 AOCs for subsurface investigation, which are summarized in **Appendix C, Table 1.1-1**. Metric submitted a summary of the selected 17 AOCs to HDR, along with exhibits depicting proposed soil boring locations for the subsurface investigation. HDR further evaluated the 17 AOCs identified by Metric based on FTA and NICTD requirements, alignment modification, and property acquisition and access. HDR narrowed the AOCs to the following five AOCs:

- AOC 1: Monon Rail Yard
- AOC 2: NIPSCO Corporation Manufactured Gas Plant (MGP) Site
- AOC 3: Dombrowski & Holmes
- AOC 4: Marble Street Industrial Area
- AOC 5: Marble Street Dump A, B, and C

As a result of property access restrictions, Metric conducted subsurface investigations at only three of the five AOCs along the Project Preferred Alternative (Corridor). The subsurface investigation consisted of the advancement of soil borings and the construction of temporary groundwater monitoring wells to collect soil and groundwater samples for laboratory analysis. Laboratory analytical results of soil samples collected were compared to the most recent Indiana Department of Environmental Management (IDEM) Remediation Closure Guide (RCG) screening levels (SLs), including *Migration to Groundwater (MTG) SLs*, *Residential Direct Contact SLs*, and *Commercial/Industrial Direct Contact SLs*. Laboratory analytical results of groundwater samples collected were compared to tap groundwater SLs, residential vapor intrusion (VI) SLs, and commercial/industrial VI SLs.



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The IDEM RCG outlines the use of risk-based SLs to aid in the evaluation of contaminated sites. The SLs were derived from Regional Screening Levels (RSLs) published by the United States Environmental Protection Agency (USEPA). The analytical results of the investigation were compared against these SLs under various scenarios. Under the proposed future use of the Corridor, the *Commercial/Industrial Direct Contact SL* and *Excavation Direct Contact SL* would be the most applicable for soils. The *IDEM RCG Residential Tap SL* was used to evaluate groundwater samples.

The number and location of the soil borings and temporary monitoring wells, quantity and interval of samples collected, and parameters selected for laboratory analyses were based on the nature of the RECs and site conditions identified in the field for each AOC. The three AOCs (and associated parcels descriptions) included in this Phase II ESA are summarized in the following table:

| AOC | Description/Location | Tax Parcel | Owner | Address |
|-----|---|--------------------------|--|------------------------|
| 2 | NIPSCO Corp MGP/Best Auto Repair Wilcox and Hohman | 45-02-36-127-003.000-023 | NIPSCO | 4912 HOHMAN AVE |
| | | 45-02-36-127-001.000-023 | NIPSCO | 4912 HOHMAN |
| | | 45-02-36-127-002.000-023 | NIPSCO | 4912 WILCOX AVE |
| | | 45-02-36-129-014.000-023 | City of Hammond Indiana | 5925 CALUMET AVE |
| 3 | Dombrowski & Holmes (a.k.a. Djuric Trucking, Hendrix Property, and Illiana Scrap & Core) 4805 Sheffield Ave | 45-02-25-455-001.000-023 | Djuric, Jim Z | 4804 HOHMAN AVE |
| | | 45-02-25-455-002.000-023 | Indiana Harbor Belt Railroad Co. | 4700 BL W OF SHEFFIELD |
| | | 45-02-25-377-008.000-023 | Djuric, Jim Z | 4828 HOHMAN AVE |
| | | 45-02-25-377-005.000-023 | Monon, Railroad | 4714 SHEFFIELD |
| | | 45-02-25-377-004.000-023 | North Hammond Metals Inc | 4742 SHEFFIELD AVE |
| | | 45-02-25-377-002.000-023 | Hendrix, Randal L | 4700 SHEFFIELD AVE |
| | | 45-02-25-377-003.000-023 | North Hammond Metals Inc | 4700 SHEFFIELD AVE |
| | | 45-02-25-377-001.000-023 | Illiana Scrap & Core, Inc. | 4700 SHEFFIELD AVE |
| 4 | Marble Street Industrial Area (various tenants) Area located west of Sheffield Ave, on the north and south sides of Marble Street | 45-02-25-336-021.000-023 | Ayala, Luis U Trust dtd 01/07/15 | 227 CHICAGO ST |
| | | 45-02-25-336-022.000-023 | Noojin, Deborah J as Trs of the Deborah J Noojin T | 4642 SHEFFIELD AVE |
| | | 45-02-25-336-011.000-023 | Goana, Robert & Belinda h&w | 4634 SHEFFIELD AVE |
| | | 45-02-25-336-019.000-023 | Indiana Harbor Belt Railroad Co. | 200 MARBLE ST |
| | | 45-02-25-335-001.000-023 | Broderick Benjamin LLC | 4700 SHEFFIELD AVE |
| | | 45-02-25-336-007.000-023 | Quinteros, Jose A | 248 MARBLE ST |
| | | 45-02-25-336-002.000-023 | Eddings, Michael & Elizabeth h&w | 228 MARBLE ST |
| | | 45-02-25-336-003.000-023 | Palmerin, Miguel & Maria T/E | 232 MARBLE ST |
| | | 45-02-25-336-008.000-023 | Quinteros, Jose A | 252 MARBLE ST |

Based on the evaluation, Metric presents the following findings, conclusions, and recommendations relative to each AOC.



AOC 2: NIPSCO Corporation Manufactured Gas Plant Site

Metric advanced seven soil borings at AOC 2 and collected soil samples, which were analyzed for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and Resource Conservation and Recovery Act (RCRA) Metals.

Based on the soil data obtained from AOC 2, Metric presents the following conclusions:

- Exceedances of the *Commercial/Industrial Direct Contact SLs* for several PAH parameters and naphthalene (a VOC) were detected in the deeper soil sample collected at 02-SB-02 (16 to 18 feet).
- An exceedance of the *Commercial/Industrial Direct Contact SL* for benzo(a)pyrene was found in the shallow soil sample collected at 02-SB-01.
- Mercury concentrations in exceedance of the *Excavation Direct Contact SL* were found in all but one (02-SB-02) of the shallow soil samples collected onsite.
- No groundwater samples were collected as part of the subsurface investigation of AOC 2 because an active groundwater extraction system is in place with regular monitoring and reporting to IDEM under their voluntary clean up program.

Given that the AOC is currently undergoing active remediation, no further investigation is warranted at this time; however, based on the levels of mercury exceeding *Excavation Direct Contact SLs*, the Health and Safety Plan (HASP) associated with the Project needs to include special provisions beyond normal construction recommendations. Standard personal protective equipment (PPE) is not considered suitable for the planned construction activities and should be upgraded to an appropriate level in accordance with Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1920.120. Construction workers performing excavation or working within the subsurface should be advised of the existing conditions and be trained per the requirements of OSHA 29 CFR 1920.120.

AOC 3: Dombrowski & Holmes

Metric advanced nine soil borings at AOC 3 and collected both soil and groundwater samples, which were then analyzed for VOCs, PAHs, and RCRA Metals.

Based on the soil and groundwater data obtained from AOC 3, Metric presents the following conclusions:

- Arsenic concentrations in exceedance of at least one of the SLs was detected in all but two (03-SB-07 and 03-SB-09) of the shallow soil samples collected. Specifically, the *Commercial/Industrial Direct Contact SL* was exceeded at shallow depths at 03-SB-04 and 03-SB-08.
- Lead in exceedance of at least one of the SLs was found in all but three (03-SB-01, 03-SB-07, and 03-SB-09) of the shallow soil samples collected. Specifically, the *Commercial/Industrial Direct Contact SL* was exceeded at 03-SB-06 and the *Excavation Direct Contact SL* was exceeded at 03-SB-04.
- The concentrations reported in the soil samples collected at 03-SB-04 (0 to 1 foot) and 03-SB-06 (6 to 8 feet) were both in exceedance of the *Commercial/Industrial Direct Contact SL* for arsenic and the *Excavation Direct Contact SL* for lead.
- PAH and VOC concentrations did not exceed *Commercial/Industrial Direct Contact or Excavation Direct Contact SLs* in any of the soil samples collected.



- No contaminants of concern (COCs) were present in the groundwater samples collected at concentrations exceeding *Groundwater Residential Tap SLs*.

The majority of shallow soil samples had arsenic and lead concentrations that exceeded the *Commercial/Industrial Direct Contact SLs*. Lead concentrations exceeded the *Excavation Direct Contact SL* in samples collected at two locations. IDEM might require further investigation and remediation of the onsite impacts on soil and/or might require an Environmental Restrictive Covenant (ERC), based on the site's planned commercial use. Additionally, based on the levels of lead exceeding *Excavation Direct Contact SL*, the HASP associated with the Project needs to include special provisions beyond normal construction recommendations. Standard PPE is not considered suitable for the planned construction activities and should be upgraded to an appropriate level in accordance with OSHA 29 CFR 1920.120. Construction workers performing excavation or working within the subsurface should be advised of the existing conditions and be trained per requirements of OSHA 29 CFR 1920.120.

AOC 4: Marble Street Industrial Corridor

Metric advanced five soil borings at AOC 4 and collected both soil and groundwater samples, which were analyzed for VOCs, PAHs, polychlorinated biphenyls (PCBs), and RCRA Metals.

Based on the soil and groundwater data obtained from AOC 4, Metric presents the following conclusions:

- No soil concentrations were detected in exceedance of the *Commercial/Industrial or Excavation Direct Contact SLs*.
- Arsenic concentrations exceeded the *Groundwater Residential Tap SL* in both the filtered and unfiltered groundwater samples taken from boring 04-SB-03. The arsenic concentrations in soil sample 04-SB-03 (0 to 1 foot) exceed the *MTG SL*; therefore, the arsenic in the soil is suspected to be the source of groundwater quality impacts at this location.
- Lead concentrations exceeded the *Groundwater Residential Tap SL* in the filtered and unfiltered groundwater samples taken from boring 04-SB-01. The lead concentration in soil sample 04-SB-01 (0 to 1 foot) exceeded the *MTG SL*; therefore, the lead in the soil is suspected to be a source of groundwater quality impacts at these locations.
- The lead concentration exceeded the *Groundwater Residential Tap SL* in the unfiltered groundwater sample taken from boring 04-SB-05, but was not detected above the laboratory method detection limit in the filtered groundwater sample. Therefore, the lead concentrations in the unfiltered groundwater sample at 04-SB-05 appear to be a result of sediments in the groundwater and are not suspected to represent elevated concentrations of dissolved lead.

No COCs exceeded *Commercial/Industrial or Excavation Direct Contact SLs* in the soil samples collected; however, arsenic and lead did exceed *Residential Direct Contact SLs* for soil at one location and *Groundwater Residential Tap SL* for groundwater. Therefore, IDEM could require further investigation and remediation of the onsite impacts on soil and groundwater and might also require an ERC based on the site's planned commercial use.



1 Introduction

The Federal Transit Administration (FTA) and Northern Indiana Commuter Transportation District (NICTD) are conducting an environmental review for the West Lake Corridor Project (Project) located in Lake County, Indiana, and portions of Cook County, Illinois, in accordance with the National Environmental Policy Act (NEPA) and other regulatory requirements. NICTD is currently engaged in planning the Project. The Project would involve the installation of a commuter rail line along an approximate 9-mile extension of the existing South Shore Line (SSL) between Dyer and Hammond, Indiana. Several alternative routes were proposed; however, after taking into consideration numerous engineering, transportation, and environmental factors and municipality input, the Hammond Alternative (Preferred Alternative) has been proposed for this Project. The southern terminus of the Project would begin near Main Street near the Muster/Dyer municipal boundary and would head north and connect to the existing SSL at the newly proposed Hammond Gateway Station in Hammond. The Project would expand the service coverage of NICTD, and would improve mobility and accessibility.

The Project would include the installation of new track on a separate right-of-way adjacent to, and east of, the existing CSX railroad in Munster, Indiana. The Project also proposes to use the former Monon Railroad corridor located in Munster and Hammond as a part of the commuter rail alignment. In accordance with NEPA, a Draft Environmental Impact Statement (DEIS) was prepared, with FTA as the Federal Lead Agency and NICTD as the Local Project Sponsor. A Final Environmental Impact Statement (FEIS) is currently being prepared as part of the process.

As part of the DEIS, AECOM conducted a limited-scope Phase I Environmental Site Assessment (ESA) for the West Lake Corridor Project to evaluate potential hazardous substance impacts, which could adversely affect design, scope, schedule, and/or budget of the Project. AECOM's findings were documented in the *NICTD West Lake Corridor Project Hazardous Materials Technical Report* (HMTR), dated November 2016. According to the HMTR, AECOM's assessment identified a total of 68 recognized environmental conditions (RECs), 2 controlled RECs (CRECs), and 3 historical RECs (HRECs) for the Project. AECOM classified each REC and CREC as either a low-, medium-, or high-risk site, defined as follows:

- Low risk: Properties identified as CRECs.
- Medium risk: Properties identified as RECs that have closed leaking underground storage tank (LUST) or other spill incidents, aboveground storage tank (AST)/underground storage tank (UST) sites with no spill-related listings, vehicle repair sites, junk yards, or sites without long-term historical industrial use.
- High risk: Properties identified as RECs that have active/open LUST or other spill incidents, historical dry cleaners, historical auto stations (e.g., gas stations), active LUST sites, or sites with identified long-term historical industrial use.

1.1 Purpose of Report

Metric Environmental, LLC (Metric) reviewed the HMTR to establish high priority areas of concern (AOCs) where subsurface investigations were needed to assess whether a release of hazardous substances and/or petroleum hydrocarbons had occurred within the Project footprint, and whether the release would adversely affect scope, schedule, and costs of the Project. Metric developed a risk analysis spreadsheet based on the following Project activities:

- Redevelopment of the former Monon Yard

- Construction of a new maintenance facility and yard in an industrial area in Hammond
- Areas of major ground disturbance, such as underground utility relocations
- Acquisition of properties along the railroad route that might be identified in the DEIS
- Proposed bridge abutments spanning the Grand Calumet River in an environmentally impaired area

Based on these proposed activities, Metric developed an analysis table to evaluate each REC identified in the HMTR. Each REC was then given a high, medium, or low risk assignment within each of the categories, which were then combined into an overall risk. Those with a high overall risk were selected for further subsurface investigation. The 17 AOCs that Metric initially selected for subsurface investigation are summarized in **Appendix C, Table 1.1-1**.

Metric submitted a summary of the selected 17 AOCs to HDR, along with exhibits depicting proposed soil boring locations for the subsurface investigation. HDR further evaluated the 17 AOCs identified by Metric based on FTA and NICTD requirements, alignment modification, and property acquisition and access. HDR narrowed the AOCs to the following five AOCs:

- AOC 1: Monon Rail Yard
- AOC 2: NIPSCO Corporation Manufactured Gas Plant (MGP) Site
- AOC 3: Dombrowski & Holmes
- AOC 4: Marble Street Industrial Area
- AOC 5: Marble Street Dump A, B, and C

These five AOCs are summarized in the following sections.

1.1.1 AOC 1: Monon Rail Yard

According to the HMTR, the Monon Rail Yard was an active rail yard from the late 1800s until the mid-1980s, at which time the rail line in that area ceased operations. The former Monon Rail Yard historically occupied the West Lake Corridor Project Area between 169th Street and I-94 prior to the 1990s. This site was entered into the Indiana Department of Environmental Management (IDEM) Voluntary Remediation Program (VRP) in 1997, and remediation was performed to address soil and groundwater contamination from historical site use. The site was awarded a VRP Certificate of Completion on February 15, 2002, with the condition that the property could not be used for residential purposes. Additionally, the Monon Rail Yard is adjoined by Neal's Auto Body facility to the east at 6922 Harrison Avenue. Prior to Neal's Auto Body, the site was occupied by an industrial facility with an associated rail spur between at least 1929 and 1974. Sunny Cleaners, a dry cleaning facility, has been located southeast adjacent to the Monon Yard site at 428 173rd Street since at least 2003.

Planned project activities within AOC 1 include property acquisition and construction of a rail station and parking lot.

1.1.2 AOC 2: NIPSCO Corporation Manufactured Gas Plant Site

The former NIPSCO Corporation MGP, located at the intersection of Wilcox Street and Hohman Avenue in Hammond, Indiana, was constructed in 1900. Manufactured gas was produced using coal carbonization and water gas processes from 1904 through approximately 1930. Records indicate that the site was then used as a gas transfer station from an East Chicago, Indiana,



facility until approximately 1950. It was during this period of transfer activity that several ASTs and USTs were installed for use on the site. By 1951, the facility was shut down, site buildings abandoned, and the property converted to a supply yard and storage area for NIPSCO.

The former Hammond MGP was entered into the IDEM VRP in 1998 after investigative activities indicated that residuals from former gas manufacturing operations had impacted the former MGP parcel and adjacent properties. The site is identified as IDEM VRP #6980801. Active remediation is occurring at the site. A groundwater extraction system and underground barrier walls are present onsite. A permeable reactive cap associated with the Great Lakes Legacy Act cleanup of the Grand Calumet River was completed along the north side of the site (outside the fence) in 2016. Installation of a low-permeability cap in the upland area (inside the fence) is planned in the near future.

Planned project activities within AOC 2 include excavation for bridge piers/abutments and negotiated land lease/easement.

1.1.3 AOC 3: Dombrowski & Holmes

The former Dombrowski & Holmes recycling facility was located at 4805 Sheffield Avenue. This site is listed in the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) No Further Response Action Planned (NFRAP) database. The database listing indicates that the site was added to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program in 1980. Preliminary assessment that year classified the site as a high priority for further assessment. However, following a site inspection later in 1980, the site did not qualify for the National Priorities List (NPL) and was delisted as a NFRAP site. Based on the industrial history of this site and the lack of details concerning cleanup and site closure, the HMTR listed the site as a REC.

Planned project activities within AOC 3 include property acquisition and construction of a maintenance facility.

1.1.4 AOC 4: Marble Street Industrial Area

The Marble Street Industrial Area has been improved with industrial facilities since at least 1915. Between 1915 and 1930, industrial occupants included Federal Cement Tile Co., the Prest-O-Lite Co. (a manufacturer of acetylene gas), Standard Oil Co. of Indiana Bulk Oil Yard, Hammond Foundry Co., Champion Corporation (manufacturer of farm machinery and auto bodies), Page & Jones Chemical Co. Inc., and others. This corridor is situated along the north side of the Grand Calumet River and might also be impacted by contaminants associated with the NIPSCO Corporation MGP situated along the south side of the Grand Calumet River.

Planned project activities within AOC 4 include property acquisition and construction of a maintenance facility.

1.1.5 AOC 5: Marble Street Dump A, B, and C

The Marble Street Dump A, B, and C site is listed in the CERCLIS, Resource Conservation and Recovery Act (RCRA) Corrective Action Sites (CORRACTS), and RCRA-Small Quantity Generator (SQG) databases. The CERCLIS database listing indicates that the site was discovered as a contaminated site in 1980. The database listed the site as an abandoned property that most recently was used as an open dump for auto fluff, foundry sand, and unknown wastes between 1989 and 1993. The database also indicates that the site was formerly operated as Estech General Chemical Co., which manufactured agri-chemicals and



sulfuric acid from 1952 to 1982. The site is also listed as Marble Street Dump on the Brownfields Database (ACRES Property ID #11870). The databases did not indicate whether contamination remains onsite.

Planned project activities within AOC 5 include property acquisition and construction of a maintenance facility.

1.2 Project Overview

Metric conducted a Phase II ESA along the Corridor. Site access and agreements to perform push probe borings in order to collect samples were negotiated through NICTD's Real Estate Department. Access to the sites was denied at two of the AOCs. The remaining three AOCs and their associated parcels are summarized in **Table 1.2-1**. A site vicinity map is provided in **Appendix A, Exhibit 1**.

Table 1.2-1: AOC – Property and Location Details

| AOC | Description/Location | Tax Parcel | Owner | Address |
|--------------------------|---|--------------------------|---|---------------------------|
| 2 | NIPSCO Corp MGP/ Best Auto Repair Wilcox and Hohman | 45-02-36-127-003.000-023 | NIPSCO | 4912 HOHMAN AVE |
| | | 45-02-36-127-001.000-023 | NIPSCO | 4912 HOHMAN |
| | | 45-02-36-127-002.000-023 | NIPSCO | 4912 WILCOX AVE |
| | | 45-02-36-129-014.000-023 | City of Hammond Indiana | 5925 CALUMET AVE |
| 3 | Dombrowski & Holmes (a.k.a. Djuric Trucking, Hendrix Property, and Illiana Scrap & Core) 4805 Sheffield Ave | 45-02-25-455-001.000-023 | Djuric, Jim Z | 4804 HOHMAN AVE |
| | | 45-02-25-455-002.000-023 | Indiana Harbor Belt Railroad Co. | 4700 BL W OF SHEFFIELD |
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| | | 45-02-25-377-001.000-023 | Illiana Scrap & Core, Inc. | 4700 SHEFFIELD AVE |
| 4 | Marble Street Industrial Area (various tenants) Area located west of Sheffield Ave, on the north and south sides of Marble Street | 45-02-25-336-021.000-023 | Ayala, Luis U Trust dtd 01/07/15 | 227 CHICAGO ST |
| | | 45-02-25-336-022.000-023 | Noojin, Deborah J as Trs of the Deborah J Noojin T | 4642 SHEFFIELD AVE |
| | | 45-02-25-336-011.000-023 | Goana, Robert & Belinda h&w | 4634 SHEFFIELD AVE |
| | | 45-02-25-336-019.000-023 | Indiana Harbor Belt Railroad Co. | 200 MARBLE ST |
| | | 45-02-25-335-001.000-023 | Broderick Benjamin LLC | 4700 SHEFFIELD AVE |
| | | 45-02-25-336-007.000-023 | Quinteros, Jose A | 248 MARBLE ST |
| | | 45-02-25-336-002.000-023 | Eddings, Michael & Elizabeth h&w | 228 MARBLE ST |
| | | 45-02-25-336-003.000-023 | Palmerin, Miguel & Maria T/E | 232 MARBLE ST |
| 45-02-25-336-008.000-023 | Quinteros, Jose A | 252 MARBLE ST | | |

2 Regulatory Setting

Numerous federal and state laws and regulations govern the handling, treatment, storage, and transportation of hazardous and contaminated materials. Key regulations directing the investigation pertinent to hazardous, contaminated, and regulated materials relevant to the Project include:

- **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 United States Code [USC] § 9601 et seq.):** Provides a federal “superfund” to clean up uncontrolled, inactive, or abandoned hazardous waste sites and accidents, spills, and emergency releases of pollutants and contaminants into the environment.
- **Superfund Amendments and Reauthorization Act (SARA) (Public Law 99-499):** Amended CERCLA in 1986 to provide a program to address abandoned hazardous waste sites.
- **RCRA (42 USC § 6901 et seq.):** Regulates the safe generation, treatment, storage, transportation, and disposal of solid hazardous wastes from cradle to grave. Subtitle I of RCRA establishes a regulatory program that prevents, detects, and cleans up releases from UST systems containing petroleum or hazardous substances.
- **Occupational Safety and Health Act (29 USC § 651 et seq.):** Provides workers with a place of employment free from recognized hazards to safety and health.
- **Toxic Substances Control Act (TSCA) (15 USC § 2601 et seq.):** Includes restrictions relating to chemical substances and mixtures, and requirements for reporting, recordkeeping, and testing.
- **Indiana Title 329 Solid Waste Management Division (329 Indiana Administrative Code 3.1-1-2):** Provides Indiana’s hazardous waste and solid waste management programs and contains requirements for addressing inactive hazardous substance or waste disposal sites.
- **Illinois Solid Waste Management Act (415 Illinois Compiled Statutes 20):** Provides Illinois’s hazardous waste and solid waste management programs and contains requirements for addressing inactive hazardous substance or waste disposal sites.

3 Methodology

Metric conducted a subsurface investigation at each of the three AOCs identified in Section 1. The subsurface investigation consisted of the advancement of soil borings and the construction of temporary groundwater monitoring wells to collect soil and groundwater samples for laboratory analysis. The number and location of the soil borings and temporary monitoring wells, quantity and interval of samples collected, and parameters selected for laboratory analyses were based on the nature of the RECs and site conditions identified in the field for each AOC.

Laboratory analytical results of soil samples collected were compared to the most recent IDEM Remediation Closure Guide (RCG) screening levels (SLs) including *Migration to Groundwater (MTG) SLs*, *Residential Direct Contact SLs*, and *Commercial/Industrial Direct Contact SLs*. Laboratory analytical results of groundwater samples collected were compared to tap groundwater SLs, residential vapor intrusion (VI) SLs, and commercial/industrial VI SLs.

The IDEM RCG outlines the use of risk-based SLs to aid in the evaluation of contaminated sites. The SLs were derived from Regional Screening Levels (RSLs) published by the United States Environmental Protection Agency (USEPA). The analytical results of the investigation were compared against these SLs under various scenarios. Under the proposed future use of the Corridor, the *Commercial/Industrial Direct Contact SL* and *Excavation Direct Contact SL* would be the most applicable for soils. The *IDEM RCG Residential Tap SL* was used to evaluate groundwater samples.

3.1 Soil and Groundwater Sampling

Metric and Direct Push Analytical Corporation (Direct Push) mobilized to the site to advance a total of 23 soil borings. Soil borings were advanced to a depth of up to 30 feet below ground surface (bgs) or until the saturated zone was reached, whichever was encountered first. The exception was at AOC 2, where borings were advanced only to approximately 20 feet bgs to the top of the confining (clay) layer. Metric collected one subsurface soil sample from each boring for laboratory analysis. Additionally, Metric collected one surface soil sample (i.e., 0 to 1 foot bgs) from each soil boring for laboratory analysis. Upon completion of soil boring installation and soil sampling activities, Metric and Direct Push installed temporary monitoring wells (a minimum of three temporary wells per AOC, with the exception of AOC 2) in select borehole locations.

3.2 Scope of Work

Prior to advancing soil borings at the site, Indiana Underground Plant Protection Service (IUPPS) was contacted to mark public underground utilities. In addition to IUPPS, a private utility locate company was contracted to conduct a limited geophysical survey of the proposed boring areas. A ground penetrating radar instrument and electro-magnetic instrument were used by the private utility locate company to clear the proposed boring locations of any buried anomalies and utility lines that would impede the proposed borings.

The soil borings were advanced using hydraulic direct-push dual tube techniques with a track-mounted Geoprobe® equipped with 4-foot steel samplers lined with dedicated, disposable acetate liners.

A photoionization detector (PID) was used in the field to screen soils for the presence of organic vapors. Headspace analysis was conducted at 2-foot intervals at each soil boring location. An elevated reading on a PID could indicate the presence of volatile organic compounds (VOCs), such as petroleum and/or chlorinated compounds.

All the soil cores collected were characterized, with information on the lithology and any pertinent observations (e.g., staining or odors) recorded in soil boring logs at each location. Soil boring logs are provided as **Appendix B**.

Two intervals were selected from each boring for laboratory analysis. One surface soil sample was collected for laboratory analysis within the first 0 to 2 feet of each boring. A second sample interval was selected for laboratory analysis based on a consideration of field observations, field screening using the PID, or likely migration pathways of contaminants of concern (COCs).

3.2.1 AOC 2: NIPSCO Corporation Manufactured Gas Plant Site

On July 25, 2017, Metric advanced one soil boring outside the security fence, and on August 3, 2017, Metric advanced six soil borings inside the security fence at AOC 2. Each boring was advanced to the top of the confining (clay) layer located approximately 20 feet bgs, with the exception of 02-SB-07, because it is located south of the NIPSCO portion of AOC 2, and 02-SB-06, due to sand heaving at approximately 16 feet bgs. The top of the saturated zone was encountered between 6 and 13 feet bgs in the borings. Boring 02-SB-06 was offset 15 feet west-northwest after hitting probe refusal at 6 feet bgs because the original location was on top of large aggregate placed at the site entrance. Two additional attempts were made to advance boring 02-SB-06 past the sand heaving before terminating the boring.

USEPA SW-846 Method 5035 was used to collect soil samples for VOC analysis. An approximately 5-gram soil sample was measured in the field using a Terra Core sampler from laboratory-supplied Method 5035 field-ready soil sampling kits and was placed into each of the associated sample kit vials. Soil samples collected for laboratory analysis of polycyclic aromatic hydrocarbons (PAHs) and RCRA Metals were placed into unused, laboratory-supplied 4-ounce jars. The soil samples were staged on ice until they were submitted to the Pace Analytical laboratory in Indianapolis, Indiana, under proper chain-of-custody documentation. The boring locations are depicted in **Appendix A, Exhibit 2**. The boring locations and parameters analyzed are summarized in **Table 3.2-1**.



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Table 3.2-1: AOC 2 - Soil Parameter Analysis Summary

| Boring Designation | Shallow Soil Sample Depth (ft bgs) | Deep Soil Sample Depth (ft bgs) | Termination Depth (ft bgs) | Location | Concern | Maximum PID Reading (ppm) | Analyses (USEPA SW-846) | Groundwater Sample Collected (Y/N) | Deviations from Work Plan |
|--------------------|------------------------------------|---------------------------------|----------------------------|--|---------------------------------------|---------------------------|---|------------------------------------|---|
| 02-SB-01 | 0-2 | 18-20 | 20 | Along the northeast border of the NIPSCO site | NIPSCO former manufacturing gas plant | 93.6 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |
| 02-SB-02 | 0-2 | 16-18 | 22 | Toward the northeast border of the NIPSCO site | NIPSCO former manufacturing gas plant | 147 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |
| 02-SB-03 | 0-2 | 10-12 | 20 | Toward the center of the NIPSCO site | NIPSCO former manufacturing gas plant | 4.1 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |
| 02-SB-04 | 0-2 | 10-12 | 20 | Toward the center of the NIPSCO site | NIPSCO former manufacturing gas plant | 6.2 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | Boring moved 10 feet east to avoid underground anomaly. |
| 02-SB-05 | 0-2 | 6-8 | 22 | Toward the southwest border of the NIPSCO site | NIPSCO former manufacturing gas plant | 66.3 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |



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| Boring Designation | Shallow Soil Sample Depth (ft bgs) | Deep Soil Sample Depth (ft bgs) | Termination Depth (ft bgs) | Location | Concern | Maximum PID Reading (ppm) | Analyses (USEPA SW-846) | Groundwater Sample Collected (Y/N) | Deviations from Work Plan |
|--------------------|------------------------------------|---------------------------------|----------------------------|---|---------------------------------------|---------------------------|---|------------------------------------|---|
| 02-SB-06 | 0-2 | 12-14 | 16 | Along the southwest border of the NIPSCO site | NIPSCO former manufacturing gas plant | 9.9 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | Boring moved 15 feet west to avoid underground anomaly. Due to sand heaving at approximately 16 feet bgs, could not advance boring to clay layer. |
| 02-SB-07 | 0-1 | 6-8 | 12 | Center of 4926 Hohman Avenue | NIPSCO former manufacturing gas plant | 0.9 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |

3.2.2 AOC 3: Dombrowski & Holmes

Soil Borings

On July 25, 2017, Metric advanced nine soil borings at AOC 3. The borings were advanced only until groundwater was reached or probe refusal occurred. Groundwater was first encountered between 7 and 12 feet bgs in the borings advanced to groundwater. Soil borings 03-SB-06 and 03-SB-07 could not be advanced to groundwater because probe refusal prevented advancement beyond the depths of approximately 12 feet and 4 feet bgs, respectively. Each boring that hit probe refusal was offset 1 to 5 feet from the original location and reattempted. Up to two additional offset attempts were conducted at each boring location where probe refusal occurred in an attempt to meet one of the two original criteria for total depth. However, probe refusal reoccurred at similar depths in all of the offset borings conducted.

USEPA SW-846 Method 5035 was used to collect soil samples for VOC analysis. An approximately 5-gram soil sample was measured in the field using a Terra Core sampler from laboratory-supplied Method 5035 field-ready soil sampling kits and was placed into each of the associated sample kit vials. Soil samples collected for laboratory analysis of PAHs and RCRA Metals were placed into unused, laboratory-supplied 4-ounce jars. The soil samples were staged on ice until they were submitted to the Pace Analytical laboratory in Indianapolis under proper chain-of-custody documentation. The boring locations are depicted in **Appendix A, Exhibit 2**. The boring locations and parameters analyzed are summarized in **Table 3.2-2**.

Temporary Groundwater Monitoring Wells

Temporary piezometers were constructed at boring locations 03-SB-02, 03-SB-05, and 03-SB-08 for groundwater sampling. The temporary piezometers were constructed using 5 feet of ¾-inch-diameter slotted polyvinyl chloride (PVC) pipe (screen), a drive point tip, and PVC risers. To ensure that an adequate area within the saturated zone was exposed for the well screens, the borings were advanced at least 4 feet past the top of the saturation zone at these locations. The 5-foot-long screen was positioned within the water-bearing zone so that it was approximately 2 feet above and 3 feet below the water table. The PVC screen and PVC risers were dedicated to each boring and disposed of after each use.

Prior to groundwater sample extraction, the temporary wells were purged using a low-flow peristaltic pump until groundwater was clear and no longer turbid. Groundwater samples collected for laboratory analyses of PAHs and RCRA Metals were extracted using a low-flow peristaltic pump. Groundwater samples selected for VOC analysis were extracted from each well using dedicated polyethylene or fluorinated ethylene propylene disposable bailers. Metric also collected one filtered groundwater sample from each temporary well for laboratory analysis of dissolved RCRA Metals. One filtered groundwater sample was collected from each well to remove sediments from the sample that could result in a bias high concentration of RCRA Metals in the groundwater. The groundwater extracted for this purpose was filtered through 0.45-micron Quick Filters. All groundwater samples collected were placed in clean, laboratory-supplied jars, as appropriate for the parameters analyzed.

Borings 03-SB-02, 03-SB-05, and 03-SB-08 were selected for groundwater collection and laboratory analysis for COCs. Soil borings 03-SB-06 and 03-SB-07 could not be advanced to groundwater because probe refusal prevented advancement beyond the depths of approximately 12 feet and 4 feet bgs, respectively; therefore, groundwater samples were not collected at these locations.



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The groundwater samples were staged on ice until they were submitted to Pace Analytical laboratory in Indianapolis under proper chain-of-custody documentation. Boring locations are depicted in **Appendix A, Exhibit 2**. The boring locations and parameters analyzed during this project are summarized in **Table 3.2-2**.



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Table 3.2-2: AOC 3 - Soil Parameter Analysis Summary

| Boring Designation | Shallow Soil Sample Depth (ft bgs) | Deep Soil Sample Depth (ft bgs) | Termination Depth (ft bgs) | Location | Concern | Maximum PID Reading (ppm) | Analyses (USEPA SW-846) | Groundwater Sample Collected (Y/N) | Deviations from Work Plan |
|--------------------|------------------------------------|---------------------------------|----------------------------|--|---|---------------------------|---|------------------------------------|--|
| 03-SB-01 | 0-1 | 6-8 | 12 | West adjacent to 4714 Sheffield Avenue building | Former Dombrowski & Holmes recycling facility and former industrial sites | 1.8 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | Boring moved approximately 75 feet west due to obstruction by trailers. |
| 03-SB-02 | 0-1 | 6-8 | 12 | Southwest adjacent to 4714 Sheffield Avenue building | Former Dombrowski & Holmes recycling facility and former industrial sites | 0.9 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | Y | Boring moved approximately 75 feet west due to obstruction by trailers. |
| 03-SB-03 | 0-1 | 6-8 | 12 | Center of the western border of AOC 3 | Former Dombrowski & Holmes recycling facility and former industrial sites | 0.5 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | Boring moved approximately 50 feet south due to obstruction by trailers. |
| 03-SB-04 | 0-1 | 4-6 | 12 | Center of AOC 3 | Former Dombrowski & Holmes recycling facility and former industrial sites | 0.0 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |
| 03-SB-05 | 0-1 | 8-10 | 16 | Toward entrance to trailer staging area | Former Dombrowski & Holmes recycling facility and former industrial sites | 2.6 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | Y | N/A |



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| Boring Designation | Shallow Soil Sample Depth (ft bgs) | Deep Soil Sample Depth (ft bgs) | Termination Depth (ft bgs) | Location | Concern | Maximum PID Reading (ppm) | Analyses (USEPA SW-846) | Groundwater Sample Collected (Y/N) | Deviations from Work Plan |
|--------------------|------------------------------------|---------------------------------|----------------------------|--|---|---------------------------|---|------------------------------------|--|
| 03-SB-06 | 0-1 | 6-8 | 12 | Toward southwest corner of AOC 3 | Former Dombrowski & Holmes recycling facility and former industrial sites | 0.5 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | Boring moved approximately 25 feet east due to obstruction by trailers. Probe refusal occurred at the alternate location at approximately 12 feet bgs. |
| 03-SB-07 | 0-1 | Not Collected | 4 | Toward southwest corner of Djuric Trucking facility | Former Dombrowski & Holmes recycling facility and former industrial sites | 0.0 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | Due to probe refusal at approximately 4 feet bgs, could not advance boring to groundwater. |
| 03-SB-08 | 0-1 | 10-12 | 16 | Toward the center of the southern border of the Djuric Trucking facility | Former Dombrowski & Holmes recycling facility and former industrial sites | 2.1 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | Y | N/A |
| 03-SB-09 | 0-1 | 6-8 | 12 | Toward the entrance to the 4714 Sheffield Avenue building | Former Dombrowski & Holmes recycling facility and former industrial sites | 0.3 | VOCs (8260) PAHs (8270) RCRA Metals (6010/7471) | N | N/A |

3.2.3 AOC 4: Marble Street Industrial Area

Soil Borings

On July 24 and 25, 2017, Metric advanced five soil borings at AOC 4. The borings were advanced only until groundwater was reached or probe refusal occurred. Groundwater was encountered between 6 and 8 feet bgs. Soil boring 04-SB-02 could not be advanced to groundwater because probe refusal occurred at depths of approximately 2 feet bgs. Boring 04-SB-02 was offset 1 to 5 feet from the original location and reattempted two times to try to meet one of the two original criteria for total depth. However, probe refusal reoccurred at a similar depth in the offset borings conducted.

USEPA SW-846 Method 5035 was used to collect soil samples for VOC analysis. An approximately 5-gram soil sample was measured in the field using a Terra Core sampler from laboratory-supplied Method 5035 field-ready soil sampling kits and was placed into each of the associated sample kit vials. Soil samples collected for laboratory analysis of PAHs and RCRA Metals were placed into unused, laboratory-supplied 4-ounce jars. The soil samples were staged on ice until they were submitted to the Pace Analytical laboratory in Indianapolis under proper chain-of-custody documentation. The boring locations are depicted in **Appendix A, Exhibit 2**. The boring locations and parameters analyzed are summarized in **Table 3.2-3**.

Temporary Groundwater Monitoring Wells

Temporary piezometers were constructed at boring locations 04-SB-01, 04-SB-03, and 04-SB-05 for groundwater sampling. The temporary piezometers were constructed using 5 feet of ¾-inch-diameter slotted PVC pipe (screen), a drive point tip, and PVC risers. To ensure that an adequate area within the saturated zone was exposed for the well screens, the borings were advanced at least 4 feet past the top of the saturation zone at these locations. The 5-foot-long screen was positioned within the water-bearing zone to be approximately 2 feet above and 3 feet below the water table. The PVC screen and PVC risers were dedicated to each boring and disposed of after each use.

Prior to groundwater sample extraction, the temporary wells were purged using a low-flow peristaltic pump until groundwater was clear and no longer turbid. Groundwater samples collected for laboratory analyses of PAHs, polychlorinated biphenyls (PCBs), and RCRA Metals were extracted using a low-flow peristaltic pump. Groundwater samples selected for VOCs analysis were extracted from each well using dedicated polyethylene or fluorinated ethylene propylene disposable bailers. Metric also collected one filtered groundwater sample from each temporary well for laboratory analysis of dissolved RCRA Metals. One filtered groundwater sample was collected from each well to remove sediments from the sample that could result in a bias high concentration of RCRA Metals in the groundwater. The groundwater extracted for this purpose was filtered through 0.45-micron Quick Filters. All groundwater samples collected were placed in clean, laboratory-supplied jars, as appropriate for the parameters analyzed.

Borings 04-SB-01, 04-SB-03, and 04-SB-05 were selected for groundwater collection and laboratory analysis for COCs. Soil boring 04-SB-02 could not be advanced to groundwater because probe refusal occurred at depths of approximately 2 feet bgs; therefore, a groundwater sample was not collected at this location.

The groundwater samples were staged on ice until they were submitted to Pace Analytical laboratory in Indianapolis under proper chain-of-custody documentation. Boring locations are depicted in **Appendix A, Exhibit 2**. The boring locations and parameters analyzed during this project are summarized in **Table 3.2-3**.



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Table 3.2-3: AOC 4 - Soil Parameter Analysis Summary

| Boring Designation | Shallow Soil Sample Depth (ft bgs) | Deep Soil Sample Depth (ft bgs) | Termination Depth (ft bgs) | Location | Concern | Maximum PID Reading (ppm) | Analyses (USEPA SW-846) | Groundwater Sample Collected (Y/N) | Deviations from Work Plan |
|--------------------|------------------------------------|---------------------------------|----------------------------|---|------------------------------|---------------------------|---|------------------------------------|--|
| 04-SB-01 | 0-1 | 6-8 | 16 | Towards the northern portion of the trailer staging area | Former industrial facilities | 0.7 | VOCs (8260) PAHs (8270) PCBs (2540G) RCRA Metals (6010/7471) | Y | Boring moved approximately 25 feet south due to obstruction by trailers |
| 04-SB-02 | 0-1 | Not Collected | 2 | Towards the western portion of Mickey's Auto & Truck facility | Former industrial facilities | 0.3 | VOCs (8260) PAHs (8270) PCBs (2540G) RCRA Metals (6010/7471) | N | Boring moved approximately 10 feet north due to obstruction by vehicle crushing operations. Due to probe refusal at approximately 2 feet bgs, could not advance boring to groundwater. |
| 04-SB-03 | 0-1 | 4-6 | 12 | Side yard of 228 Marble Street | Former industrial facilities | 0.7 | VOCs (8260) PAHs (8270) PCBs (2540G) RCRA Metals (6010/7471) | Y | N/A |
| 04-SB-04 | 0-1 | 6-8 | 12 | Front yard of 240 Marble Street | Former industrial facilities | 0.6 | VOCs (8260) PAHs (8270) PCBs (2540G) RCRA Metals (6010/7471) | N | N/A |



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| Boring Designation | Shallow Soil Sample Depth (ft bgs) | Deep Soil Sample Depth (ft bgs) | Termination Depth (ft bgs) | Location | Concern | Maximum PID Reading (ppm) | Analyses (USEPA SW-846) | Groundwater Sample Collected (Y/N) | Deviations from Work Plan |
|--------------------|------------------------------------|---------------------------------|----------------------------|--|------------------------------|---------------------------|---|------------------------------------|---------------------------|
| 04-SB-05 | 0-1 | 6-8 | 12 | Towards the southeastern portion of Mickey's Auto & Truck facility | Former industrial facilities | 1.2 | VOCs (8260) PAHs (8270) PCBs (2540G) RCRA Metals (6010/7471) | Y | N/A |

4 Findings

IDEM has published an RCG that outlines the use of risk-based SLs to aid in the evaluation of contaminated sites. The SLs were derived from RSLs published by USEPA. The SLs for soil are published by contaminant under the following risk-based scenarios:

- Soil MTG
- Residential Direct Contact
- Commercial/Industrial Direct Contact
- Excavation Direct Contact

The risk-based scenarios listed above are presented from the most restrictive to the least restrictive. For example, the *MTG SL* is typically the one with the lowest threshold for exceedance of an SL. Cleanup or exposure at this level is most restrictive and has the lowest acceptable level of contaminant concentration among the risk-based scenarios. The *Excavation Direct Contact SL* is the least restrictive and has higher levels of acceptable contaminant concentrations. If a contaminant exceeds the *Excavation Direct Contact SL*, it would also exceed all the other SLs for a particular contaminant.

Residential and Commercial/Industrial Direct Contact SLs provide a screening threshold to assess the potential for long-term direct contact exposure concerns of impacted soils. *Residential Direct Contact SLs* apply to school facilities, daycare facilities, and other properties that could potentially include long-term exposures of children. The *MTG SL* offers a comparative threshold to evaluate the potential risk for the migration of soil contaminants to groundwater resulting in contaminant concentrations in groundwater exceeding tap drinking water criteria. The *MTG* and *Residential Direct Contact SLs* are used to determine whether contamination is present per the IDEM Uncontaminated Soil Policy (Waste-0064-NPD).

Based on the risk-based scenarios described above, comparison of the analytical results of the investigation is most applicable to the *Commercial/Industrial Direct Contact* and *Excavation Direct Contact SLs* based on the proposed future use of the Corridor.

IDEM has also published SLs for groundwater. Laboratory analytical results of groundwater samples collected were compared to tap groundwater SLs, residential VI SLs, and commercial/industrial VI SLs.

Site data collected from field activities and laboratory analysis are summarized below.

4.1 AOC 2: NIPSCO Corporation Manufactured Gas Plant Site

During field activities, visual and olfactory indicators of petroleum impacted soils (e.g., petroleum staining and odors) were noted in all seven borings conducted at the site. Specific observations are shown on field boring logs provided in **Appendix B**. The field indicators of potential petroleum impact that were noted at AOC 2 are summarized in **Table 4.1-1**.

Table 4.1-1: AOC 2 – Indicators of Petroleum Impacts Noted During Field Activities

| Boring Designation | Noted Petroleum Impacts |
|--------------------|---|
| 02-SB-01 | <ul style="list-style-type: none"> • Petro-like odors and iridescence were noted in the 8 to 12 feet bgs interval • Dark amber staining was noted in the 12 to 16 feet bgs interval • Three (3) inch seam of petro-like sheen and iridescence was noted at 13.5 feet bgs |
| 02-SB-02 | <ul style="list-style-type: none"> • Petro-like odor was noted in the 3 to 20 feet bgs interval • Very strong petro-like odor and sheen/ yellow residue were noted at the 6 to 7 feet bgs interval • Amber color staining was noted at the 16 to 18 feet bgs interval • Two (2) inch seam of petro-like staining and iridescence was noted at 16.5 feet bgs |
| 02-SB-03 | <ul style="list-style-type: none"> • Six (6) inch seam of petro-like odor/ staining was noted at 7 feet bgs |
| 02-SB-04 | <ul style="list-style-type: none"> • Mild petro-like odor was noted in the 2 to 20 feet bgs interval |
| 02-SB-05 | <ul style="list-style-type: none"> • Petro-like odor was noted in the 3.5 to 8 feet bgs interval • Petroleum sheen was noted at 7 feet bgs |
| 02-SB-06 | <ul style="list-style-type: none"> • One (1) inch mottling seam was noted at 5 feet bgs • Petro-like odor was noted in the 6.5 to 16 feet bgs interval |
| 02-SB-07 | <ul style="list-style-type: none"> • Two (2) inch red oxidation seam was noted at 3 feet bgs |

PID measurements recorded during field screening activities ranged from less than 1 part per million (ppm) up to 93.6 ppm. Soil samples from each boring were selected for laboratory analysis based on likely migration pathways for petroleum COCs and PID field screening and field observations. Specific observations are shown on field boring logs provided in **Appendix B**.

All 14 samples that were collected at AOC 2 were sent for laboratory analysis of VOCs, PAHs, and RCRA Metals.

Exceedances of the following standards were identified in samples collected from AOC 2:

- RCRA Metals
 - Of the RCRA Metals, only arsenic and/or mercury concentrations exceeded at least one of the SLs in 7 of the 14 soil samples collected.
 - Arsenic concentrations exceeded the *MTG SL* in 6 of the 14 soil samples [02-SB-01 (0 to 2 feet), 02-SB-01 (18 to 20 feet), 03-SB-03 (0 to 2 feet), 02-SB-04 (10 to 12 feet), 02-SB-05 (0 to 2 feet), and 02-SB-06 (0 to 2 feet)]. Further exceedance of the *Residential Direct Contact SL* was reported at the shallow soil samples from 02-SB-05 and 02-SB-06.
 - Mercury concentrations exceeded the *Excavation Direct Contact SL* in 5 of the 14 soil samples [02-SB-01 (0 to 2 feet), 02-SB-03 (0 to 2 feet), 02-SB-04 (0 to 2 feet), 02-SB-05 (0 to 2 feet), and 02-SB-06 (0 to 2 feet)]. Mercury was not detected above laboratory method detection limits in the remaining soil samples.

- PAHs
 - PAH concentrations exceeded *MTG SLs* in all but 3 of the 14 soil samples collected [02-SB-02 (0 to 2 feet), 02-SB-04 (10 to 12 feet), and 02-SB-06 (12 to 14 feet)]; however, PAH concentrations did not exceed the *Excavation Direct Contact SLs* in any of the soil samples collected.
 - PAH concentrations exceeded *Residential Direct Contact SLs* in 8 of the 14 soil samples collected, with further exceedance of the *Commercial/Industrial Direct Contact SL* at 02-SB-01 (0 to 2 feet) and 02-SB-02 (16 to 18 feet).
 - The sample collected at 02-SB-02 (16 to 18 feet) reported the highest concentrations and number of PAH parameters in exceedance of *SLs*.
- VOCs
 - VOC concentrations above laboratory method detection limits were reported in 5 of the 14 soil samples collected. VOC concentrations in samples 02-SB-03 (0 to 2 feet), 02-SB-03 (10 to 12 feet), and 02-SB-05 (6 to 8 feet) were all below *SLs*.
 - VOC concentrations, including benzene, ethylbenzene, naphthalene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene, exceeded the *MTG SLs* in samples 02-SB-01 (18 to 20 feet) and 02-SB-02 (16 to 18 feet).
 - The *Residential Direct Contact SLs* were exceeded for ethylbenzene and naphthalene in sample 02-SB-01 (18 to 20 feet) and benzene, ethylbenzene, and naphthalene in sample 02-SB-02 (16 to 18 feet).
 - The concentration of naphthalene in sample 02-SB-02 (16 to 18 feet) also exceeded the *Commercial/Industrial Direct Contact SL*.

The soil analytical results are summarized in **Appendix C, Table 4.1-2**. The laboratory analytical report is included as **Appendix E**.

4.2 AOC 3: Dombrowski & Holmes

4.2.1 Soil Analytical Results

No obvious indicators of a potential release were encountered during field PID screening or field observations. PID measurements ranged from <1.0 to 2.6 ppm. Soil sample intervals from each boring were selected for laboratory analysis based on likely migration pathways for petroleum COCs. Specific observations are shown on field boring logs provided in **Appendix B**.

All 17 samples that were collected at AOC 3 were sent for laboratory analysis of VOCs, PAHs, and RCRA Metals. Exceedances of the following standards were identified in soil samples collected from AOC 3:

- RCRA Metals
 - Of the RCRA Metals, only arsenic and/or lead were detected above at least one of the *SLs* in 10 of the 17 soil samples collected.
 - Concentrations of arsenic and/or lead exceeded *Residential Direct Contact SLs* in 8 of the 17 soil samples at 03-SB-02 (0 to 1 foot), 03-SB-03 (6 to 8 feet), 03-SB-04 (0 to 1 foot), 03-SB-05 (0 to 1 foot), 03-SB-05 (8 to 10 feet), 03-SB-06 (0 to 1 foot), 03-SB-06 (6 to 8 feet), and 03-SB-08 (0 to 1 foot).

- Concentrations of arsenic in shallow soil samples 03-SB-04, 03-SB-06, and 03-SB-08 exceeded the *Commercial/Industrial Direct Contact SL*.
- Concentrations of lead in samples 03-SB-04 (0 to 1 foot) and 03-SB-06 (6 to 8 feet) exceeded the *Excavation Direct Contact SL*.
- PAHs
 - PAH concentrations were detected above laboratory method detection limits in 14 of the 17 soil samples. However, PAH concentrations in 6 soil samples [03-SB-01 (0 to 1 foot), 03-SB-01 (6 to 8 feet), 03-SB-03 (6 to 8 feet), 03-SB-07 (0 to 1 foot), 03-SB-08 (10 to 12 feet), and 03-SB-09 (0 to 1 foot)] did not exceed any of the SLs.
 - Naphthalene, benzo(a)pyrene, and/or benzo(a)anthracene concentrations were detected above *MTG SLs* in 8 of the 17 soil samples; further exceedance of the *Residential Direct Contact SLs* was reported in soil samples 03-SB-02 (0 to 1 foot), 03-SB-03 (0 to 1 foot), 03-SB-05 (8 to 10 feet), and 03-SB-06 (0 to 1 foot).
 - PAHs concentrations did not exceed either the *Commercial/Industrial or Excavation Direct Contact SLs* in any of the soil samples collected.
- VOCs
 - VOC concentrations above the laboratory method detection limits were reported in 8 of the 17 soil samples; however, the concentrations did not exceed any SLs in any of the soil samples collected.

The soil analytical results are summarized in **Appendix C, Table 4.2-1**. The laboratory analytical report is included as **Appendix E**.

4.2.2 Groundwater Analytical Results

Groundwater was encountered between approximately 6 feet and 13 feet bgs.

No COCs were present in the groundwater samples collected at concentrations exceeding *Groundwater Residential Tap SLs*. The groundwater analytical results are in **Appendix C, Table 4.2-2**. The laboratory analytical report is included as **Appendix E**.

4.3 AOC 4: Marble Street Industrial Area

4.3.1 Soil Analytical Results

No obvious indicators of a potential release were encountered during field PID screening or field observations. All PID measurements were less than 1.2 ppm. Soil sample intervals from each boring were selected for laboratory analysis based on likely migration pathways for petroleum COCs. Specific observations are shown on field boring logs provided in **Appendix B**.

All nine samples that were collected at AOC 3 were sent for laboratory analysis of VOCs, PAHs, PCBs, and RCRA Metals. Exceedances of the following standards were identified in soil samples collected from AOC 4:

- RCRA Metals
 - Of the RCRA Metals, only arsenic and lead were detected above SLs in five of the nine soil samples collected.

- Arsenic concentrations exceeded only the *MTG SL* in four soil samples [04-SB-01 (6 to 8 feet), 04-SB-03 (0 to 1 foot), 04-SB-04 (0 to 1 foot), and 04-SB-05 (0 to 1 foot)].
- Arsenic and lead concentrations exceeded the *Residential Direct Contact SLs* in soil sample 04-SB-01 (0 to 1 foot).
- RCRA metals concentrations did not exceed *Commercial/Industrial or Excavation Direct Contact SLs* in any of the soil samples collected.
- PCBs
 - The concentration of PCB-1254 (Aroclor 1254) in sample 04-SB-02 (6 to 8 feet) exceeded the *MTG SL*.
 - PCB concentrations did not exceed *SLs* in any of the remaining eight samples collected.
- PAHs
 - PAH concentrations above the laboratory method detection limits were reported in all but two soil samples; however, only the *MTG SL* was exceeded in soil samples 04-SB-01 (0 to 1 foot), 04-SB-02 (0 to 1 foot), 04-SB-03 (0 to 1 foot), 04-SB-05 (0 to 1 foot), and 04-SB-05 (6 to 8 feet).
 - PAH concentrations did not exceed *Residential, Commercial/Industrial, or Excavation Direct Contact SLs* in any of the soil samples collected.
- VOCs
 - VOC concentrations above the laboratory method detection limits were reported in three soil samples [04-SB-01 (6 to 8 feet), 04-SB-02 (0 to 1 foot), and 04-SB-05 (0 to 1 foot)]; however, concentrations did not exceed any of the *SLs* in soil samples collected.

The soil analytical results are summarized in **Appendix C, Table 4.3-1**. The laboratory analytical report is included as **Appendix E**.

4.3.2 Groundwater Analytical Results

Groundwater was encountered between approximately 6 feet and 8 feet bgs.

Exceedances of the following standards were identified in groundwater samples collected from AOC 4:

- RCRA Metals
 - Arsenic concentrations exceeded the *Groundwater Residential Tap SL* in both the filtered and unfiltered groundwater samples taken from boring 04-SB-03. The arsenic concentrations in soil sample 04-SB-03 (0 to 1 foot) exceed *MTG SL*; therefore, the arsenic in the soil is suspected to be the source of groundwater quality impacts at this location.
 - Lead concentrations exceeded the *Groundwater Residential Tap SL* in the filtered and unfiltered groundwater samples taken from boring 04-SB-01. The lead concentration in soil sample 04-SB-01 (0 to 1 foot) exceeded *MTG SL*; therefore, the lead in the soil is suspected to be a source of groundwater quality impacts at these locations.
 - The lead concentration exceeded the *Groundwater Residential Tap SL* in the unfiltered groundwater sample taken from boring 04-SB-05, but was not detected above the laboratory method detection limit in the filtered groundwater sample. Therefore, the lead



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concentrations in the unfiltered groundwater sample at 04-SB-05 appear to be a result of sediments in the groundwater and are not suspected to represent elevated concentrations of dissolved lead.

- PCBs
 - PCB concentrations were not detected above laboratory method detection limits in any of the groundwater samples collected.
- PAHs
 - PAH concentrations were not detected above laboratory method detection limits in any of the groundwater samples collected.
- VOCs
 - VOC concentrations were not detected above laboratory method detection limits in any of the groundwater samples collected.

The groundwater analytical results are in **Appendix C, Table 4.3-2**. The laboratory analytical report is included as **Appendix E**.



5 Conclusions and Recommendations

Metric conducted a Phase II ESA for the Project in Lake County, Indiana, and portions of Cook County, Illinois. The Project involves the installation of a commuter rail line along an approximate 9-mile extension of the existing SSL between Dyer and Hammond.

Metric conducted a subsurface investigation at three AOCs along the Corridor. The subsurface investigation consisted of installation of soil borings and the construction of temporary groundwater monitoring wells to collect soil and groundwater samples for laboratory analysis.

The number and location of the soil borings and temporary monitoring wells, quantity and interval of samples collected, and parameters selected for laboratory analyses were based on the nature of the RECs and site conditions identified in the field for each AOC. The three AOCs (and associated parcel descriptions) included in this Phase II ESA are summarized in the following table:

Table 5.1-1: AOC – Property and Location Details

| AOC | Description/ Location | Tax Parcel | Owner | Address |
|--------------------------|--|--------------------------|---|------------------------|
| 2 | NIPSCO Corp MGP/Best Auto Repair Wilcox and Hohman | 45-02-36-127-003.000-023 | NIPSCO | 4912 HOHMAN AVE |
| | | 45-02-36-127-001.000-023 | NIPSCO | 4912 HOHMAN |
| | | 45-02-36-127-002.000-023 | NIPSCO | 4912 WILCOX AVE |
| | | 45-02-36-129-014.000-023 | City of Hammond Indiana | 5925 CALUMET AVE |
| 3 | Dombrowski & Holmes (a.k.a. Djuric Trucking, Hendrix Property, and Illiana Scrap & Core) 4805 Sheffield Ave | 45-02-25-455-001.000-023 | Djuric, Jim Z | 4804 HOHMAN AVE |
| | | 45-02-25-455-002.000-023 | Indiana Harbor Belt Railroad Co. | 4700 BL W OF SHEFFIELD |
| | | 45-02-25-377-008.000-023 | Djuric, Jim Z | 4828 HOHMAN AVE |
| | | 45-02-25-377-005.000-023 | Monon, Railroad | 4714 SHEFFIELD |
| | | 45-02-25-377-004.000-023 | North Hammond Metals Inc | 4742 SHEFFIELD AVE |
| | | 45-02-25-377-002.000-023 | Hendrix, Randal L | 4700 SHEFFIELD AVE |
| | | 45-02-25-377-003.000-023 | North Hammond Metals Inc | 4700 SHEFFIELD AVE |
| 45-02-25-377-001.000-023 | Illiana Scrap & Core, Inc. | 4700 SHEFFIELD AVE | | |
| 4 | Marble Street Industrial Area (various tenants) Area located west of Sheffield Ave, on the north and south sides of Marble Street | 45-02-25-336-021.000-023 | Ayala, Luis U Trust dtd 01/07/15 | 227 CHICAGO ST |
| | | 45-02-25-336-022.000-023 | Noojin, Deborah J as Trs of the Deborah J Noojin T | 4642 SHEFFIELD AVE |
| | | 45-02-25-336-011.000-023 | Goana, Robert & Belinda h&w | 4634 SHEFFIELD AVE |
| | | 45-02-25-336-019.000-023 | Indiana Harbor Belt Railroad Co. | 200 MARBLE ST |
| | | 45-02-25-335-001.000-023 | Broderick Benjamin LLC | 4700 SHEFFIELD AVE |
| | | 45-02-25-336-007.000-023 | Quinteros, Jose A | 248 MARBLE ST |
| | | 45-02-25-336-002.000-023 | Eddings, Michael & Elizabeth h&w | 228 MARBLE ST |
| | | 45-02-25-336-003.000-023 | Palmerin, Miguel & Maria T/E | 232 MARBLE ST |
| | | 45-02-25-336-008.000-023 | Quinteros, Jose A | 252 MARBLE ST |

Laboratory analytical results of soil samples collected were compared to the most recent IDEM RCG SLs, including *MTG SLs*, *Residential Direct Contact SLs*, and *Commercial/Industrial Direct*



Contact SLs. Laboratory analytical results of groundwater samples collected were compared to tap groundwater SLs, residential VI SLs, and commercial/industrial VI SLs. Based on the evaluation, Metric presents the following findings, conclusions, and recommendations relative to each AOC.

AOC 2: NIPSCO Corporation Manufactured Gas Plant Site

Metric advanced seven soil borings at AOC 2 and collected soil samples, which were analyzed for VOCs, PAHs, and RCRA Metals.

Based on the soil data obtained from AOC 2, Metric presents the following conclusions:

- Exceedances of the *Commercial/Industrial Direct Contact SLs* for several PAH parameters and naphthalene (a VOC) were detected in the deeper soil sample collected at 02-SB-02 (16 to 18 feet).
- An exceedance of the *Commercial/Industrial Direct Contact SL* for benzo(a)pyrene was found in the shallow soil sample collected at 02-SB-01.
- Mercury concentrations in exceedance of the *Excavation Direct Contact SL* were found in all but one (02-SB-02) of the shallow soil samples collected onsite.
- No groundwater samples were collected as part of the subsurface investigation of AOC 2 because an active groundwater extraction system is in place with regular monitoring.

Given that the AOC is currently undergoing active remediation, no further investigation is warranted at this time; however, based on the levels of mercury exceeding *Excavation Direct Contact SLs*, the Health and Safety Plan (HASP) associated with the Project needs to include special provisions beyond normal construction recommendations. Standard personal protective equipment (PPE) is not considered suitable for the planned construction activities and should be upgraded to an appropriate level in accordance with the Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1920.120. Construction workers performing excavation or working within the subsurface should be advised of the existing conditions and be trained per requirements of OSHA 29 CFR 1920.120.

AOC 3: Dombrowski & Holmes

Metric advanced nine soil borings at AOC 3 and collected both soil and groundwater samples, which were then analyzed for VOCs, PAHs, and RCRA Metals.

Based on the soil data obtained from AOC 3, Metric presents the following conclusions:

- Arsenic concentrations in exceedance of at least one of the SLs was detected in all but two (03-SB-07 and 03-SB-09) of the shallow soil samples collected. Specifically, the *Commercial/Industrial Direct Contact SL* was exceeded at shallow depths at 03-SB-04 and 03-SB-08.
- Lead in exceedance of at least one of the SLs was found in all but three (03-SB-01, 03-SB-07, and 03-SB-09) of the shallow soil samples collected. Specifically, the *Commercial/Industrial Direct Contact SL* was exceeded at 03-SB-06 and the *Excavation Direct Contact SL* was exceeded at 03-SB-04.
- The concentrations reported in the soil samples collected at 03-SB-04 (0 to 1 foot) and 03-SB-06 (6 to 8 feet) were both in exceedance of the *Commercial/Industrial Direct Contact SL* for arsenic and the *Excavation Direct Contact SL* for lead.

- PAH and VOC concentrations did not exceed *Commercial/Industrial Direct Contact* or *Excavation Direct Contact SLs* in any of the soil samples collected.
- No COCs were present in the groundwater samples collected at concentrations exceeding *Groundwater Residential Tap SLs*.

The majority of shallow soil samples had arsenic and lead concentrations that exceeded the *Commercial/Industrial Direct Contact SLs*. Lead concentrations exceeded the *Excavation Direct Contact SL* in samples collected at two locations. IDEM might require further investigation and remediation of the onsite impacts on soil and/or might require an Environmental Restrictive Covenant (ERC), based on the site's planned commercial use. Additionally, based on the levels of lead exceeding *Excavation Direct Contact SL*, the HASP associated with the Project needs to include special provisions beyond normal construction recommendations. Standard PPE is not considered suitable for the planned construction activities and should be upgraded to an appropriate level in accordance with OSHA 29 CFR 1920.120. Construction workers performing excavation or working within the subsurface should be advised of the existing conditions and be trained per requirements of OSHA 29 CFR 1920.120.

AOC 4: Marble Street Industrial Corridor

Metric advanced five soil borings at AOC 4 and collected both soil and groundwater samples, which were analyzed for VOCs, PAHs, PCBs, and RCRA Metals.

Based on the soil data obtained from AOC 4, Metric presents the following conclusions:

- No concentrations were detected in exceedance of the *Commercial/Industrial* or *Excavation Direct Contact SLs*.
- Arsenic concentrations exceeded the *Groundwater Residential Tap SL* in both the filtered and unfiltered groundwater samples taken from boring 04-SB-03. The arsenic concentrations in soil sample 04-SB-03 (0 to 1 foot) exceed the *MTG SL*; therefore, the arsenic in the soil is suspected to be the source of groundwater quality impacts at this location.
- Lead concentrations exceeded the *Groundwater Residential Tap SL* in the filtered and unfiltered groundwater samples taken from boring 04-SB-01. The lead concentration in soil sample 04-SB-01 (0 to 1 foot) exceeded the *MTG SL*; therefore, the lead in the soil is suspected to be a source of groundwater quality impacts at these locations.
- The lead concentration exceeded the *Groundwater Residential Tap SL* in the unfiltered groundwater sample taken from boring 04-SB-05, but was not detected above the laboratory method detection limit in the filtered groundwater sample. Therefore, the lead concentrations in the unfiltered groundwater sample at 04-SB-05 appear to be a result of sediments in the groundwater and are not suspected to represent elevated concentrations of dissolved lead.

No COCs exceeded *Commercial/Industrial* or *Excavation Direct Contact SLs* in the soil samples collected; however, arsenic and lead did exceed *Residential Direct Contact SLs* for soil at one location and *Groundwater Residential Tap SL* for groundwater. Therefore, IDEM could require further investigation and remediation of the onsite impacts on soil and groundwater and might also require an ERC based on the site's planned commercial use.




West Lake Corridor
Phase II ESA Report

SIGNATURES OF ENVIRONMENTAL PROFESSIONALS


*Phase II Limited Subsurface Investigation Report
West Lake Corridor Project
Lake County, Indiana, and Cook County, Illinois*

This Phase II Limited Subsurface Investigation Report was prepared by Metric Environmental, LLC (Metric) for Northern Indiana Commuter Transportation District (NICTD).




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Date



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Senior Project Manager

September 13, 2017
Date



Prepared by:
Samir Raman, E.I.T.
Environmental Engineer

September 13, 2017
Date



West Lake Corridor
Phase II ESA Report

Appendix A. Exhibits

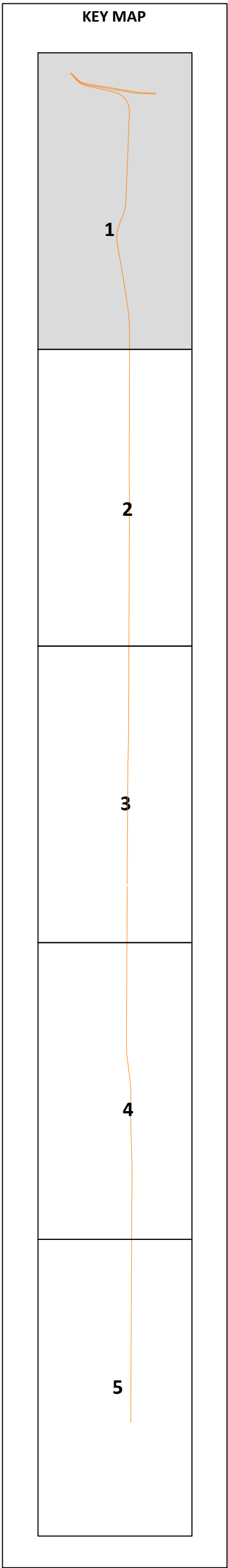


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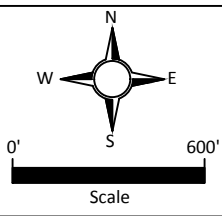


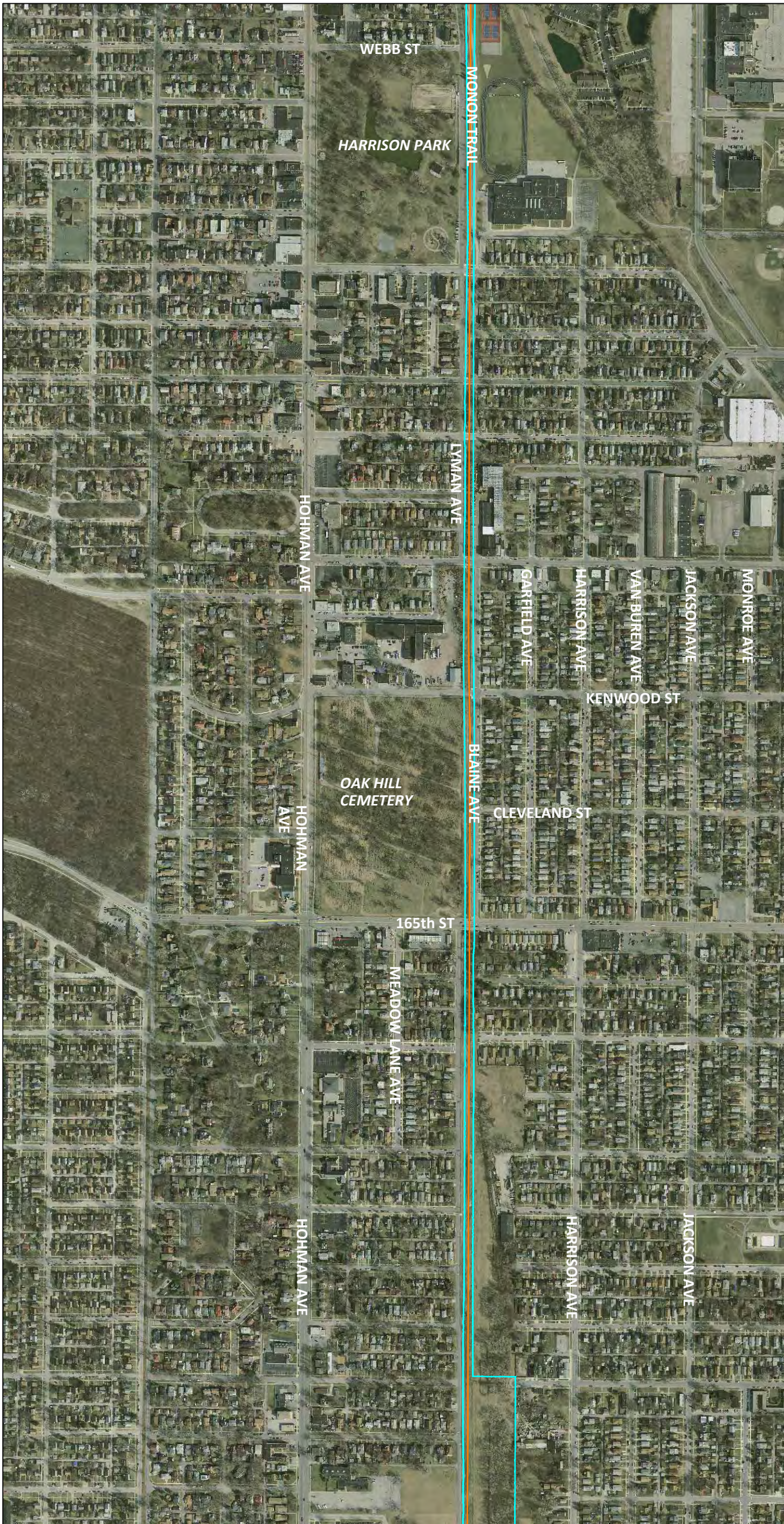
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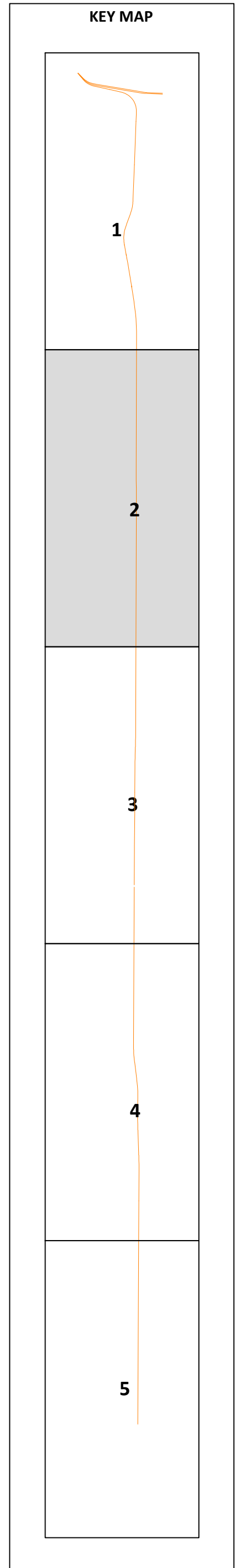
West Lake Corridor Project
 Proposed Project Limits
 Hammond, Indiana

- Proposed Construction Limits
- Proposed Alignment



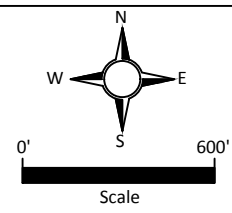


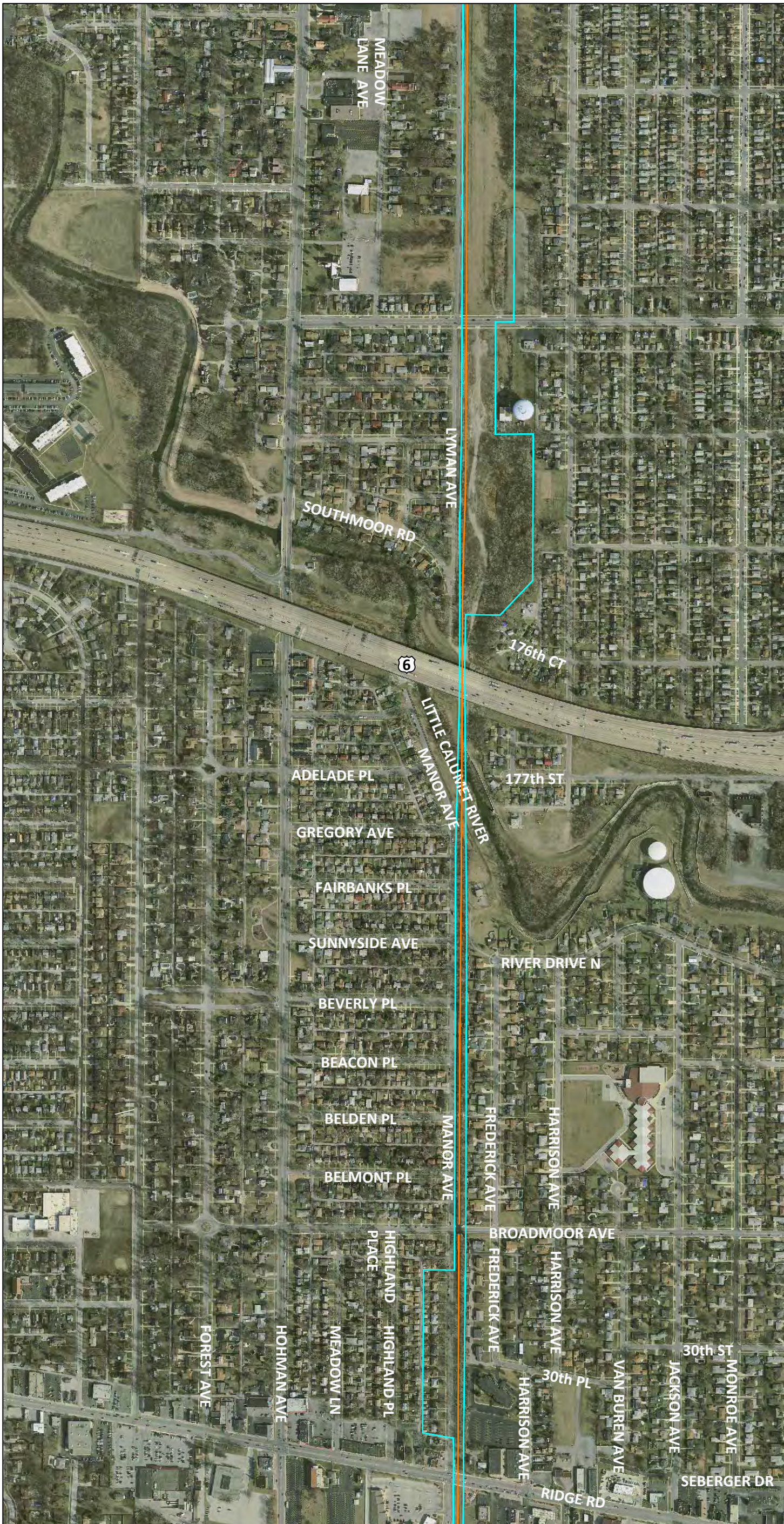
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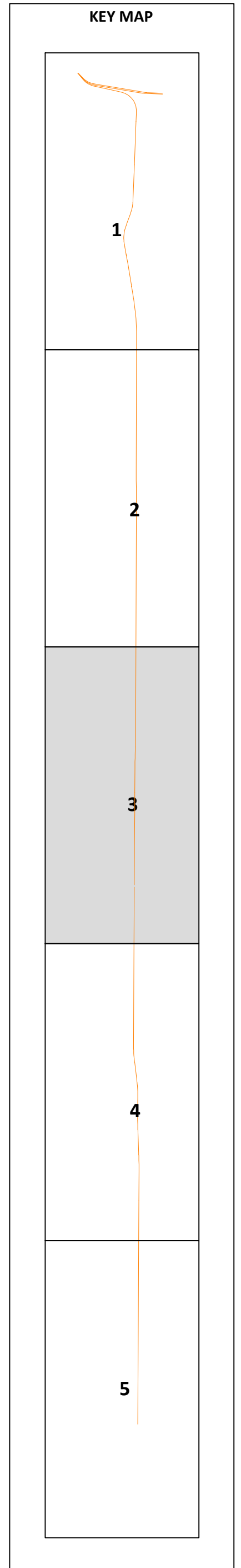
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 Hammond, Indiana

- Proposed Construction Limits
- Proposed Alignment



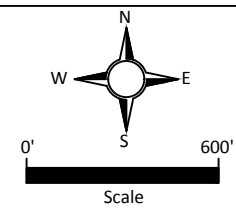


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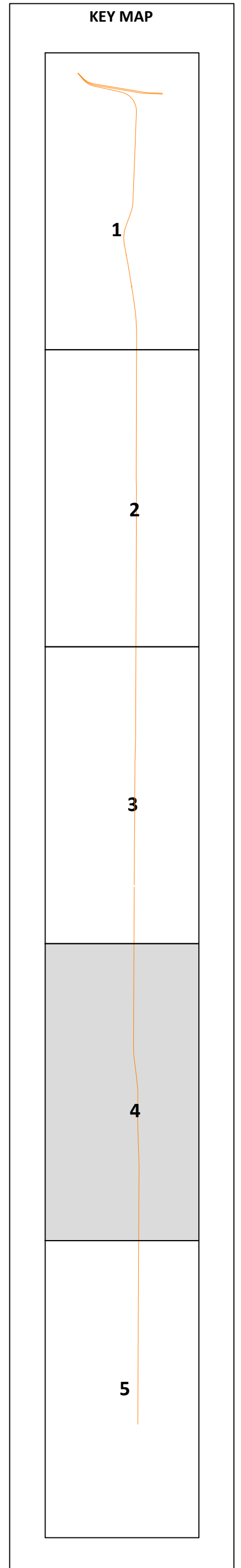
West Lake Corridor Project
 Proposed Project Limits
 Hammond, Indiana

- Proposed Construction Limits
- Proposed Alignment



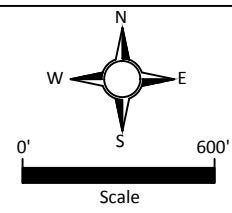


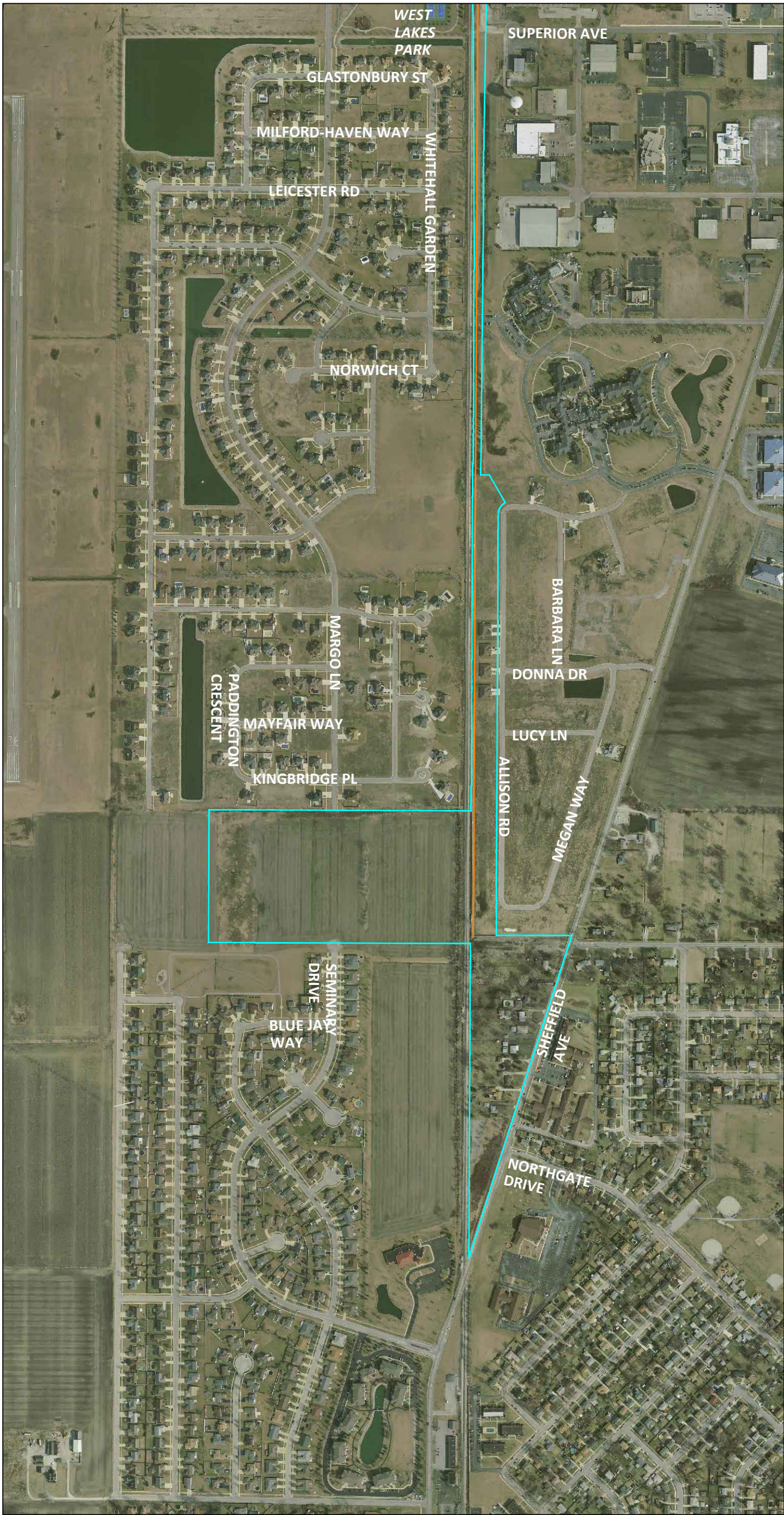
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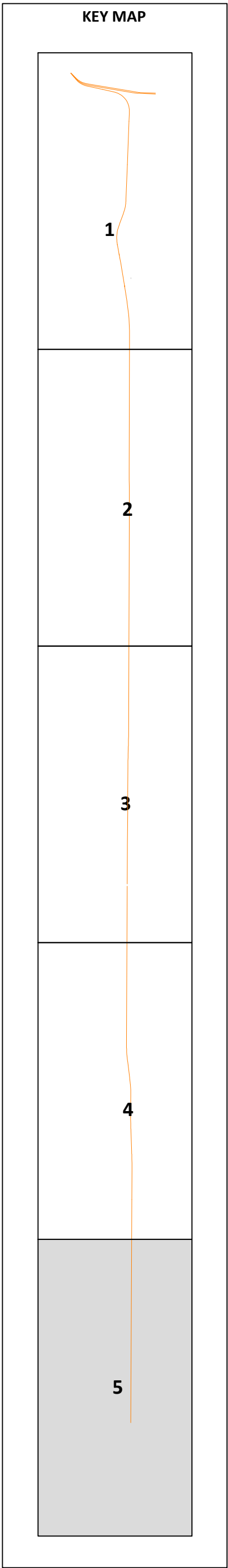
West Lake Corridor Project
 Proposed Project Limits
 Hammond, Indiana

- Proposed Construction Limits
- Proposed Alignment



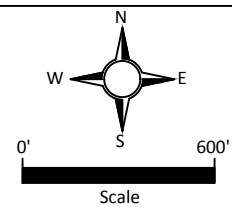


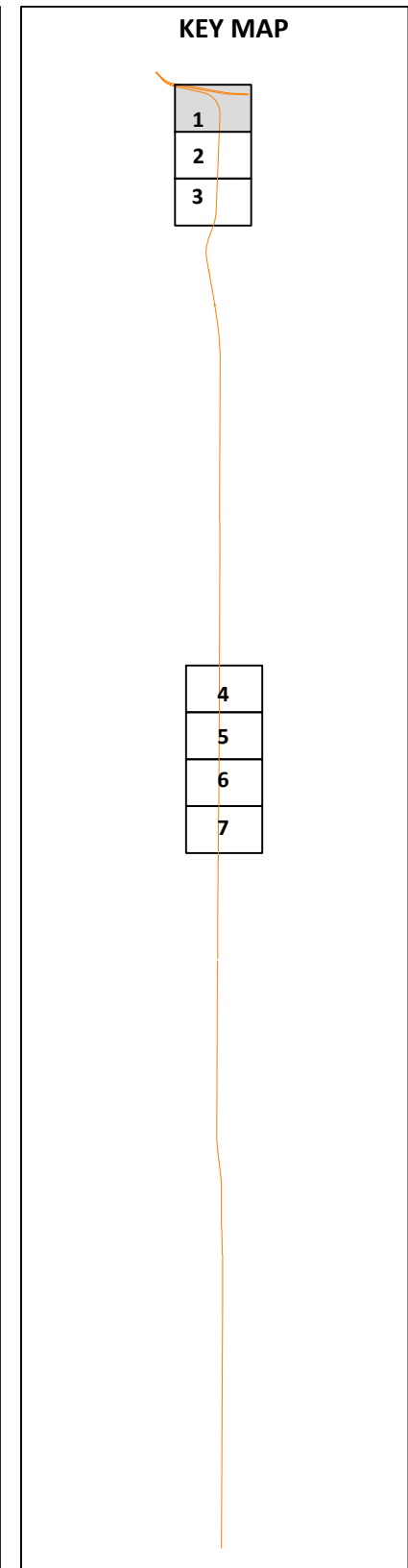
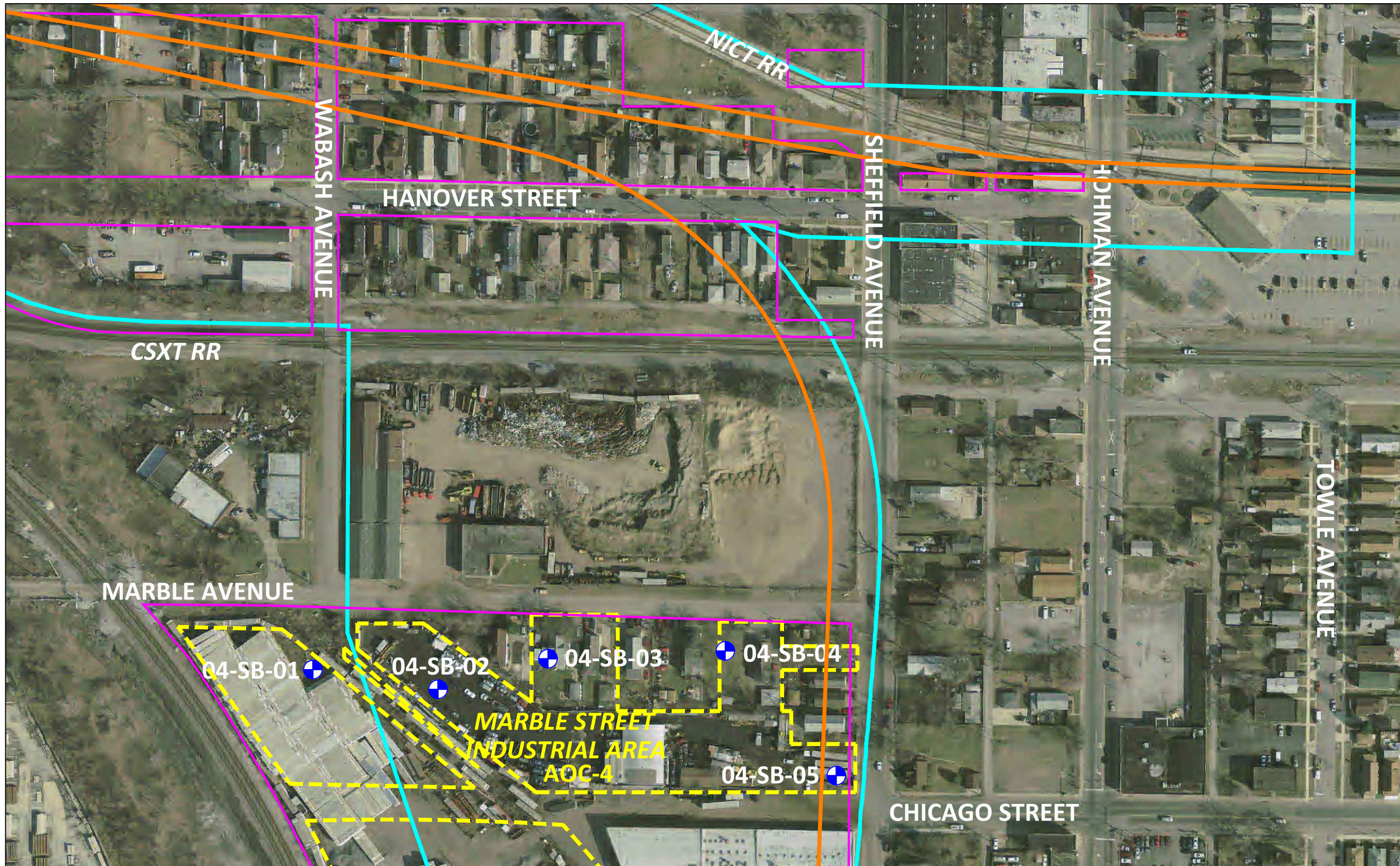
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West Lake Corridor Project
 Proposed Project Limits
 Hammond, Indiana

- Proposed Construction Limits
- Proposed Alignment





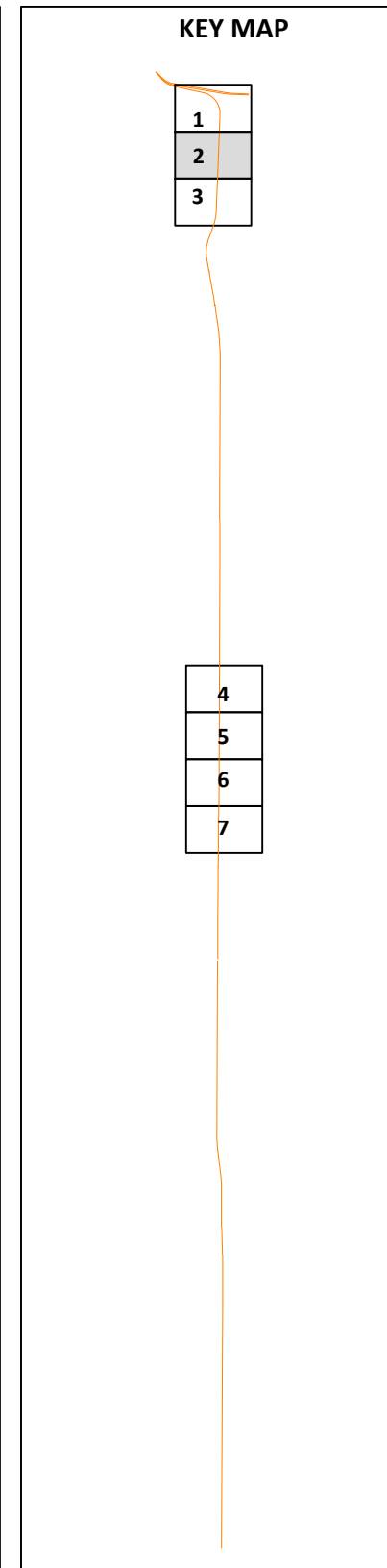
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† 0 # h
 Boring Locations
 AOC-4
 Hammond, Indiana

| | |
|------------------------------------|------------------------------|
| Proposed Boring Locations | Proposed Construction Limits |
| Proposed Alignment | |
| Acquisition Area | |
| Recognized Environmental Condition | |
| Tentative Construction Limits | |

Scale



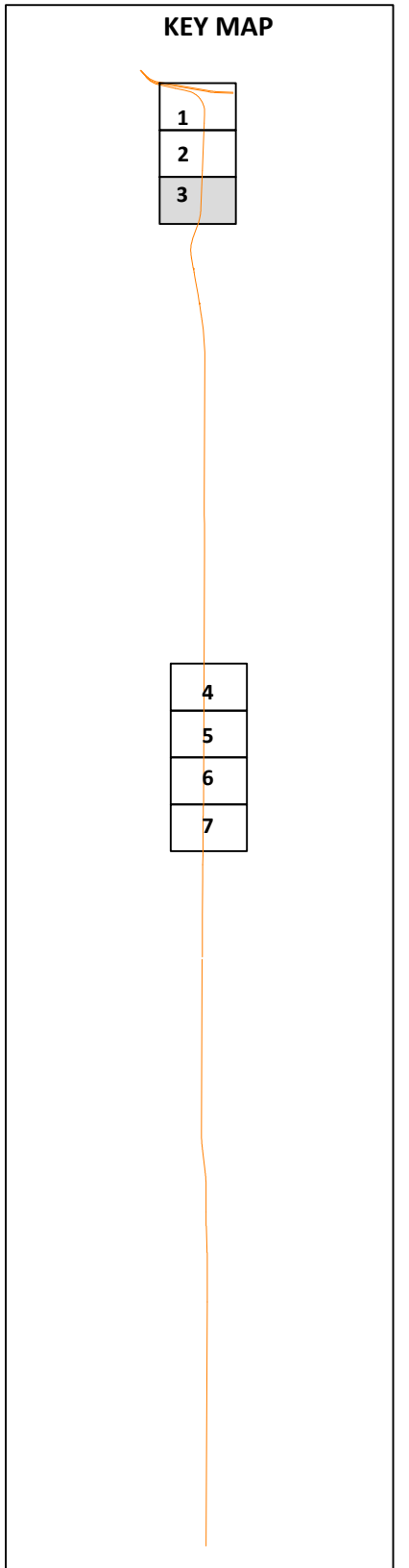
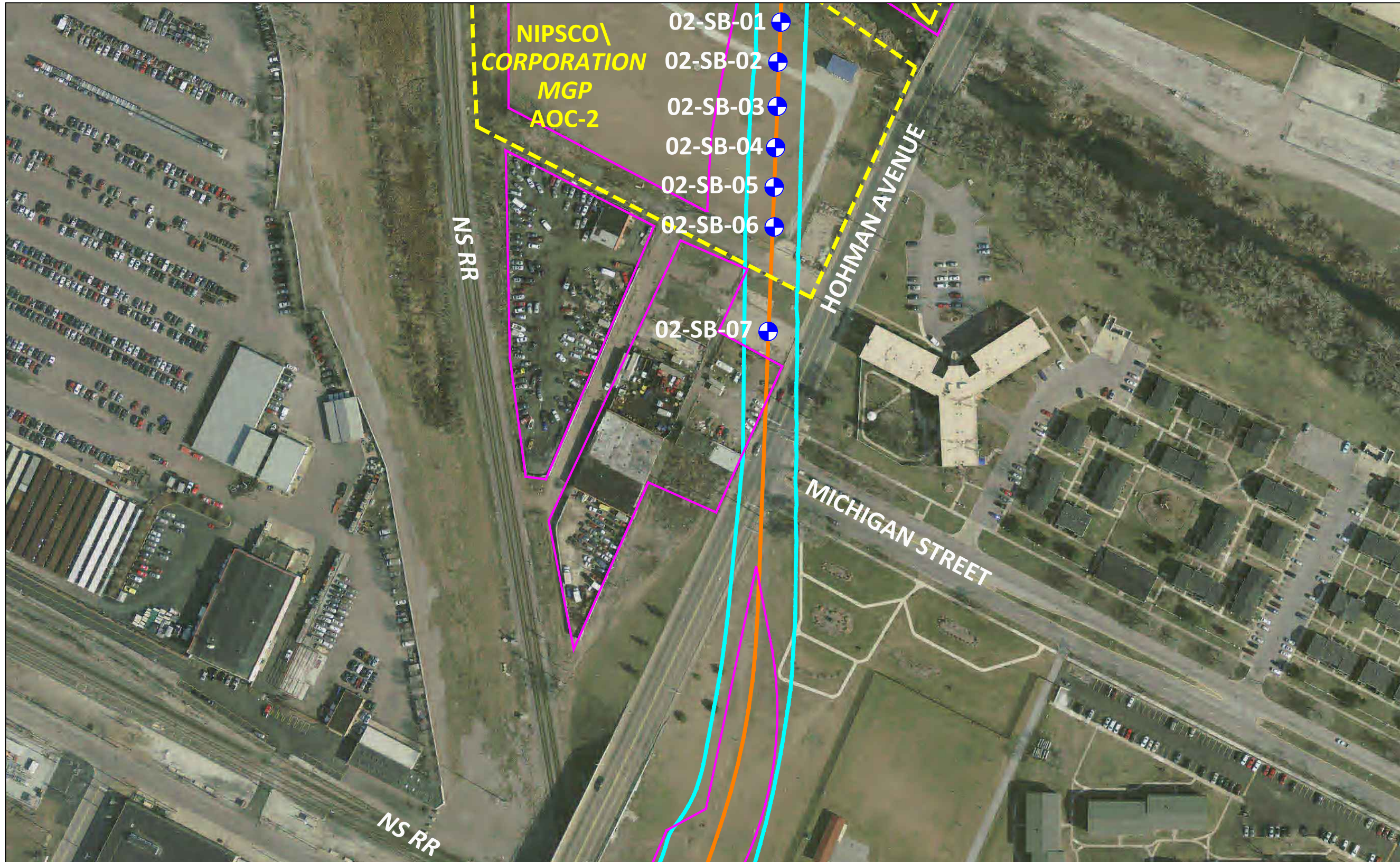


Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

† 0 # h
 Boring Locations
 AOC-3
 Hammond, Indiana

| | | | |
|--|------------------------------------|--|-------------------------------|
| | Proposed Boring Locations | | Proposed Construction Limits |
| | Proposed Alignment | | Acquisition Area |
| | Recognized Environmental Condition | | Tentative Construction Limits |



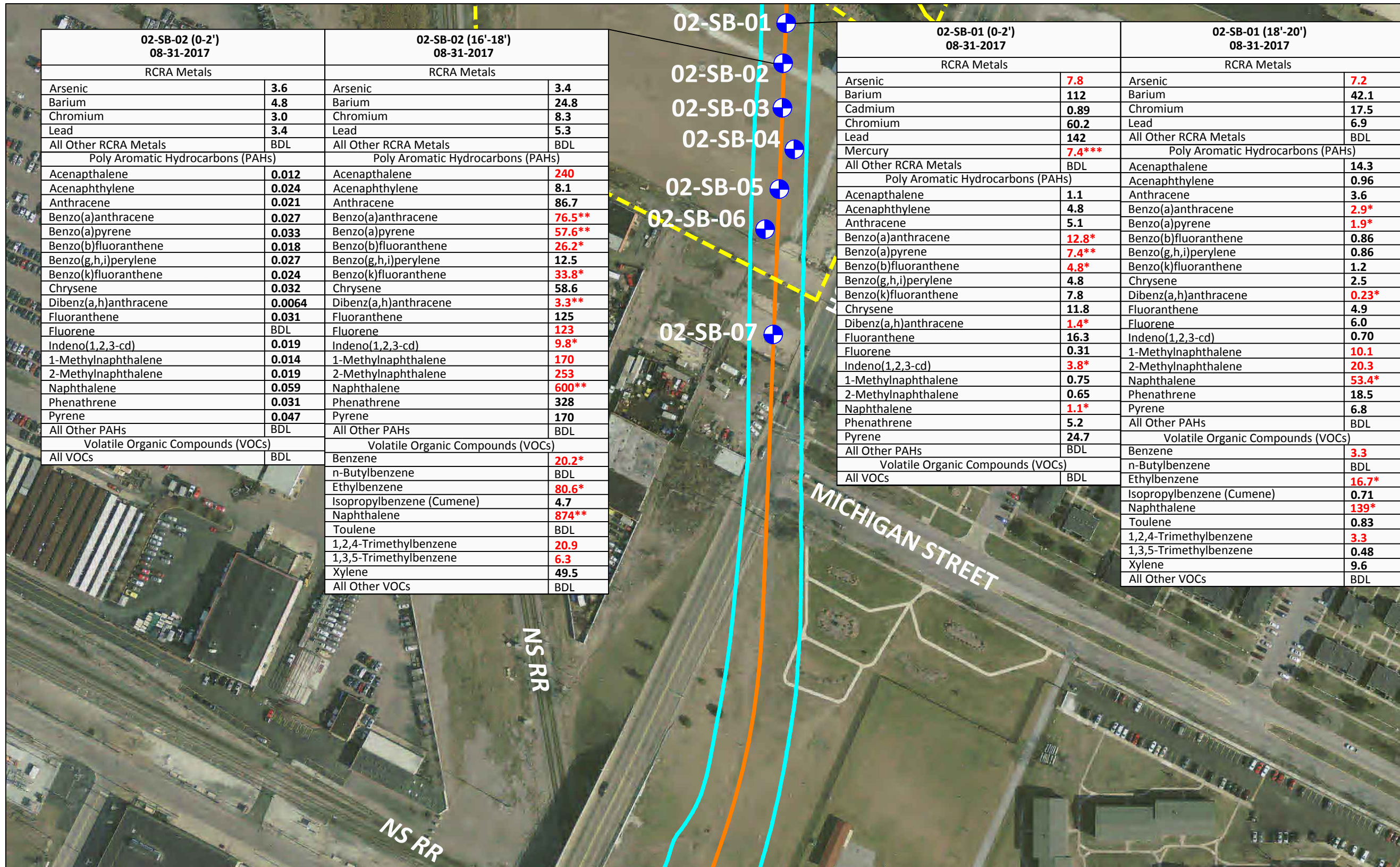


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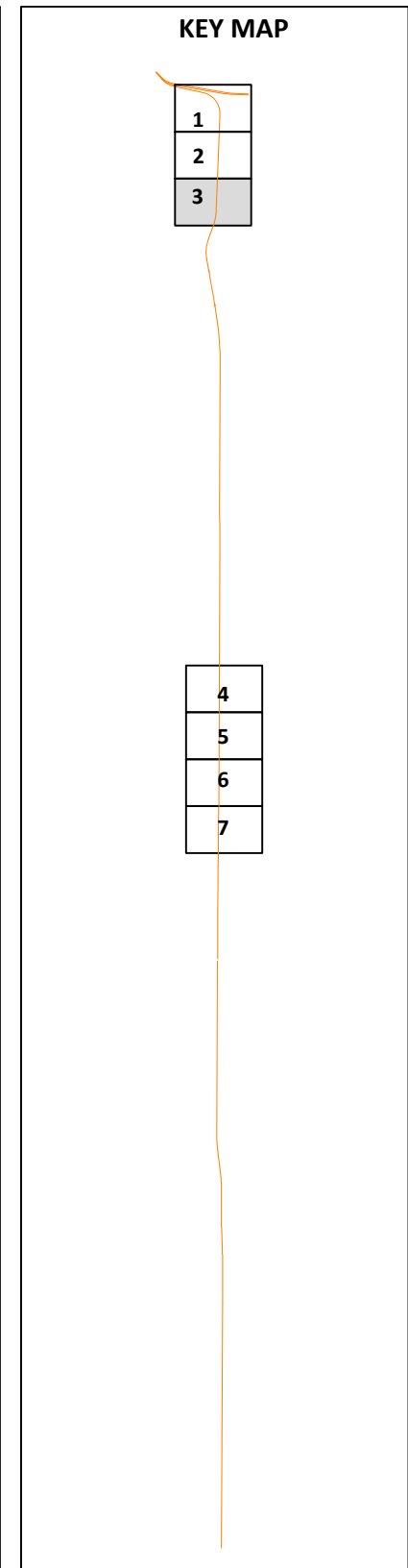
West Lake Corridor Project
 Boring Locations
 AOC-2
 Hammond, Indiana

| | | | |
|---|------------------------------------|---|------------------------------|
|  | Proposed Boring Locations |  | Proposed Construction Limits |
|  | Proposed Alignment | | |
|  | Acquisition Area | | |
|  | Recognized Environmental Condition | | |
| | Tentative Construction Limits | | |





Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>



| 02-SB-02 (0-2') 08-31-2017 | |
|-----------------------------------|--------|
| RCRA Metals | |
| Arsenic | 3.6 |
| Barium | 4.8 |
| Chromium | 3.0 |
| Lead | 3.4 |
| All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthalene | 0.012 |
| Acenaphthylene | 0.024 |
| Anthracene | 0.021 |
| Benzo(a)anthracene | 0.027 |
| Benzo(a)pyrene | 0.033 |
| Benzo(b)fluoranthene | 0.018 |
| Benzo(g,h,i)perylene | 0.027 |
| Benzo(k)fluoranthene | 0.024 |
| Chrysene | 0.032 |
| Dibenz(a,h)anthracene | 0.0064 |
| Fluoranthene | 0.031 |
| Fluorene | BDL |
| Indeno(1,2,3-cd) | 0.019 |
| 1-Methylnaphthalene | 0.014 |
| 2-Methylnaphthalene | 0.019 |
| Naphthalene | 0.059 |
| Phenathrene | 0.031 |
| Pyrene | 0.047 |
| All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | |
| All VOCs | BDL |

| 02-SB-02 (16'-18') 08-31-2017 | |
|-----------------------------------|--------|
| RCRA Metals | |
| Arsenic | 3.4 |
| Barium | 24.8 |
| Chromium | 8.3 |
| Lead | 5.3 |
| All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthalene | 240 |
| Acenaphthylene | 8.1 |
| Anthracene | 86.7 |
| Benzo(a)anthracene | 76.5** |
| Benzo(a)pyrene | 57.6** |
| Benzo(b)fluoranthene | 26.2* |
| Benzo(g,h,i)perylene | 12.5 |
| Benzo(k)fluoranthene | 33.8* |
| Chrysene | 58.6 |
| Dibenz(a,h)anthracene | 3.3** |
| Fluoranthene | 125 |
| Fluorene | 123 |
| Indeno(1,2,3-cd) | 9.8* |
| 1-Methylnaphthalene | 170 |
| 2-Methylnaphthalene | 253 |
| Naphthalene | 600** |
| Phenathrene | 328 |
| Pyrene | 170 |
| All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | |
| Benzene | 20.2* |
| n-Butylbenzene | BDL |
| Ethylbenzene | 80.6* |
| Isopropylbenzene (Cumene) | 4.7 |
| Naphthalene | 874** |
| Toulene | BDL |
| 1,2,4-Trimethylbenzene | 20.9 |
| 1,3,5-Trimethylbenzene | 6.3 |
| Xylene | 49.5 |
| All Other VOCs | BDL |

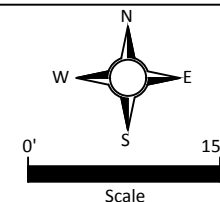
| 02-SB-01 (0-2') 08-31-2017 | |
|-----------------------------------|--------|
| RCRA Metals | |
| Arsenic | 7.8 |
| Barium | 112 |
| Cadmium | 0.89 |
| Chromium | 60.2 |
| Lead | 142 |
| Mercury | 7.4*** |
| All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthalene | 1.1 |
| Acenaphthylene | 4.8 |
| Anthracene | 5.1 |
| Benzo(a)anthracene | 12.8* |
| Benzo(a)pyrene | 7.4** |
| Benzo(b)fluoranthene | 4.8* |
| Benzo(g,h,i)perylene | 4.8 |
| Benzo(k)fluoranthene | 7.8 |
| Chrysene | 11.8 |
| Dibenz(a,h)anthracene | 1.4* |
| Fluoranthene | 16.3 |
| Fluorene | 0.31 |
| Indeno(1,2,3-cd) | 3.8* |
| 1-Methylnaphthalene | 0.75 |
| 2-Methylnaphthalene | 0.65 |
| Naphthalene | 1.1* |
| Phenathrene | 5.2 |
| Pyrene | 24.7 |
| All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | |
| All VOCs | BDL |

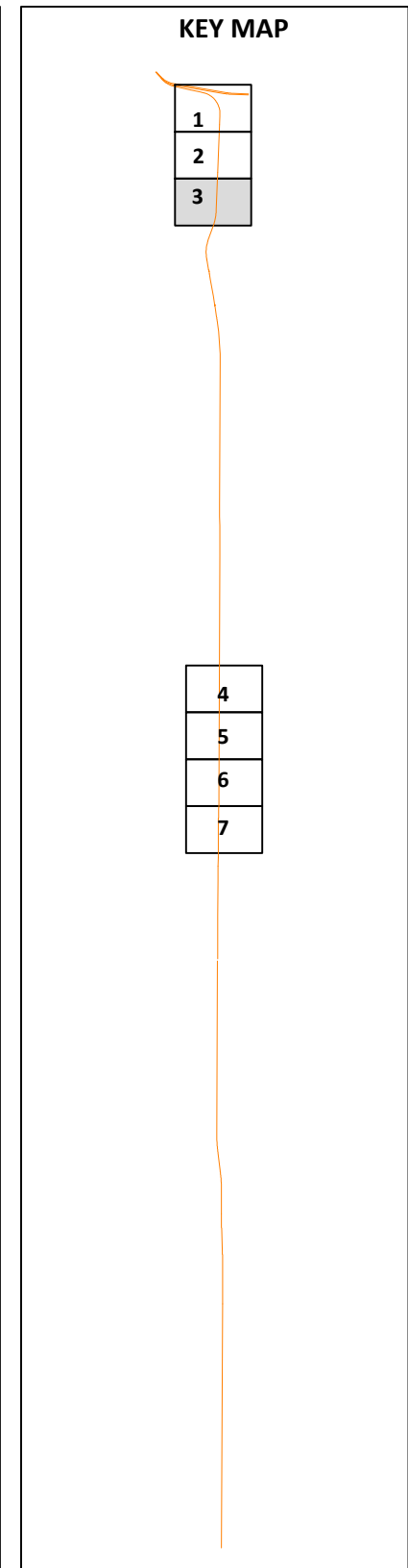
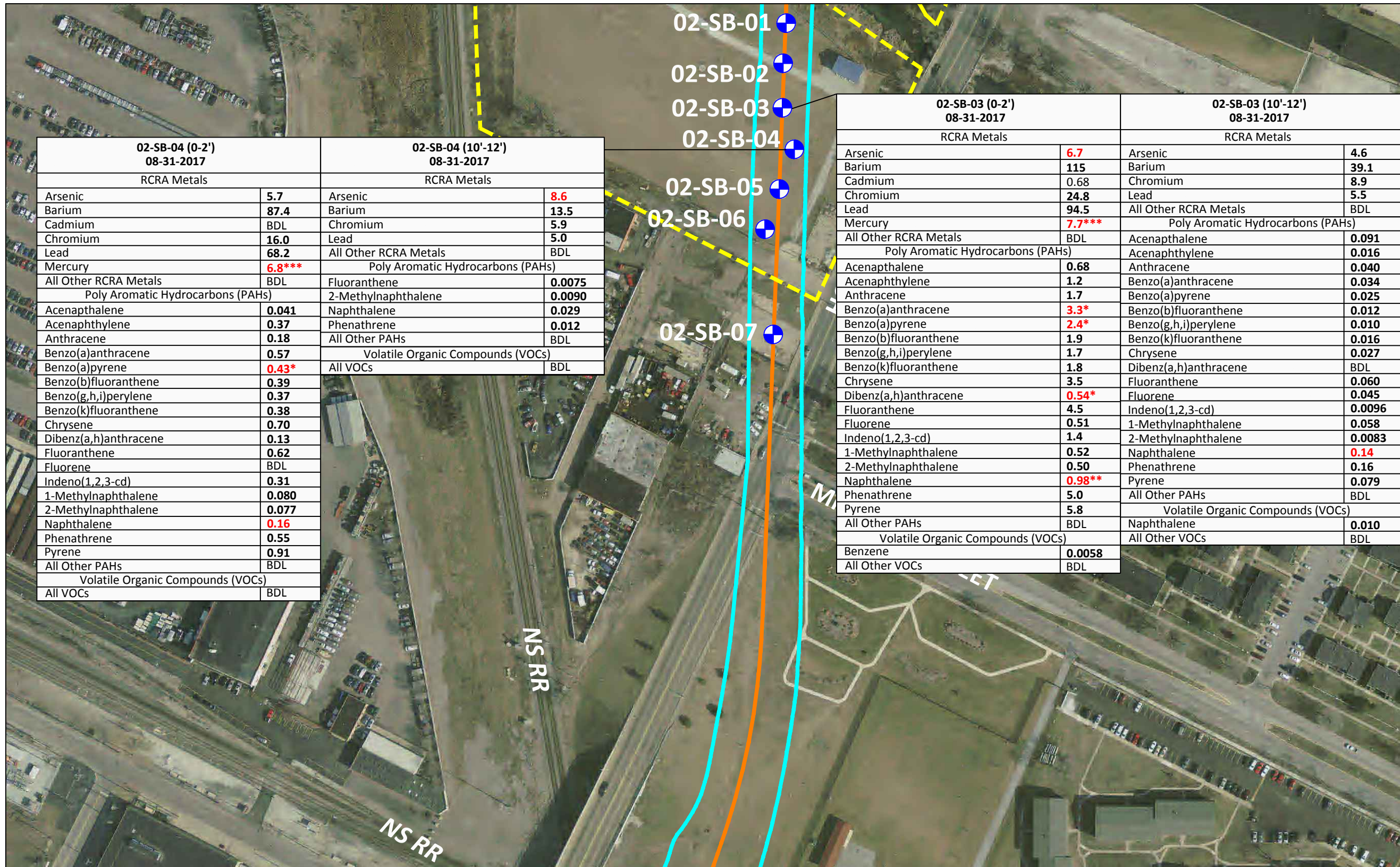
| 02-SB-01 (18'-20') 08-31-2017 | |
|-----------------------------------|-------|
| RCRA Metals | |
| Arsenic | 7.2 |
| Barium | 42.1 |
| Chromium | 17.5 |
| Lead | 6.9 |
| All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthalene | 14.3 |
| Acenaphthylene | 0.96 |
| Anthracene | 3.6 |
| Benzo(a)anthracene | 2.9* |
| Benzo(a)pyrene | 1.9* |
| Benzo(b)fluoranthene | 0.86 |
| Benzo(g,h,i)perylene | 0.86 |
| Benzo(k)fluoranthene | 1.2 |
| Chrysene | 2.5 |
| Dibenz(a,h)anthracene | 0.23* |
| Fluoranthene | 4.9 |
| Fluorene | 6.0 |
| Indeno(1,2,3-cd) | 0.70 |
| 1-Methylnaphthalene | 10.1 |
| 2-Methylnaphthalene | 20.3 |
| Naphthalene | 53.4* |
| Phenathrene | 18.5 |
| Pyrene | 6.8 |
| All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | |
| Benzene | 3.3 |
| n-Butylbenzene | BDL |
| Ethylbenzene | 16.7* |
| Isopropylbenzene (Cumene) | 0.71 |
| Naphthalene | 139* |
| Toulene | 0.83 |
| 1,2,4-Trimethylbenzene | 3.3 |
| 1,3,5-Trimethylbenzene | 0.48 |
| Xylene | 9.6 |
| All Other VOCs | BDL |

West Lake Corridor Project
Soil Analytical Results
AOC-2
Hammond, Indiana

- Boring Locations
- Proposed Alignment
- Recognized Environmental Condition
- Tentative Construction Limits
- Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)

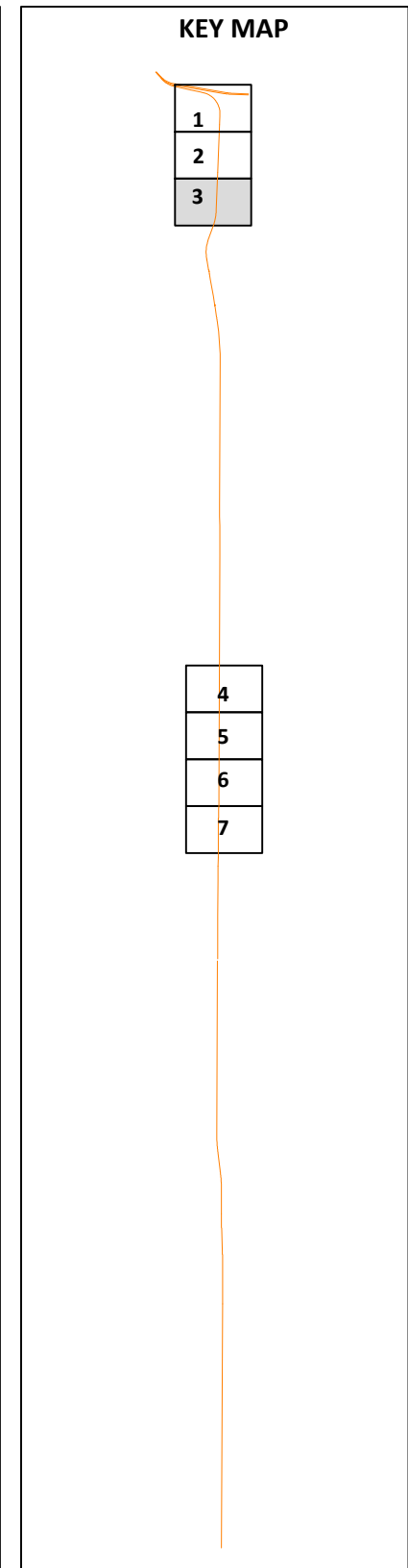
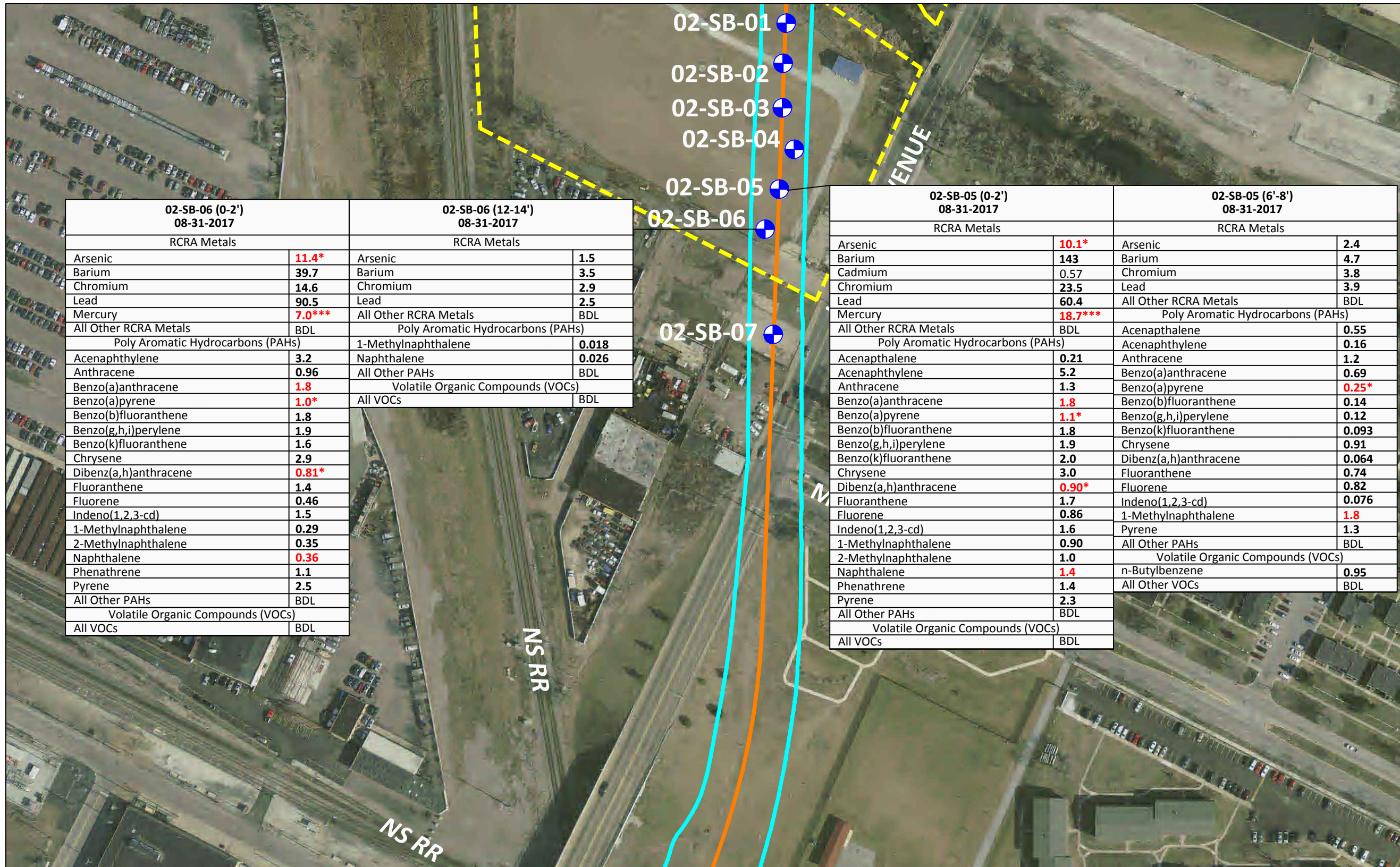
- Bold** - Denotes analyte detected above laboratory detection limit
- Bold** - Detected concentration exceeds soil migration to groundwater (MTG) screening levels
- Bold*** - Detected concentration exceeds Residential Direct Contact screening levels
- Bold**** - Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels
- Bold***** - Detected concentration exceeds Excavation Direct Contact screening levels
- BDL - Below Detection Limits





Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

| | | | |
|--|---|---|---|
| <p>West Lake Corridor Project Soil Analytical Results AOC-2 Hammond, Indiana</p> | <ul style="list-style-type: none"> Boring Locations Proposed Alignment Recognized Environmental Condition Tentative Construction Limits Proposed Construction Limits <p style="font-size: small;">All Units Reported in milligrams per kilogram (mg/kg)</p> | <p>Bold - Denotes analyte detected above laboratory detection limit</p> <p>Bold - Detected concentration exceeds soil migration to groundwater (MTG) screening levels</p> <p>Bold* - Detected concentration exceeds Residential Direct Contact screening levels</p> <p>Bold** - Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels</p> <p>Bold*** - Detected concentration exceeds Excavation Direct Contact screening levels</p> <p>BDL - Below Detection Limits</p> | <div style="text-align: center;"> <p>Scale 0' 150'</p> </div> <div style="text-align: right; margin-top: 10px;"> </div> |
|--|---|---|---|

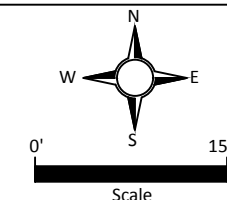


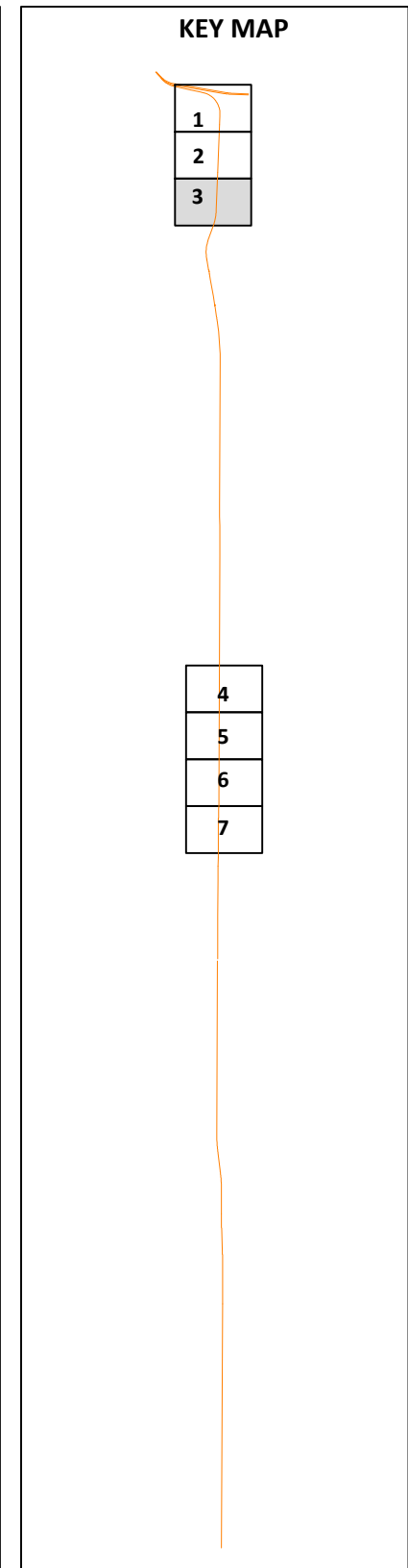
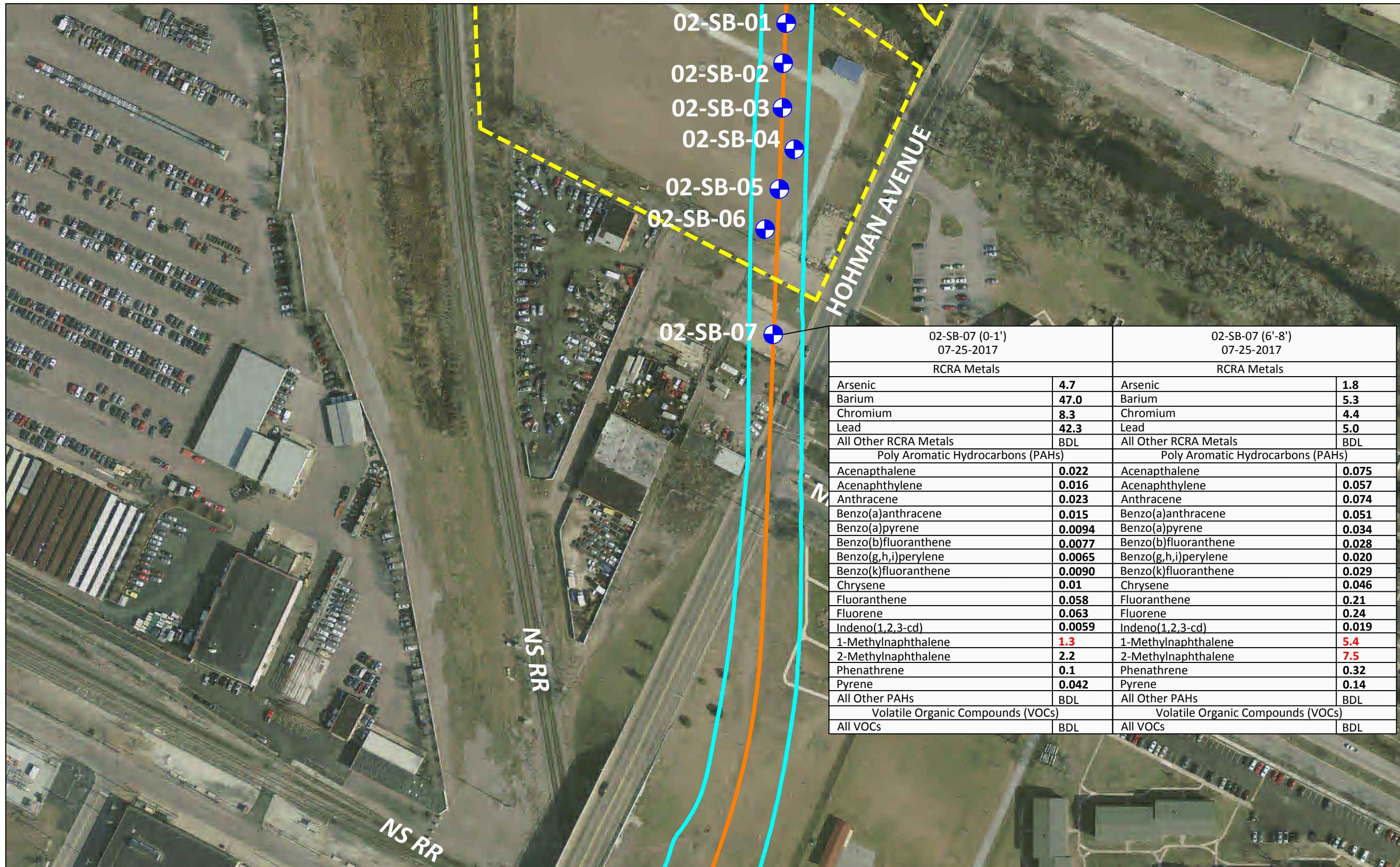
Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

West Lake Corridor Project
Soil Analytical Results
AOC-2
Hammond, Indiana

- Boring Locations
 - Proposed Alignment
 - Recognized Environmental Condition Tentative Construction Limits
 - Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)

- Bold** - Denotes analyte detected above laboratory detection limit
- Bold** - Detected concentration exceeds soil migration to groundwater (MTG) screening levels
- Bold*** - Detected concentration exceeds Residential Direct Contact screening levels
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- Bold***** - Detected concentration exceeds Excavation Direct Contact screening levels
- BDL - Below Detection Limits

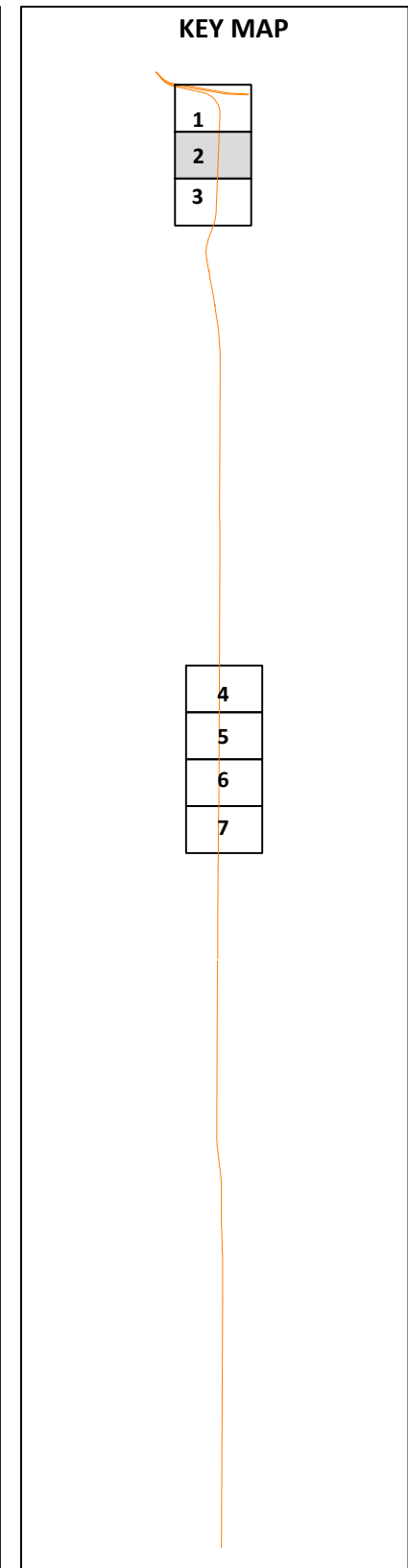
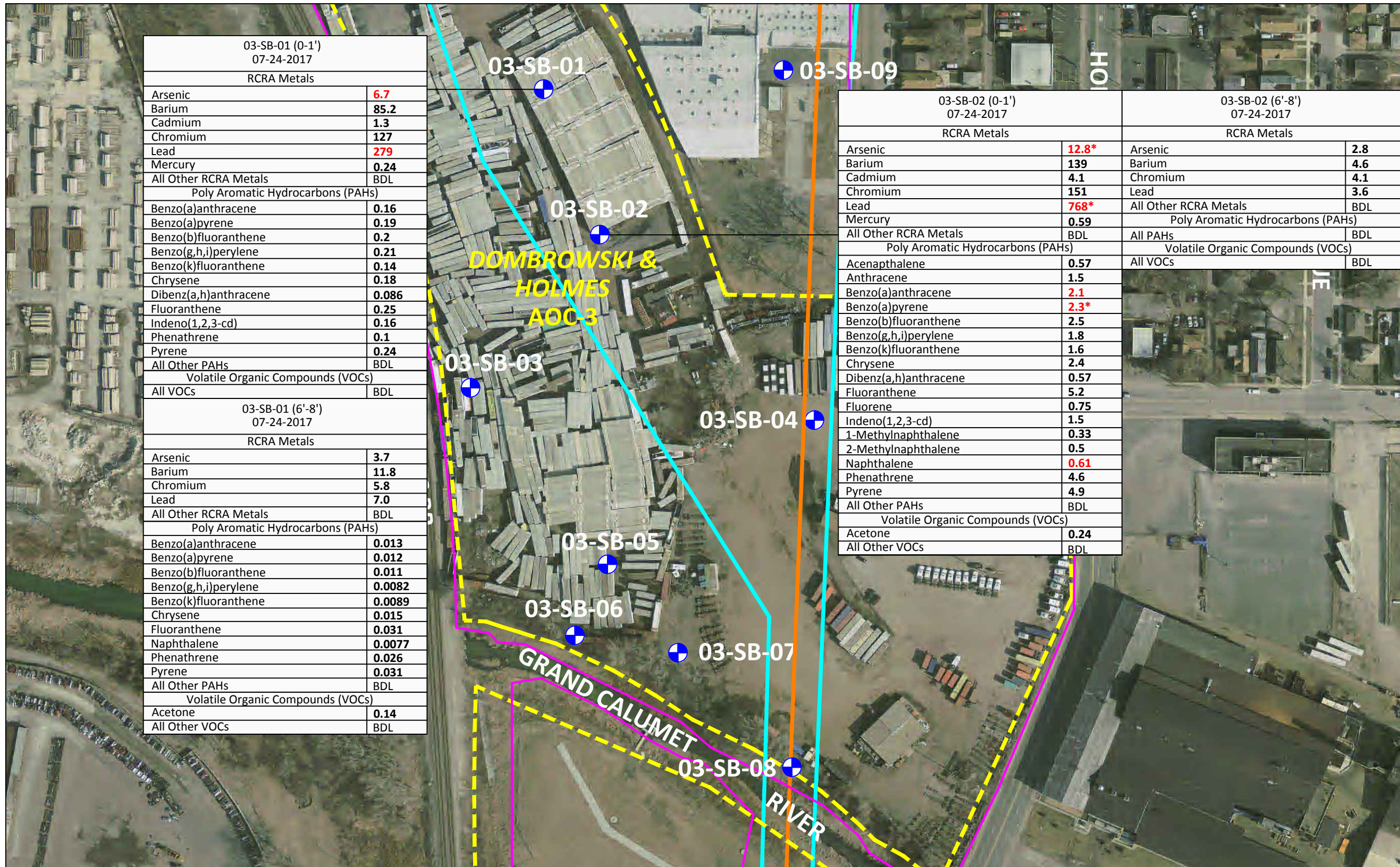




| 02-SB-07 (0'-1') 07-25-2017 | | 02-SB-07 (6'-8') 07-25-2017 | |
|-----------------------------------|---------------|-----------------------------------|--------------|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 4.7 | Arsenic | 1.8 |
| Barium | 47.0 | Barium | 5.3 |
| Chromium | 8.3 | Chromium | 4.4 |
| Lead | 42.3 | Lead | 5.0 |
| All Other RCRA Metals | BDL | All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | | Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthalene | 0.022 | Acenaphthalene | 0.075 |
| Acenaphthylene | 0.016 | Acenaphthylene | 0.057 |
| Anthracene | 0.023 | Anthracene | 0.074 |
| Benzo(a)anthracene | 0.015 | Benzo(a)anthracene | 0.051 |
| Benzo(a)pyrene | 0.0094 | Benzo(a)pyrene | 0.034 |
| Benzo(b)fluoranthene | 0.0077 | Benzo(b)fluoranthene | 0.028 |
| Benzo(g,h,i)perylene | 0.0065 | Benzo(g,h,i)perylene | 0.020 |
| Benzo(k)fluoranthene | 0.0090 | Benzo(k)fluoranthene | 0.029 |
| Chrysene | 0.01 | Chrysene | 0.046 |
| Fluoranthene | 0.058 | Fluoranthene | 0.21 |
| Fluorene | 0.063 | Fluorene | 0.24 |
| Indeno(1,2,3-cd) | 0.0059 | Indeno(1,2,3-cd) | 0.019 |
| 1-Methylnaphthalene | 1.3 | 1-Methylnaphthalene | 5.4 |
| 2-Methylnaphthalene | 2.2 | 2-Methylnaphthalene | 7.5 |
| Phenathrene | 0.1 | Phenathrene | 0.32 |
| Pyrene | 0.042 | Pyrene | 0.14 |
| All Other PAHs | BDL | All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | | Volatile Organic Compounds (VOCs) | |
| All VOCs | BDL | All VOCs | BDL |

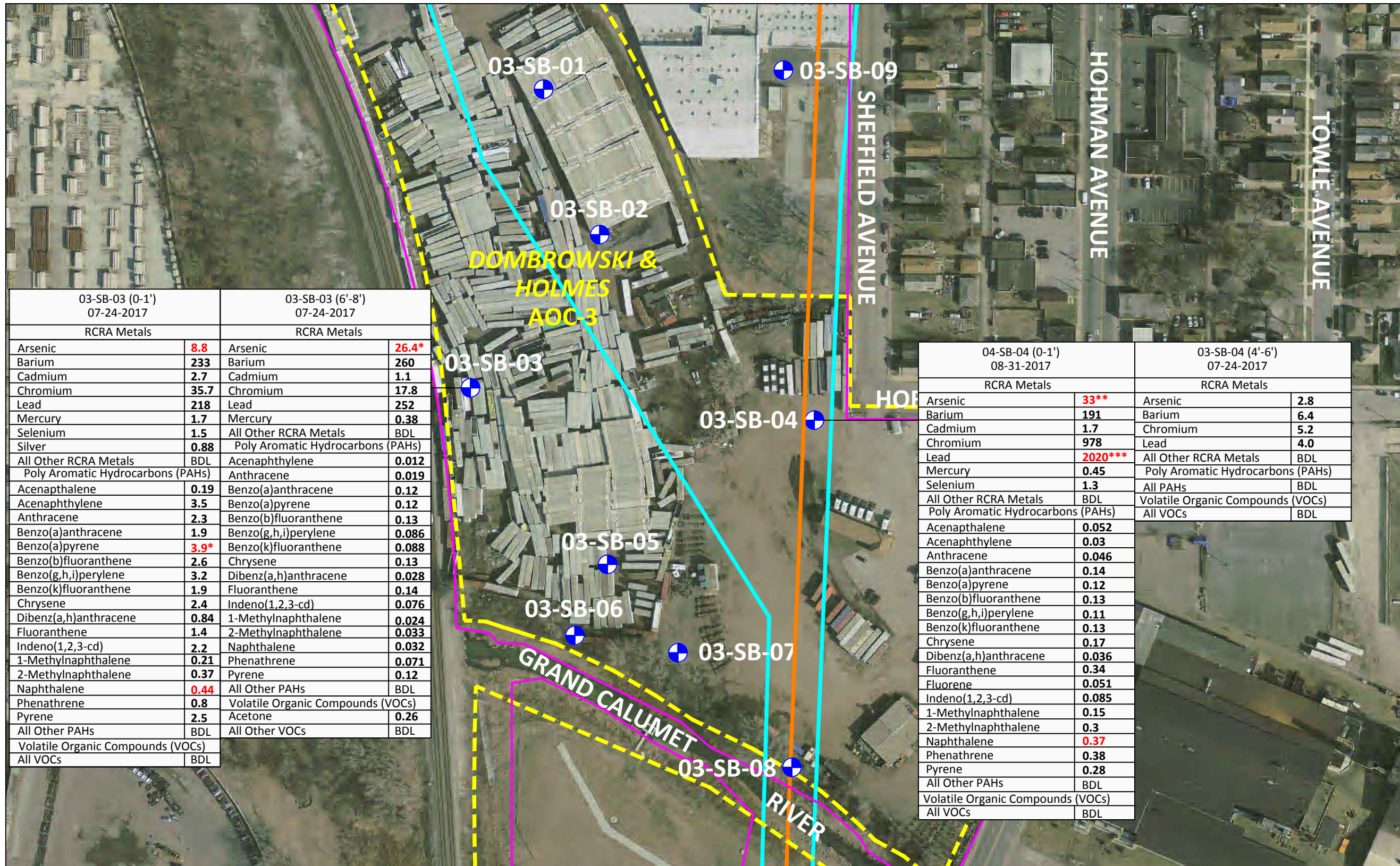
Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

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|--|---|---|--|--|
| <p>West Lake Corridor Project Soil Analytical Results AOC-2 Hammond, Indiana</p> | <ul style="list-style-type: none"> Boring Locations Proposed Alignment Recognized Environmental Condition Tentative Construction Limits Proposed Construction Limits <p>All Units Reported in milligrams per kilogram (mg/kg)</p> | <p>Bold - Denotes analyte detected above laboratory detection limit Bold - Detected concentration exceeds soil migration to groundwater (MTG) screening levels Bold* - Detected concentration exceeds Residential Direct Contact screening levels Bold** - Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels Bold*** - Detected concentration exceeds Excavation Direct Contact screening levels BDL - Below Detection Limits</p> | | |
|--|---|---|--|--|

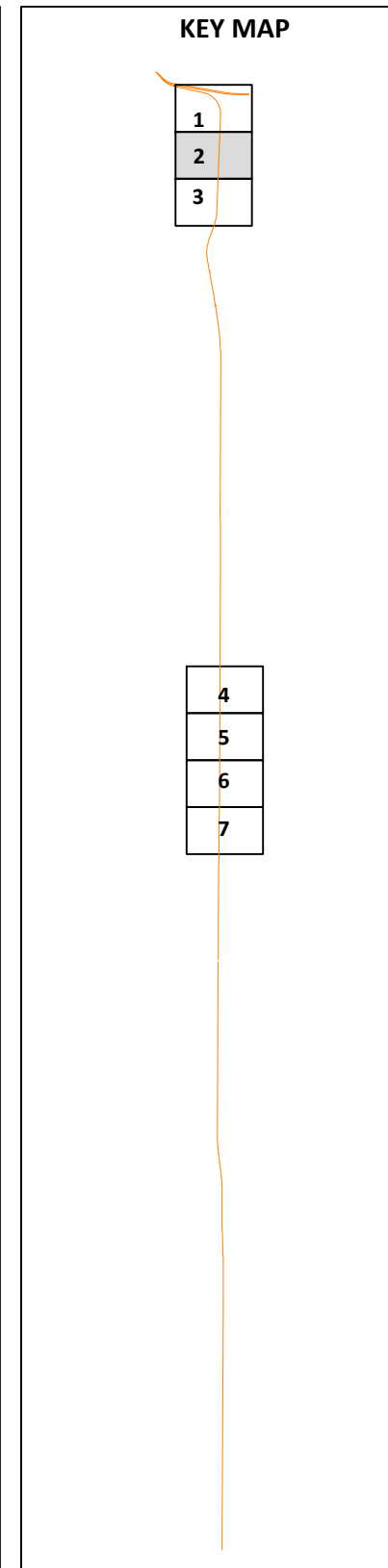


Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

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|--|---|--|--|--|
| West Lake Corridor Project Soil Analytical Results AOC-3 Hammond, Indiana | <ul style="list-style-type: none"> ● Boring Locations — Proposed Alignment — Acquisition Area - - - Recognized Environmental Condition - - - Tentative Construction Limits — Proposed Construction Limits All Units Reported in milligrams per kilogram (mg/kg) | <ul style="list-style-type: none"> * Denotes analyte detected above laboratory detection limit * Detected concentration exceeds soil migration to groundwater (MTG) screening levels * Detected concentration exceeds Residential Direct Contact screening levels * Detected concentration exceeds Commercial/ Industrial Direct Contact screenings levels * Detected concentration exceeds Excavation Direct Contact screening levels BDL - Below Detection Limits ##J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit | | |
| | | | | |



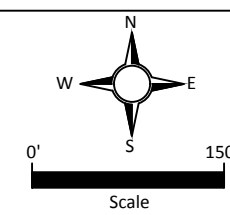
Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>



West Lake Corridor Project
Soil Analytical Results
AOC-3
Hammond, Indiana

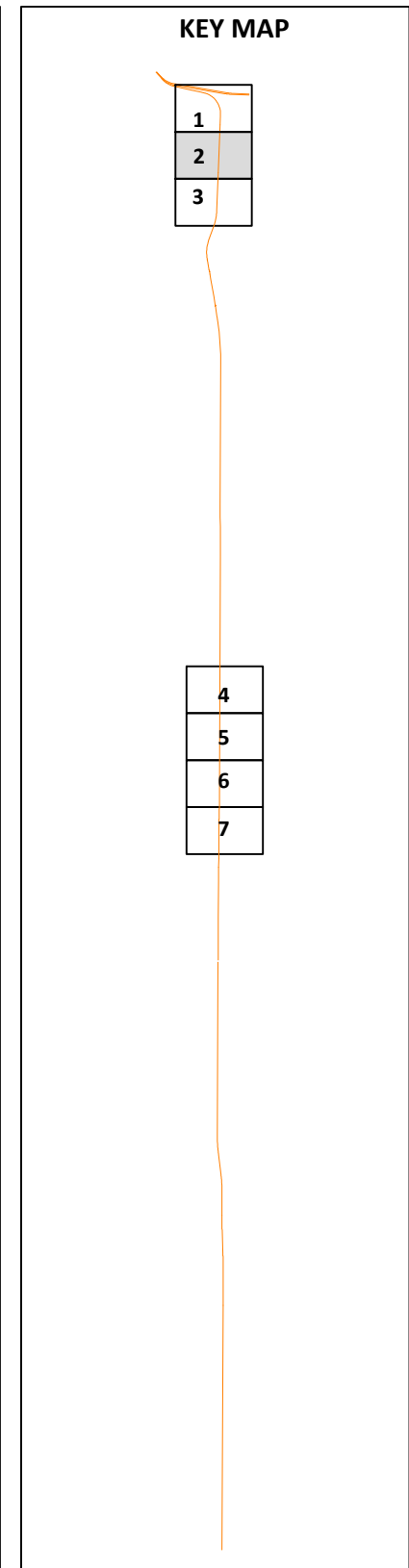
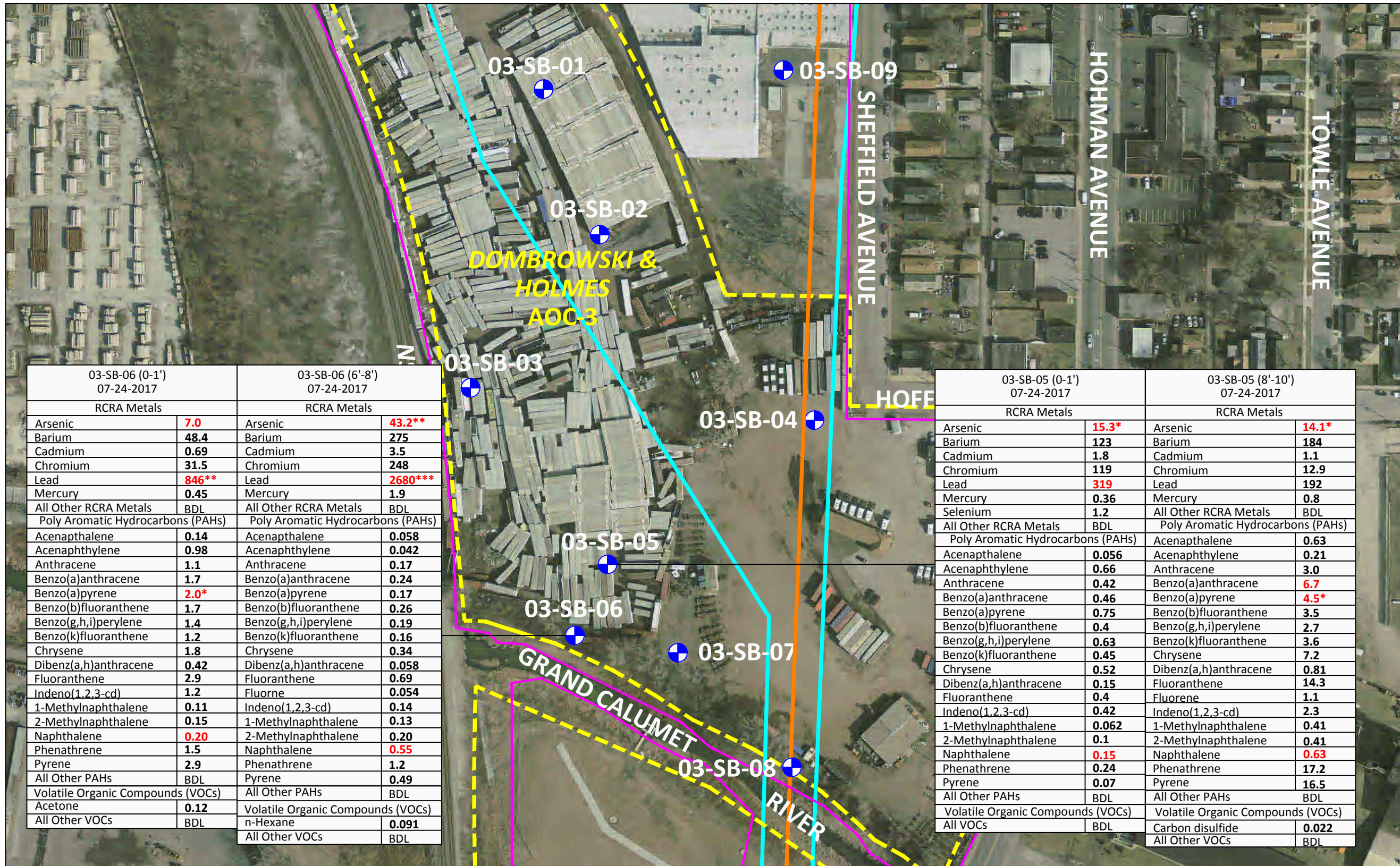
- Boring Locations
- Proposed Alignment
- Acquisition Area
- Recognized Environmental Condition
- Tentative Construction Limits
- Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)

- Denotes analyte detected above laboratory detection limit
- Detected concentration exceeds soil migration to groundwater (MTG) screening levels
- Detected concentration exceeds Residential Direct Contact screening levels
- Detected concentration exceeds Commercial/ Industrial Direct Contact screenings levels
- Detected concentration exceeds Excavation Direct Contact screening levels
- BDL - Below Detection Limits
- ##J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit



| 03-SB-03 (0-1') 07-24-2017 | | 03-SB-03 (6'-8') 07-24-2017 | |
|-----------------------------------|------|-----------------------------------|-------|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 8.8 | Arsenic | 26.4* |
| Barium | 233 | Barium | 260 |
| Cadmium | 2.7 | Cadmium | 1.1 |
| Chromium | 35.7 | Chromium | 17.8 |
| Lead | 218 | Lead | 252 |
| Mercury | 1.7 | Mercury | 0.38 |
| Selenium | 1.5 | All Other RCRA Metals | BDL |
| Silver | 0.88 | Poly Aromatic Hydrocarbons (PAHs) | |
| All Other RCRA Metals | BDL | Acenaphthylene | 0.012 |
| Poly Aromatic Hydrocarbons (PAHs) | | Anthracene | 0.019 |
| Acenaphthalene | 0.19 | Benzo(a)anthracene | 0.12 |
| Acenaphthylene | 3.5 | Benzo(a)pyrene | 0.12 |
| Anthracene | 2.3 | Benzo(b)fluoranthene | 0.13 |
| Benzo(a)anthracene | 1.9 | Benzo(g,h,i)perylene | 0.086 |
| Benzo(a)pyrene | 3.9* | Benzo(k)fluoranthene | 0.088 |
| Benzo(b)fluoranthene | 2.6 | Chrysene | 0.13 |
| Benzo(g,h,i)perylene | 3.2 | Dibenz(a,h)anthracene | 0.028 |
| Benzo(k)fluoranthene | 1.9 | Fluoranthene | 0.14 |
| Chrysene | 2.4 | Indeno(1,2,3-cd) | 0.076 |
| Dibenz(a,h)anthracene | 0.84 | 1-Methylnaphthalene | 0.024 |
| Fluoranthene | 1.4 | 2-Methylnaphthalene | 0.033 |
| Indeno(1,2,3-cd) | 2.2 | Naphthalene | 0.032 |
| 1-Methylnaphthalene | 0.21 | Phenathrene | 0.071 |
| 2-Methylnaphthalene | 0.37 | Pyrene | 0.12 |
| Naphthalene | 0.44 | All Other PAHs | BDL |
| Phenathrene | 0.8 | Volatile Organic Compounds (VOCs) | |
| Pyrene | 2.5 | Acetone | 0.26 |
| All Other PAHs | BDL | All Other VOCs | BDL |
| Volatile Organic Compounds (VOCs) | | | |
| All VOCs | BDL | | |

| 04-SB-04 (0-1') 08-31-2017 | | 03-SB-04 (4'-6') 07-24-2017 | |
|-----------------------------------|---------|-----------------------------------|-----|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 33** | Arsenic | 2.8 |
| Barium | 191 | Barium | 6.4 |
| Cadmium | 1.7 | Chromium | 5.2 |
| Chromium | 978 | Lead | 4.0 |
| Lead | 2020*** | All Other RCRA Metals | BDL |
| Mercury | 0.45 | Poly Aromatic Hydrocarbons (PAHs) | |
| Selenium | 1.3 | All PAHs | BDL |
| All Other RCRA Metals | BDL | Volatile Organic Compounds (VOCs) | |
| Poly Aromatic Hydrocarbons (PAHs) | | All VOCs | BDL |
| Acenaphthalene | 0.052 | | |
| Acenaphthylene | 0.03 | | |
| Anthracene | 0.046 | | |
| Benzo(a)anthracene | 0.14 | | |
| Benzo(a)pyrene | 0.12 | | |
| Benzo(b)fluoranthene | 0.13 | | |
| Benzo(g,h,i)perylene | 0.11 | | |
| Benzo(k)fluoranthene | 0.13 | | |
| Chrysene | 0.17 | | |
| Dibenz(a,h)anthracene | 0.036 | | |
| Fluoranthene | 0.34 | | |
| Fluorene | 0.051 | | |
| Indeno(1,2,3-cd) | 0.085 | | |
| 1-Methylnaphthalene | 0.15 | | |
| 2-Methylnaphthalene | 0.3 | | |
| Naphthalene | 0.37 | | |
| Phenathrene | 0.38 | | |
| Pyrene | 0.28 | | |
| All Other PAHs | BDL | | |
| Volatile Organic Compounds (VOCs) | | | |
| All VOCs | BDL | | |

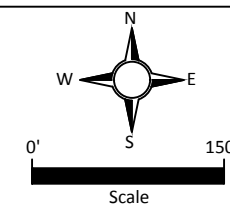


Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

West Lake Corridor Project
Soil Analytical Results
AOC-3
Hammond, Indiana

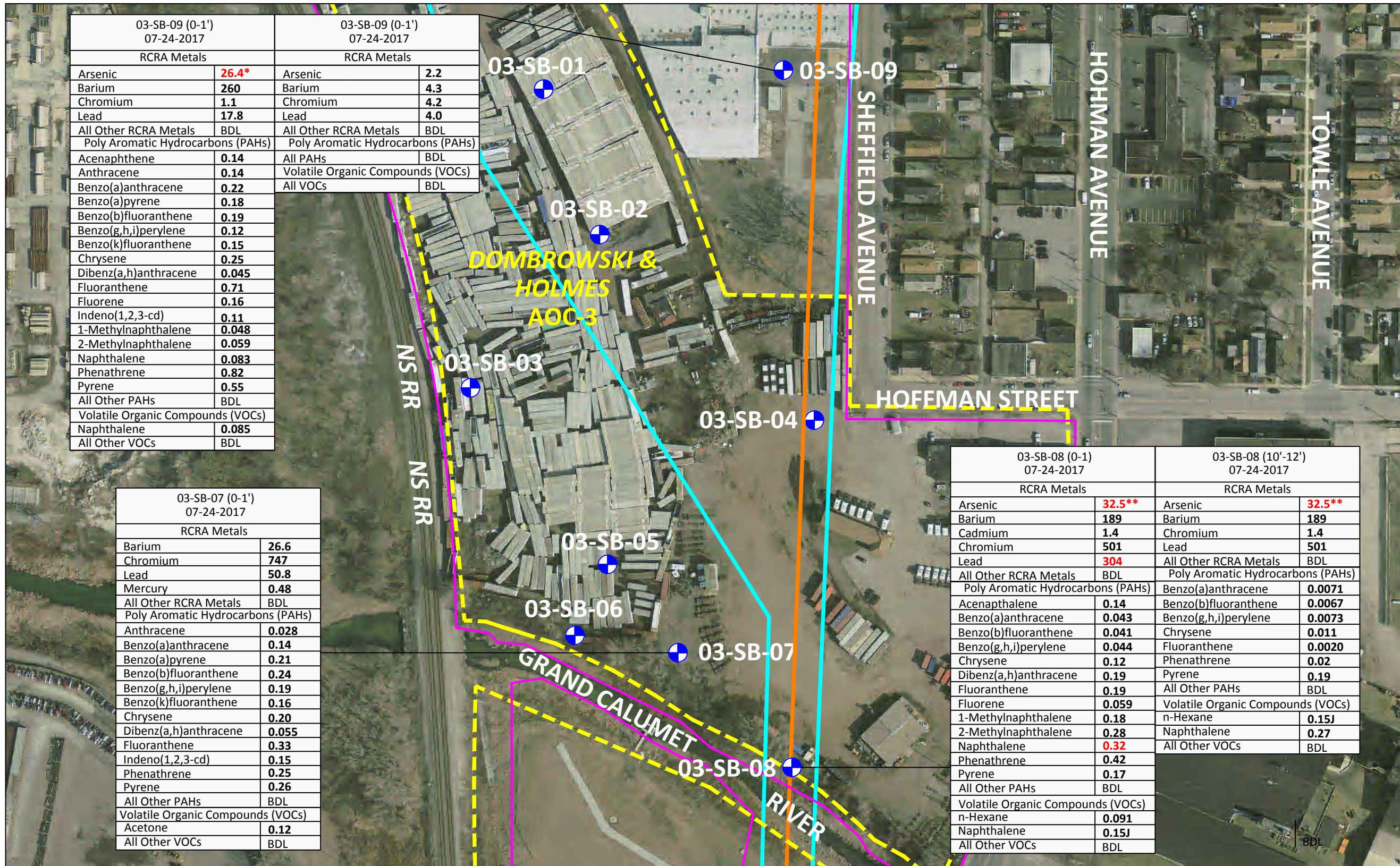
- Boring Locations
- Proposed Alignment
- Acquisition Area
- Recognized Environmental Condition
- Tentative Construction Limits
- Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)

- Denotes analyte detected above laboratory detection limit
- Detected concentration exceeds soil migration to groundwater (MTG) screening levels
- Detected concentration exceeds Residential Direct Contact screening levels
- Detected concentration exceeds Commercial/ Industrial Direct Contact screenings levels
- Detected concentration exceeds Excavation Direct Contact screening levels
- BDL - Below Detection Limits
- ##J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit



| 03-SB-06 (0-1') 07-24-2017 | | 03-SB-06 (6'-8') 07-24-2017 | |
|-----------------------------------|-------|-----------------------------------|---------|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 7.0 | Arsenic | 43.2** |
| Barium | 48.4 | Barium | 275 |
| Cadmium | 0.69 | Cadmium | 3.5 |
| Chromium | 31.5 | Chromium | 248 |
| Lead | 846** | Lead | 2680*** |
| Mercury | 0.45 | Mercury | 1.9 |
| All Other RCRA Metals | BDL | All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | | Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthalene | 0.14 | Acenaphthalene | 0.058 |
| Acenaphthylene | 0.98 | Acenaphthylene | 0.042 |
| Anthracene | 1.1 | Anthracene | 0.17 |
| Benzo(a)anthracene | 1.7 | Benzo(a)anthracene | 0.24 |
| Benzo(a)pyrene | 2.0* | Benzo(a)pyrene | 0.17 |
| Benzo(b)fluoranthene | 1.7 | Benzo(b)fluoranthene | 0.26 |
| Benzo(g,h,i)perylene | 1.4 | Benzo(g,h,i)perylene | 0.19 |
| Benzo(k)fluoranthene | 1.2 | Benzo(k)fluoranthene | 0.16 |
| Chrysene | 1.8 | Chrysene | 0.34 |
| Dibenz(a,h)anthracene | 0.42 | Dibenz(a,h)anthracene | 0.058 |
| Fluoranthene | 2.9 | Fluoranthene | 0.69 |
| Indeno(1,2,3-cd) | 1.2 | Fluorene | 0.054 |
| 1-Methylnaphthalene | 0.11 | Indeno(1,2,3-cd) | 0.14 |
| 2-Methylnaphthalene | 0.15 | 1-Methylnaphthalene | 0.13 |
| Naphthalene | 0.20 | 2-Methylnaphthalene | 0.20 |
| Phenathrene | 1.5 | Naphthalene | 0.55 |
| Pyrene | 2.9 | Phenathrene | 1.2 |
| All Other PAHs | BDL | Pyrene | 0.49 |
| Volatile Organic Compounds (VOCs) | | All Other PAHs | |
| Acetone | 0.12 | All Other PAHs | BDL |
| All Other VOCs | BDL | Volatile Organic Compounds (VOCs) | |
| | | n-Hexane | 0.091 |
| | | All Other VOCs | BDL |

| 03-SB-05 (0-1') 07-24-2017 | | 03-SB-05 (8'-10') 07-24-2017 | |
|-----------------------------------|-------|-----------------------------------|-------|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 15.3* | Arsenic | 14.1* |
| Barium | 123 | Barium | 184 |
| Cadmium | 1.8 | Cadmium | 1.1 |
| Chromium | 119 | Chromium | 12.9 |
| Lead | 319 | Lead | 192 |
| Mercury | 0.36 | Mercury | 0.8 |
| Selenium | 1.2 | All Other RCRA Metals | BDL |
| All Other RCRA Metals | BDL | Poly Aromatic Hydrocarbons (PAHs) | |
| Poly Aromatic Hydrocarbons (PAHs) | | Acenaphthalene | 0.63 |
| Acenaphthalene | 0.056 | Acenaphthylene | 0.21 |
| Acenaphthylene | 0.66 | Anthracene | 3.0 |
| Anthracene | 0.42 | Benzo(a)anthracene | 6.7 |
| Benzo(a)anthracene | 0.46 | Benzo(a)pyrene | 4.5* |
| Benzo(a)pyrene | 0.75 | Benzo(b)fluoranthene | 3.5 |
| Benzo(b)fluoranthene | 0.4 | Benzo(g,h,i)perylene | 2.7 |
| Benzo(g,h,i)perylene | 0.63 | Benzo(k)fluoranthene | 3.6 |
| Benzo(k)fluoranthene | 0.45 | Chrysene | 7.2 |
| Chrysene | 0.52 | Dibenz(a,h)anthracene | 0.81 |
| Dibenz(a,h)anthracene | 0.15 | Fluoranthene | 14.3 |
| Fluoranthene | 0.4 | Fluorene | 1.1 |
| Indeno(1,2,3-cd) | 0.42 | Indeno(1,2,3-cd) | 2.3 |
| 1-Methylnaphthalene | 0.062 | 1-Methylnaphthalene | 0.41 |
| 2-Methylnaphthalene | 0.1 | 2-Methylnaphthalene | 0.41 |
| Naphthalene | 0.15 | Naphthalene | 0.63 |
| Phenathrene | 0.24 | Phenathrene | 17.2 |
| Pyrene | 0.07 | Pyrene | 16.5 |
| All Other PAHs | BDL | All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | | Volatile Organic Compounds (VOCs) | |
| All VOCs | BDL | Carbon disulfide | 0.022 |
| | | All Other VOCs | BDL |



| 03-SB-09 (0-1') 07-24-2017 | | 03-SB-09 (0-1') 07-24-2017 | |
|-----------------------------------|-------|-----------------------------------|-----|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 26.4* | Arsenic | 2.2 |
| Barium | 260 | Barium | 4.3 |
| Chromium | 1.1 | Chromium | 4.2 |
| Lead | 17.8 | Lead | 4.0 |
| All Other RCRA Metals | BDL | All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | | Poly Aromatic Hydrocarbons (PAHs) | |
| Acenaphthene | 0.14 | All PAHs | BDL |
| Anthracene | 0.14 | Volatile Organic Compounds (VOCs) | |
| Benzo(a)anthracene | 0.22 | All VOCs | BDL |
| Benzo(a)pyrene | 0.18 | | |
| Benzo(b)fluoranthene | 0.19 | | |
| Benzo(g,h,i)perylene | 0.12 | | |
| Benzo(k)fluoranthene | 0.15 | | |
| Chrysene | 0.25 | | |
| Dibenz(a,h)anthracene | 0.045 | | |
| Fluoranthene | 0.71 | | |
| Fluorene | 0.16 | | |
| Indeno(1,2,3-cd) | 0.11 | | |
| 1-Methylnaphthalene | 0.048 | | |
| 2-Methylnaphthalene | 0.059 | | |
| Naphthalene | 0.083 | | |
| Phenathrene | 0.82 | | |
| Pyrene | 0.55 | | |
| All Other PAHs | BDL | | |
| Volatile Organic Compounds (VOCs) | | | |
| Naphthalene | 0.085 | | |
| All Other VOCs | BDL | | |

| 03-SB-07 (0-1') 07-24-2017 | |
|-----------------------------------|-------|
| RCRA Metals | |
| Barium | 26.6 |
| Chromium | 747 |
| Lead | 50.8 |
| Mercury | 0.48 |
| All Other RCRA Metals | BDL |
| Poly Aromatic Hydrocarbons (PAHs) | |
| Anthracene | 0.028 |
| Benzo(a)anthracene | 0.14 |
| Benzo(a)pyrene | 0.21 |
| Benzo(b)fluoranthene | 0.24 |
| Benzo(g,h,i)perylene | 0.19 |
| Benzo(k)fluoranthene | 0.16 |
| Chrysene | 0.20 |
| Dibenz(a,h)anthracene | 0.055 |
| Fluoranthene | 0.33 |
| Indeno(1,2,3-cd) | 0.15 |
| Phenathrene | 0.25 |
| Pyrene | 0.26 |
| All Other PAHs | BDL |
| Volatile Organic Compounds (VOCs) | |
| Acetone | 0.12 |
| All Other VOCs | BDL |

| 03-SB-08 (0-1) 07-24-2017 | | 03-SB-08 (10'-12') 07-24-2017 | |
|-----------------------------------|--------|-----------------------------------|--------|
| RCRA Metals | | RCRA Metals | |
| Arsenic | 32.5** | Arsenic | 32.5** |
| Barium | 189 | Barium | 189 |
| Cadmium | 1.4 | Chromium | 1.4 |
| Chromium | 501 | Lead | 501 |
| Lead | 304 | All Other RCRA Metals | BDL |
| All Other RCRA Metals | BDL | Poly Aromatic Hydrocarbons (PAHs) | |
| Poly Aromatic Hydrocarbons (PAHs) | | Benzo(a)anthracene | 0.0071 |
| Acenaphthalene | 0.14 | Benzo(b)fluoranthene | 0.0067 |
| Benzo(a)anthracene | 0.043 | Benzo(g,h,i)perylene | 0.0073 |
| Benzo(b)fluoranthene | 0.041 | Chrysene | 0.011 |
| Benzo(g,h,i)perylene | 0.044 | Fluoranthene | 0.0020 |
| Chrysene | 0.12 | Phenathrene | 0.02 |
| Dibenz(a,h)anthracene | 0.19 | Pyrene | 0.19 |
| Fluoranthene | 0.19 | All Other PAHs | BDL |
| Fluorene | 0.059 | Volatile Organic Compounds (VOCs) | |
| 1-Methylnaphthalene | 0.18 | n-Hexane | 0.15J |
| 2-Methylnaphthalene | 0.28 | Naphthalene | 0.27 |
| Naphthalene | 0.32 | All Other VOCs | BDL |
| Phenathrene | 0.42 | | |
| Pyrene | 0.17 | | |
| All Other PAHs | BDL | | |
| Volatile Organic Compounds (VOCs) | | | |
| n-Hexane | 0.091 | | |
| Naphthalene | 0.15J | | |
| All Other VOCs | BDL | | |

KEY MAP

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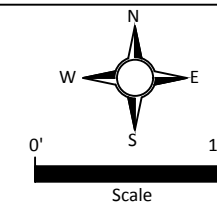
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| 7 |

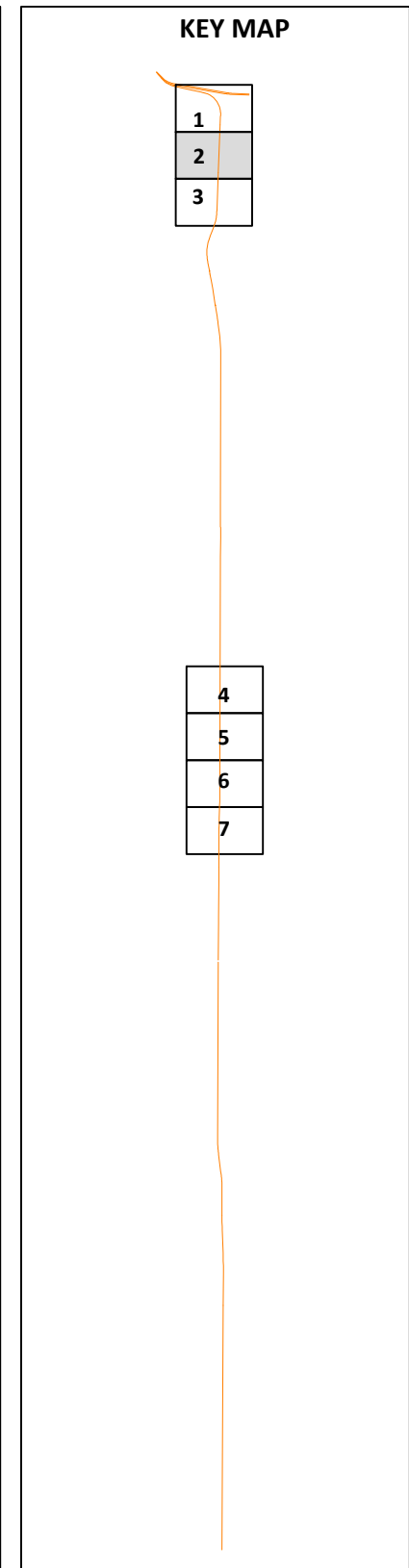
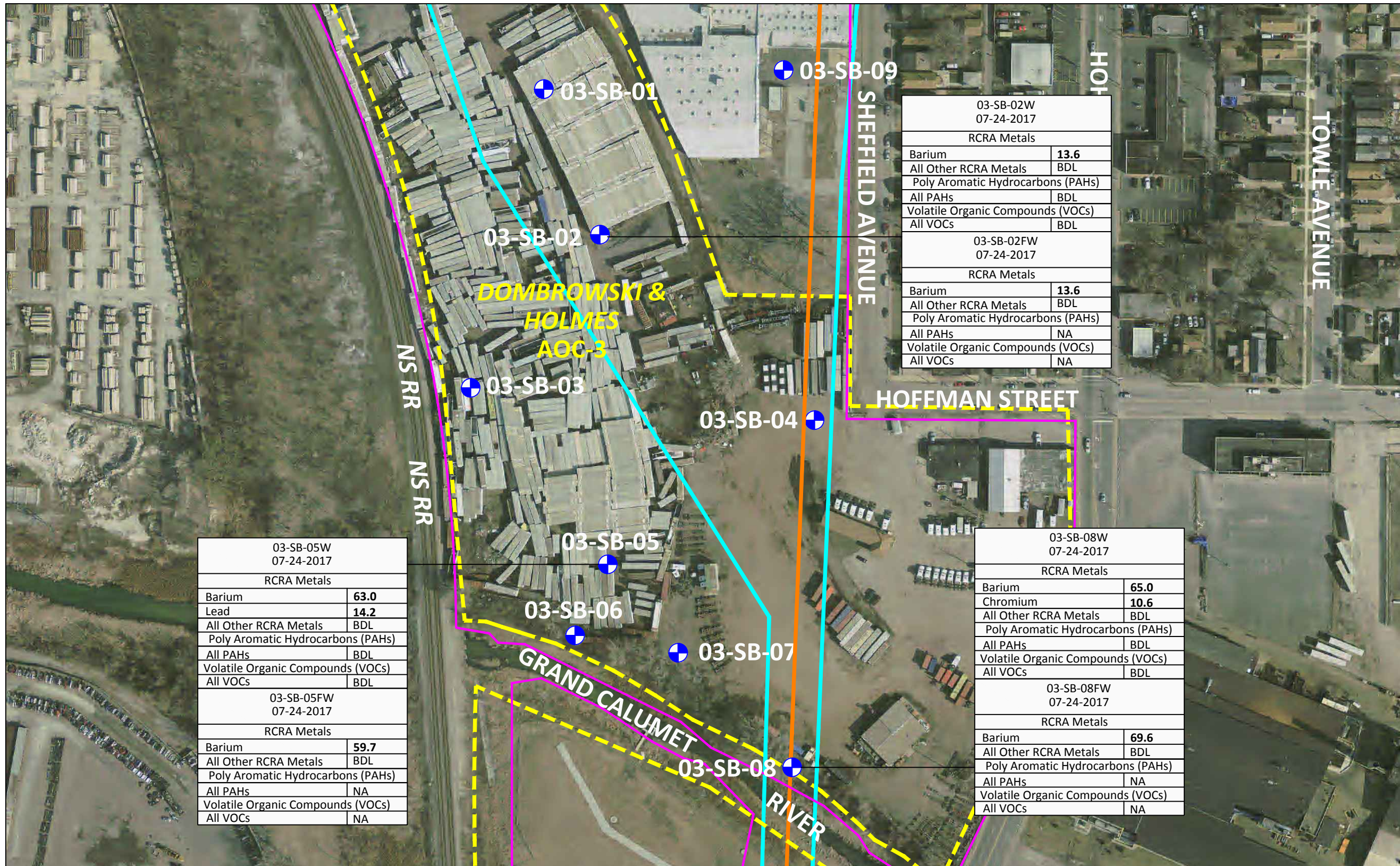
Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

West Lake Corridor Project
Soil Analytical Results
AOC-3
Hammond, Indiana

- Boring Locations
- Proposed Alignment
- Acquisition Area
- Recognized Environmental Condition
- Tentative Construction Limits
- Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)

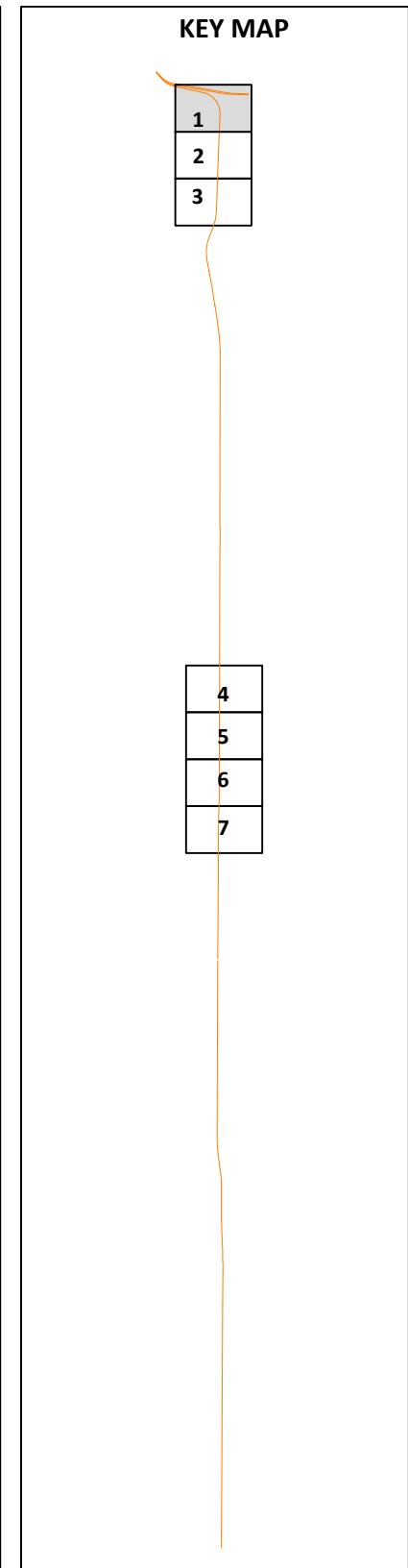
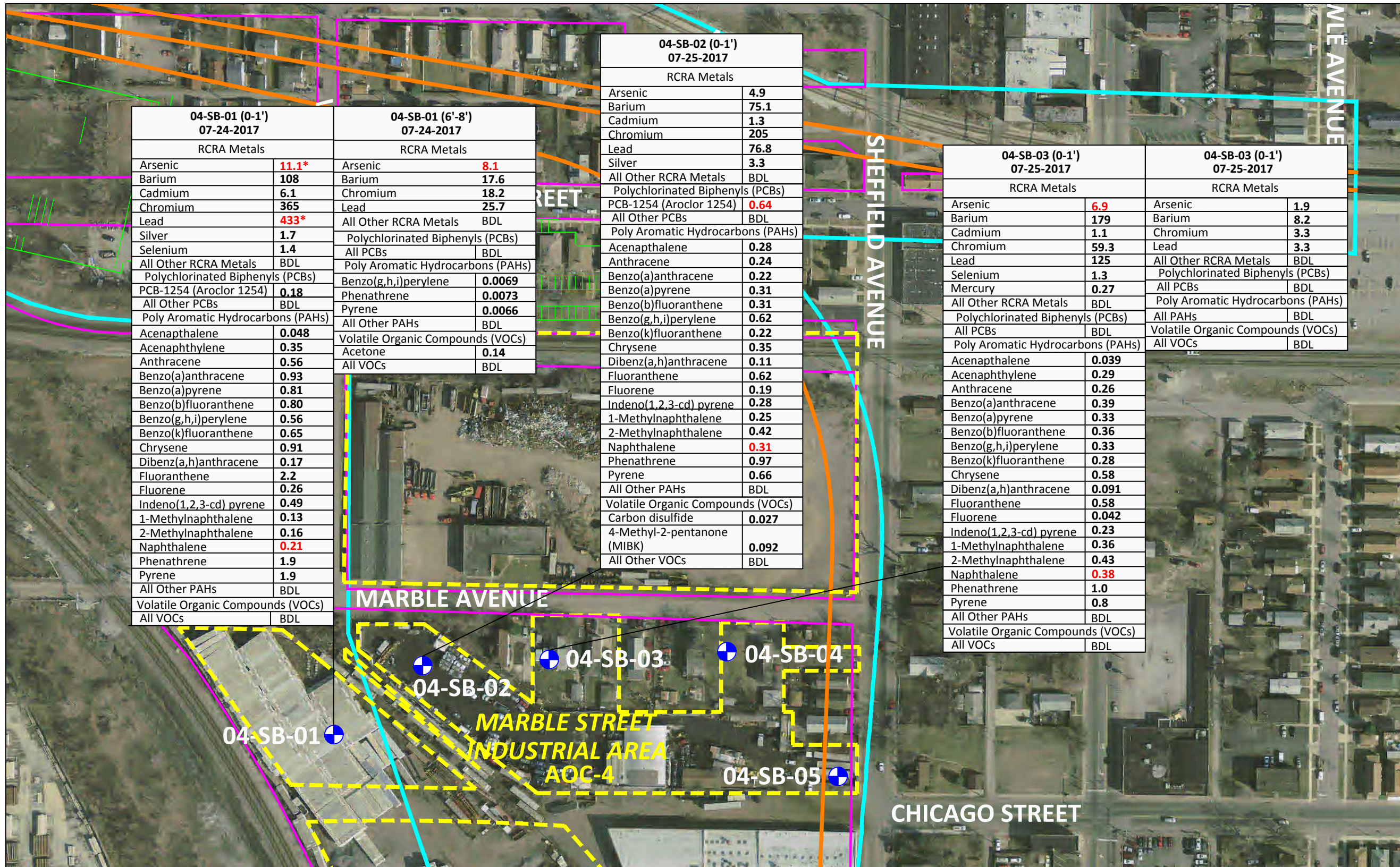
- Denotes analyte detected above laboratory detection limit
- Detected concentration exceeds soil migration to groundwater (MTG) screening levels
- Detected concentration exceeds Residential Direct Contact screening levels
- Detected concentration exceeds Commercial/ Industrial Direct Contact screenings levels
- Detected concentration exceeds Excavation Direct Contact screening levels
- BDL - Below Detection Limits
- ##J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit





Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

| | | | | |
|---|--|--|--|--|
| West Lake Corridor Project Groundwater Analytical Results AOC-3 Hammond, Indiana | Boring Locations Proposed Alignment Acquisition Area Recognized Environmental Condition Tentative Construction Limits Proposed Construction Limits All Units Reported in micrograms per liter (µg/L) | Bold - Detected concentration Bold - Detected concentration exceeds Groundwater Tap Residential screening levels Bold * - Detected concentration exceeds RCG 2017 Vapor Exposure Residential screening levels BDL - Below Detection Limits NA - Not Analyzed Sample IDs ending in '-FW' are field filtered groundwater samples | | |
| | | | | |

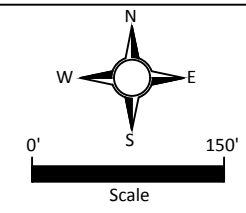


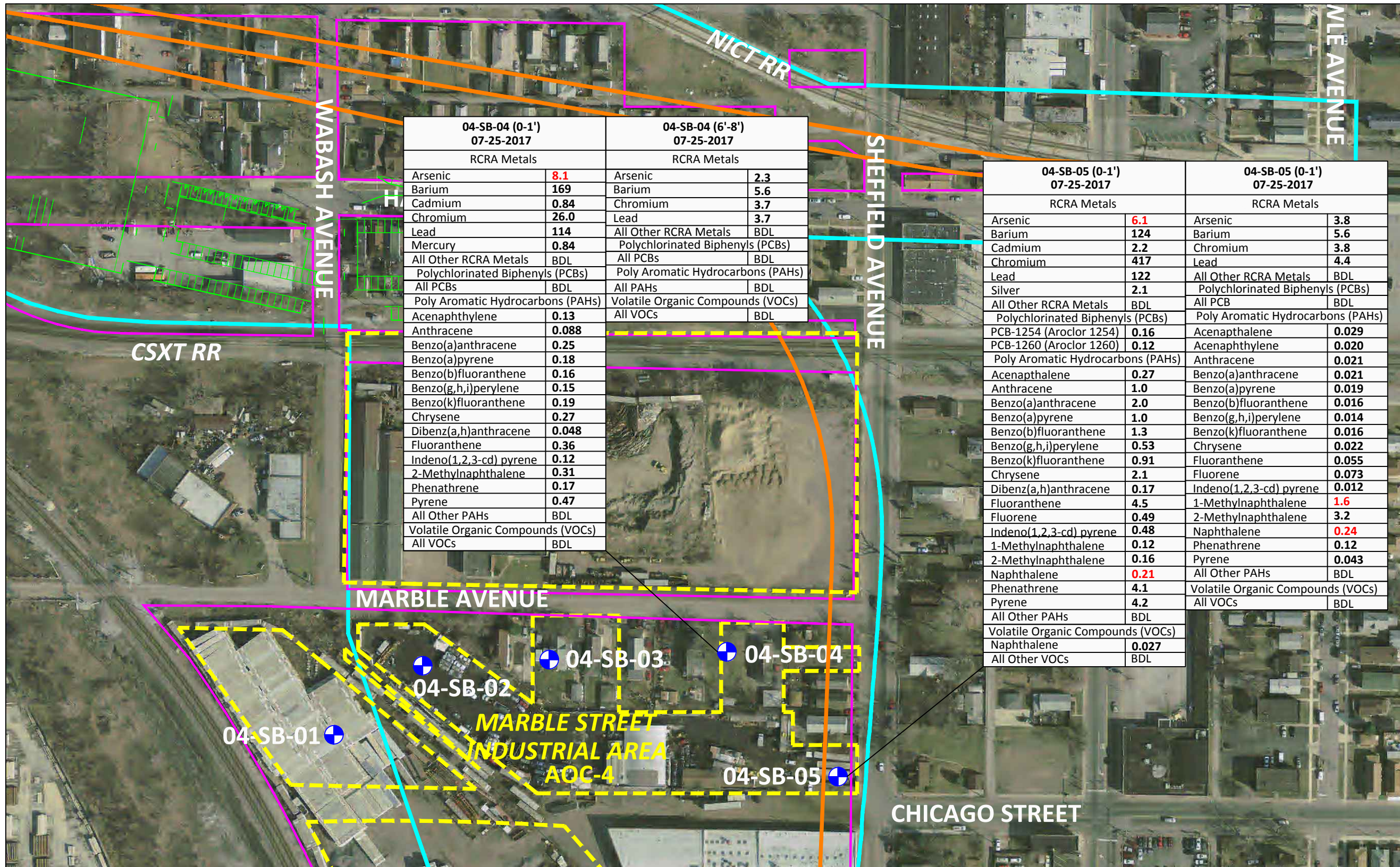
Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

Westlake Corridor Project
Soil Analytical Results
AOC-4
Hammond, Indiana

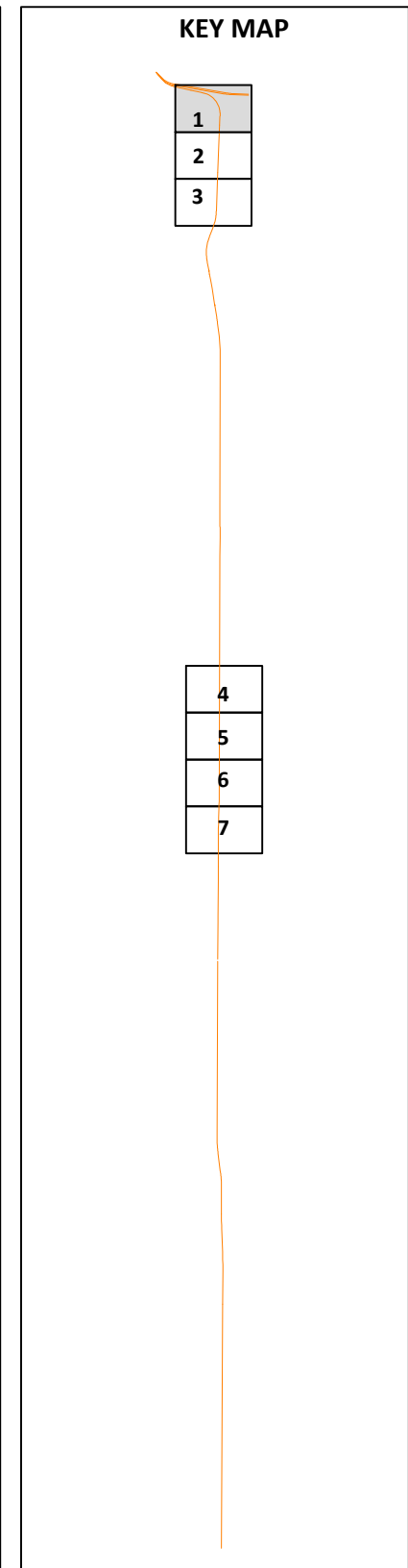
- Boring Locations
- Proposed Alignment
- Recognized Environmental Condition
- Tentative Construction Limits
- Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)

Bold - Denotes analyte detected above laboratory detection limit
Bold - Detected concentration exceeds soil migration to groundwater (MTG) screening levels
Bold* - Detected concentration exceeds Residential Direct Contact screening levels
Bold** - Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels
Bold*** - Detected concentration exceeds Excavation Direct Contact screening levels
 BDL - Below Detection Limits





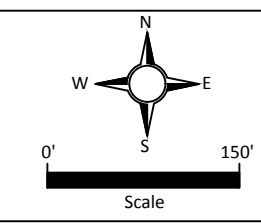
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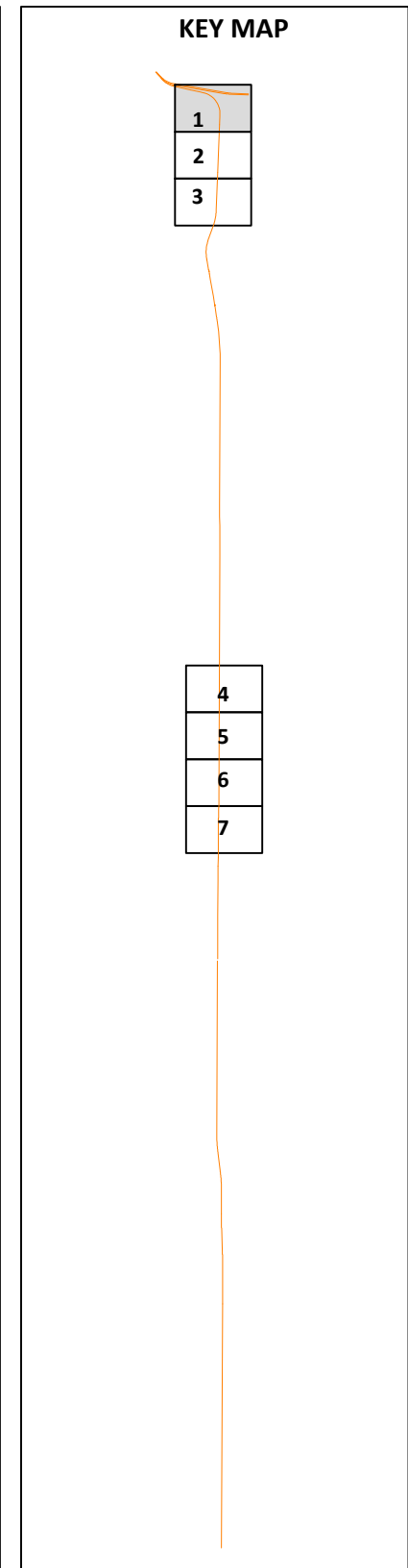
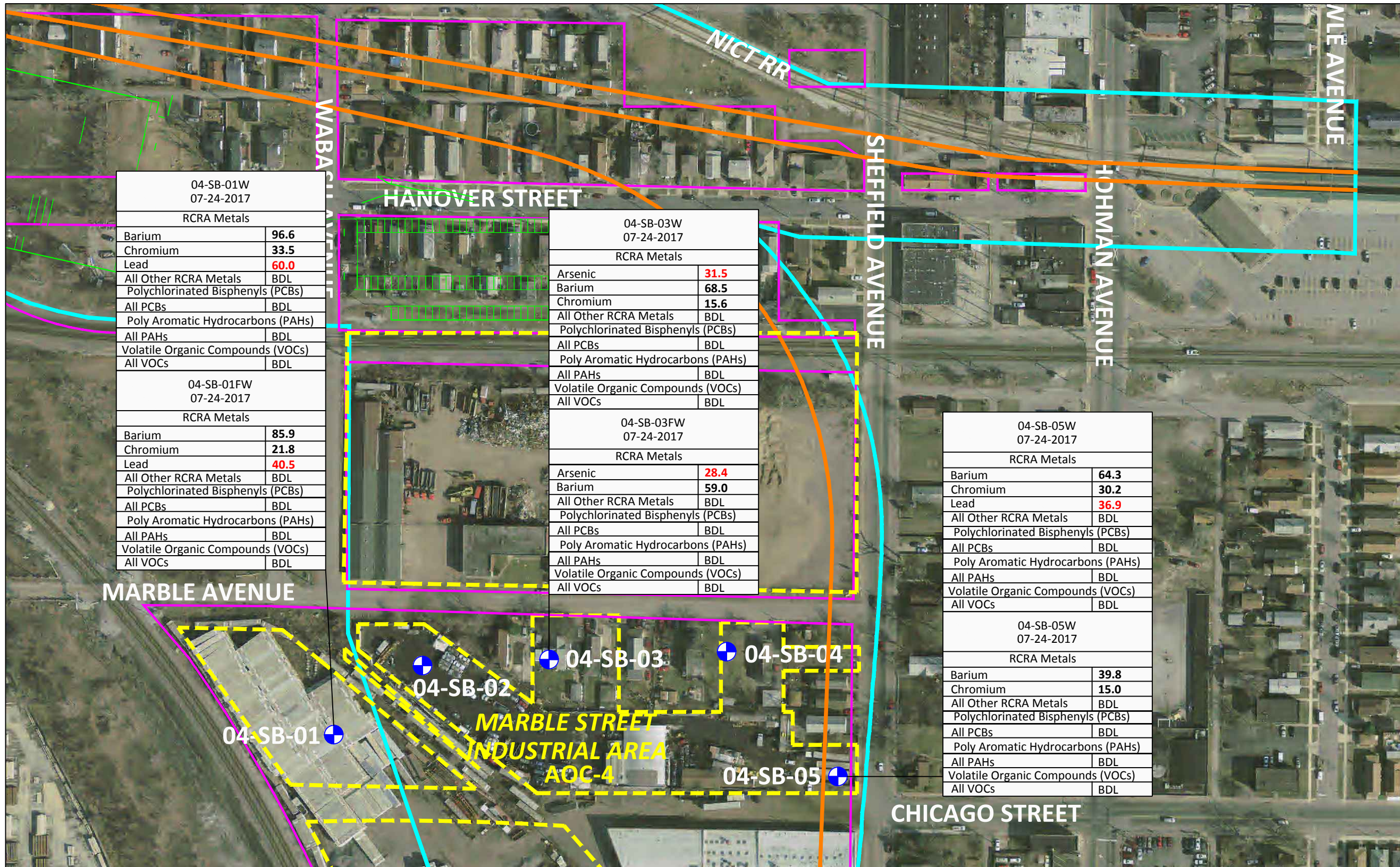


Westlake Corridor Project
Soil Analytical Results
AOC-4
Hammond, Indiana

- Boring Locations
- Proposed Alignment
- Recognized Environmental Condition
- Tentative Construction Limits
- Proposed Construction Limits
- All Units Reported in milligrams per kilogram (mg/kg)






Bold - Denotes analyte detected above laboratory detection limit
Bold - Detected concentration exceeds soil migration to groundwater (MTG) screening levels
Bold* - Detected concentration exceeds Residential Direct Contact screening levels
Bold** - Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels
Bold*** - Detected concentration exceeds Excavation Direct Contact screening levels
 BDL - Below Detection Limits



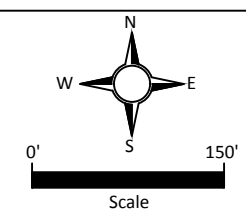


Source: <https://gisdb.uits.indiana.edu/portal/map/m10000.html>

West Lake Corridor Project
Groundwater Analytical Results
AOC-4
Hammond, Indiana

-  Boring Locations
 -  Proposed Alignment
 -  Acquisition Area
 -  Recognized Environmental Condition Tentative Construction Limits
 -  Proposed Construction Limits
- All Units Reported in micrograms per liter (µg/L)

- Bold** - Detected concentration
- Bold** - Detected concentration exceeds Groundwater Tap Residential screening levels
- Bold *** - Detected concentration exceeds RCG 2017 Vapor Exposure Residential screening levels
- BDL - Below Detection Limits
- NA - Not Analyzed
- Sample IDs ending in '-FW' are field filtered groundwater samples





West Lake Corridor
Phase II ESA Report

Appendix B. Boring Logs



West Lake Corridor
Phase II ESA Report

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02-SB-01 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 8/3/2017

DEPTH TO WATER: 8'

DATE FINISHED: 8/3/2017

TOTAL DEPTH: 20'


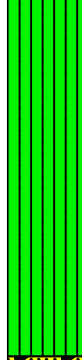



BORING NO: 02-SB-01

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Along northeastern border of AOC #2



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|----|-----|------|---|----|--|---|--|
| 0 | | | | | | TOPSOIL: TOPSOIL/ organics |  | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.0 | 0.0 | | | ML: Dark brown, sandy SILT |  | |
| 2 | | | | | | | | |
| 3 | 2 | 1.0 | 0.0 | | SM | | | |
| 4 | | | | | | @ 4' bgs color change to dark gray | | |
| 5 | 3 | 1.0 | 0.0 | | | | | |
| 6 | | | | | | | | |
| 7 | 4 | 1.0 | 0.0 | | VM | GW: Dark gray, silty well-graded GRAVEL, with trace poorly-graded sand |  | |
| 8 | | | | ▼ | | | | |
| 9 | 5 | 1.0 | 40.8 | | | SP: Dark gray, silty, poorly-graded SAND |  | |
| 10 | | | | | | | | @ 8'-12' bgs petro-like odors and iridescence |
| 11 | 6 | 1.0 | 45.0 | | | | | |
| 12 | | | | | | | | |
| 13 | 7 | 1.0 | 31.4 | | W | | | @ 12'-16' bgs dark amber staining |
| 14 | | | | | | | | @ 13.5' bgs 3" petro-like sheen and iridescence |
| 15 | 8 | 1.0 | 6.4 | | | | | |
| 16 | | | | | | | | |
| 17 | 9 | 1.0 | 10.0 | | | | | @ 17.5' bgs 1" seam of well-graded gravel |
| 18 | | | | | | | | |
| 19 | 10 | 1.0 | 93.6 | | SM | CL: Dark gray CLAY |  | * Sample collected from 18'-20' interval for laboratory analysis |
| 20 | | | | | | | | Bottom of boring @ 20' bgs |

02-SB-02 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 8/3/2017

DEPTH TO WATER: 13'

DATE FINISHED: 8/3/2017

TOTAL DEPTH: 22'

BORING NO: 02-SB-02

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Towards northeastern border of AOC #2



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | | |
|----|----|-----|------|---|----|--|--|---|--|
| 0 | | | | | | GW: Well-graded GRAVEL, with some concrete | | * Sample collected from 0'-1' interval for laboratory analysis | |
| 1 | 1 | 1.5 | 0.0 | | SM | | | | |
| 2 | | | | | | | | | |
| 3 | 2 | 1.5 | 0.0 | | | ML: Black, sandy SILT, with trace well-graded gravel | | @ 3' bgs 3" dark black clayey silt seam | |
| 4 | | | | | | | | | |
| 5 | 3 | 1.0 | 24.6 | | | GW: Black, silty, well-graded GRAVEL, with some clayey, well-graded sand | | @ 6'-7' bgs very strong petro-like odor and sheen/ yellow residue | |
| 6 | | | | | | | | | |
| 7 | 4 | 1.0 | 73.2 | | | CL: Dark gray CLAY, with some poorly-graded sand | | | |
| 8 | | | | | VM | | | | |
| 9 | 5 | 1.5 | 77.4 | | | | | | |
| 10 | 6 | 1.5 | 65.8 | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | SP: Dark gray, silty, poorly-graded SAND | | @ 3'-20' bgs petro-like odor | |
| 13 | 7 | 1.5 | 12.8 | ▼ | | | | | |
| 14 | | | | | | | | | |
| 15 | 8 | 1.5 | 1.2 | | W | | | @ 16'-18' bgs amber color staining | |
| 16 | | | | | | | | | @ 16.5' bgs 2" seam of petro staining and iridescence |
| 17 | 9 | 1.5 | 147 | | | | | | * Sample collected from 16'-18' interval for laboratory analysis |
| 18 | | | | | | | | | |
| 19 | 10 | 1.5 | 19.7 | | | | | | |
| 20 | | | | | | | | @ 20' bgs 2" well-graded gravel seam | |
| 21 | 11 | 1.5 | 4.2 | | SM | CL: Dark gray CLAY | | | |
| 22 | | | | | | | | Bottom of boring @ 22' bgs | |

02-SB-03 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 8/3/2017

DEPTH TO WATER: 12'

DATE FINISHED: 8/3/2017

TOTAL DEPTH: 20'

BORING NO: 02-SB-03

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Towards center of AOC #2



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|----|-----|-----|---|----|---|--|--|
| 0 | | | | | | ML: Dark brown SILT, with some well-graded gravel and some poorly-graded sand | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 2.0 | 0.0 | | | | | |
| 2 | | | | | | | | |
| 3 | 2 | 2.0 | 0.1 | | | | | |
| 4 | | | | | SM | @ 4' bgs color change to black | | |
| 5 | 3 | 2.0 | 4.1 | | | | | |
| 6 | | | | | | | | |
| 7 | 4 | 2.0 | 0.9 | | | | | @ 7' bgs 6" petro-like staining/odor |
| 8 | | | | | | @ 8' bgs color change to dark brown and with some sand | | |
| 9 | 5 | 1.0 | 0.1 | | VM | | | |
| 10 | | | | | | | | |
| 11 | 6 | 1.0 | 0.0 | | | SP: Dark gray, silty, poorly-graded SAND | | * Sample collected from 10'-12' interval for laboratory analysis |
| 12 | | | | ▼ | | | | |
| 13 | 7 | 1.5 | 0.0 | | | | | |
| 14 | | | | | | | | |
| 15 | 8 | 1.5 | 0.0 | | | | | |
| 16 | | | | | W | | | |
| 17 | 9 | 1.5 | 0.0 | | | | | |
| 18 | | | | | | | | |
| 19 | 10 | 1.5 | 0.0 | | | | | |
| 20 | | | | | SM | CL: Dark gray CLAY | | |

02-SB-04 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 8/3/2017

DEPTH TO WATER: 12'

DATE FINISHED: 8/3/2017

TOTAL DEPTH: 20'

BORING NO: 02-SB-04

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Towards center of AOC #2



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|----|-----|-----|---|----|--|--|--|
| 0 | | | | | | FILL: FILL, with some well-graded gravel | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 0.0 | | | | | |
| 2 | | | | | | SP: Black, gravelly, poorly-graded SAND | | @ 2'-20' bgs mild petro-like odor |
| 3 | 2 | 1.5 | 0.0 | | | | | |
| 4 | | | | | SM | ML: Black, sandy, clayey SILT | | |
| 5 | 3 | 1.5 | 6.2 | | | | | |
| 6 | | | | | | | | |
| 7 | 4 | 1.5 | 1.1 | | | | | |
| 8 | | | | | | | | |
| 9 | 5 | 1.5 | 0.0 | | | SP: Brown, silty, poorly-graded SAND | | |
| 10 | | | | | M | | | * Sample collected from 10'-12' interval for laboratory analysis |
| 11 | 6 | 1.5 | 0.0 | | | @ 11' bgs color change to gray | | @ 11' bgs 3" brown silty clay seam |
| 12 | | | | ▼ | VM | | | |
| 13 | 7 | 1.5 | 0.0 | | | | | |
| 14 | | | | | | | | |
| 15 | 8 | 1.5 | 0.0 | | | | | |
| 16 | | | | | W | | | |
| 17 | 9 | 1.5 | 0.0 | | | | | |
| 18 | | | | | | | | |
| 19 | 10 | 1.5 | 0.0 | | | | | |
| 20 | | | | | SM | CL: Gray CLAY, with few poorly-graded sand | | Bottom of boring @ 20' bgs |

02-SB-05 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 8/3/2017

DEPTH TO WATER: 8.5'

DATE FINISHED: 8/3/2017

TOTAL DEPTH: 20'

BORING NO: 02-SB-05

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Towards southwest border of AOC #2



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|----|-----|------|--|----|---|--|--|
| 0 | | | | | | TOPSOIL: TOPSOIL/ organics | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 3.1 | | | FILL: Gray FILL, with some red brick and gravel | | |
| 2 | | | | | | | | |
| 3 | 2 | 1.5 | 3.2 | | SM | | | @ 3' bgs 3" tan, poorly-graded sand seam |
| 4 | | | | | | SP: Dark gray, silty, poorly-graded SAND | | @ 3.5'-8' bgs petro-like odor |
| 5 | 3 | 1.5 | 4.6 | | | | | |
| 6 | | | | | M | | | * Sample collected from 6'-8' interval for laboratory analysis |
| 7 | 4 | 1.5 | 66.3 | | VM | | | @ 7' bgs petroleum sheen |
| 8 | | | | | | | | |
| 9 | 5 | 2.0 | 1.1 | | | | | |
| 10 | | | | | | | | |
| 11 | 6 | 2.0 | 0.3 | | | | | |
| 12 | | | | | | | | |
| 13 | 7 | 2.0 | 0.3 | | | | | |
| 14 | | | | | | | | |
| 15 | 8 | 2.0 | 0.2 | | W | | | |
| 16 | | | | | | | | |
| 17 | 9 | 2.0 | 0.1 | | | | | |
| 18 | | | | | | | | |
| 19 | 10 | 2.0 | 0.0 | | | | | |
| 20 | | | | | | | | |
| 21 | 11 | 2.0 | 0.0 | | SM | CL: Tan CLAY | | |
| 22 | | | | | | | | Bottom of boring @ 22' bgs |

02-SB-06 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 8/3/2017

DEPTH TO WATER: 6'

DATE FINISHED: 8/3/2017

TOTAL DEPTH: 16'



BORING NO: 02-SB-06

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Along southwest border of AOC #2



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|--|--|--|
| 0 | | | | | | TOPSOIL: TOPSOIL/ organics |  | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 0.3 | | SM | SP: Tan/ gray, silty, poorly-graded SAND |  | |
| 2 | | | | | M | | | |
| 3 | 2 | 1.5 | 0.5 | | | | | |
| 4 | | | | | VM | | | |
| 5 | 3 | 1.5 | 8.0 | | | | | @ 5' bgs 1" mottling seam |
| 6 | | | | ▼ | | @ 6' bgs color turns dark gray/ black | | |
| 7 | 4 | 1.5 | 8.6 | | W | | | |
| 8 | | | | | | | | |
| 9 | 5 | 2.0 | 9.4 | | | | | @ 6.5'-16' bgs petro-like odor |
| 10 | | | | | VM | | | |
| 11 | 6 | 2.0 | 7.8 | | | | | |
| 12 | | | | | | | | |
| 13 | 7 | 2.0 | 9.9 | | | | | * Sample collected from 12'-14' interval for laboratory analysis |
| 14 | | | | | M | | | |
| 15 | 8 | 2.0 | 8.9 | | | | | |
| 16 | | | | | | | | Bottom of boring @ 16' bgs due to sand heaving |

02-SB-07 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/25/2017

DEPTH TO WATER: 8'

DATE FINISHED: 7/25/2017

TOTAL DEPTH: 12'














BORING NO: 02-SB-07

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #2 - Center of 4926 Hohman Avenue



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|--|---|--|
| 0 | | | | | | TOPSOIL: TOPSOIL |  | |
| 1 | 1 | 2.0 | 0.0 | | | SM: Tan/brown, silty SAND, with few well-graded gravel |  | * Sample collected from 0'-1' interval for laboratory analysis |
| 2 | | | | | SM | |  | @ 1.5' bgs 3" seam of odorless black gravelly sand |
| 3 | 2 | 2.0 | 0.0 | | | |  | @ 3' bgs 2" red oxidation seam |
| 4 | | | | | | |  | |
| 5 | 3 | 2.0 | 0.0 | | | |  | |
| 6 | | | | | M | |  | |
| 7 | 4 | 2.0 | 0.1 | | | |  | |
| 8 | | | | ▼ | VM | |  | * Sample collected from 6'-8' interval for laboratory analysis |
| 9 | 5 | 2.0 | 0.0 | | | |  | |
| 10 | | | | | W | @ 10' bgs color change to dark brown |  | |
| 11 | 6 | 2.0 | 0.9 | | | |  | |
| 12 | | | | | | |  | Bottom of boring @ 12' bgs |

03-SB-01 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 8'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 12'





BORING NO: 03-SB-01

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #3 - West adjacent to 4714 Sheffield Avenue building



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|---|---|--|
| 0 | | | | | | Fill: Black FILL |  | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 2.0 | 1.8 | | | ML: Dark brown SILT, with some well-graded gravel |  | @ 2' bgs 2" wood and metal seam |
| 2 | | | | | | | | |
| 3 | 2 | 2.0 | 0.1 | | | | | |
| 4 | | | | | SM | | | |
| 5 | 3 | 1.0 | 0.0 | | | SP: Brown, silty, poorly graded SAND, with trace well-graded gravel |  | @ 6' bgs 2" seam of white substance (paint or plaster) @ 6.5' bgs 1" odorless black sand seam |
| 6 | | | | | | | | * Sample collected from 6'-8' interval for laboratory analysis |
| 7 | 4 | 1.0 | 0.0 | | VM | | | |
| 8 | | | | ▼ | | | | |
| 9 | 5 | 2.0 | 0.4 | | | | | |
| 10 | | | | | W | @ 10' color change to gray, and with no well-graded gravel |  | |
| 11 | 6 | 2.0 | 0.3 | | | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |

03-SB-02 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 7'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 12'

BORING NO: 03-SB-02

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #3 - Southwest adjacent to 4714 Sheffield Avenue building



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|




| | | | | | | | | |
|----|---|-----|-----|---|----|---|--|--|
| 0 | | | | | | FILL: Black FILL, with well-graded gravel and asphalt | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 0.9 | | | | | |
| 2 | | | | | | | | |
| 3 | 2 | 1.5 | 0.2 | | SM | SP: Black/ gray SAND, with few well-graded gravel and asphalt | | |
| 4 | | | | | | | | |
| 5 | 3 | 1.5 | 0.6 | | | SM: Tan, silty SAND, with few well-graded gravel | | |
| 6 | | | | | | | | |
| 7 | 4 | 1.5 | 0.5 | ▼ | VM | | | * Sample collected from 6'-8' interval for laboratory analysis |
| 8 | | | | | | | | |
| 9 | 5 | 1.5 | 0.5 | | | | | |
| 10 | | | | | | | | |
| 11 | 6 | 1.5 | 0.3 | | W | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |

03-SB-03 FIELD BORING LOG

| | |
|---|---|
| PROJECT NAME: NICTD West Lake Corridor | DRILLING COMPANY: Direct Push Analytical Corp. |
| PROJECT NO: 16-0172 | DRILLING METHOD: 2" Dual Tube Geoprobe |
| DATE BEGAN: 7/24/2017 | DEPTH TO WATER: 8' |
| DATE FINISHED: 7/24/2017 | TOTAL DEPTH: 12' |
| BORING NO: 03-SB-03 | FIELD SPECIALIST: Samir Raman & Kennita Jones |
| BORING LOCATION: AOC #3 - Center of the western border of AOC #3 | |



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|---|---|--|
| 0 | | | | | | ASPHALT: ASPHALT/ Concrete |  | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 0.3 | | | ML: Black/ brown SILT, with some well-graded gravel |  | @ 2' bgs 1" brick seam |
| 2 | | | | | | | | |
| 3 | 2 | 1.5 | 0.4 | | | | | |
| 4 | | | | | SM | | | |
| 5 | 3 | 1.0 | 0.5 | | | | | @ 3'-7' bgs miscellaneous glass, slag, and concrete debris |
| 6 | | | | | | | | |
| 7 | 4 | 1.0 | 0.0 | | | | | * Sample collected from 6'-8' interval for laboratory analysis |
| 8 | | | | ▼ | | @ 8' bgs color change to red/ brown | | |
| 9 | 5 | 1.5 | 0.0 | | | SP: Gray/ black, silty, fine, poorly-graded SAND |  | |
| 10 | | | | | W | @ 10' bgs color change to brown/ gray | | |
| 11 | 6 | 1.5 | 0.0 | | | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |

03-SB-04 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 6.5'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 12'

BORING NO: 03-SB-04

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #3 - Center of AOC #3



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|---|--|--|
| 0 | | | | | | ASPHALT: ASPHALT | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 2.0 | 0.0 | | SM | ML: Dark brown/ gray, sandy SILT, with some well-graded gravel | | |
| 2 | | | | | | SP: Dark brown/ gray silty, poorly-graded SAND, with trace well-graded gravel | | @ 2'-3' bgs odorless black poorly-graded sand |
| 3 | 2 | 2.0 | 0.0 | | | @ 3' bgs color change to brown | | |
| 4 | | | | | VM | | | |
| 5 | 3 | 2.0 | 0.0 | | | | | * Sample collected from 4'-6' interval for laboratory analysis |
| 6 | | | | ▼ | | | | |
| 7 | 4 | 2.0 | 0.0 | | | | | |
| 8 | | | | | | | | |
| 9 | 5 | 2.0 | 0.0 | | W | | | |
| 10 | | | | | | | | |
| 11 | 6 | 2.0 | 0.0 | | | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |

03-SB-05 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 10'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 16'

BORING NO: 03-SB-05

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #3 - Towards entrance to trailer staging area



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|---|--|---|
| 0 | | | | | | FILL: Gray/black FILL, with some well-graded gravel | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 1.4 | | | | | |
| 2 | | | | | | | | |
| 3 | 2 | 1.5 | 2.6 | | | ML: Brown, sandy SILT, with some well-graded gravel | | |
| 4 | | | | | SM | GW: Black/ gray, silty, well-graded GRAVEL | | |
| 5 | 3 | 1.0 | 1.4 | | | | | @ 5' bgs 3" asphalt seam |
| 6 | | | | | | | | |
| 7 | 4 | 1.0 | 0.8 | | | | | @ 7' bgs 3" red brick seam |
| 8 | | | | | | | | |
| 9 | 5 | 1.0 | 1.0 | | VM | | | * Sample collected from 8'-10' interval for laboratory analysis |
| 10 | | | | ▼ | | SM: Gray, silty SAND, with few well-graded gravel | | |
| 11 | 6 | 1.0 | 1.8 | | | | | |
| 12 | | | | | | | | |
| 13 | 7 | 1.0 | 0.8 | | W | | | |
| 14 | | | | | | | | |
| 15 | 8 | 1.0 | 1.2 | | | | | |
| 16 | | | | | | | | Bottom of boring @ 16' bgs |

03-SB-06 FIELD BORING LOG

| | |
|---|---|
| PROJECT NAME: NICTD West Lake Corridor | DRILLING COMPANY: Direct Push Analytical Corp. |
| PROJECT NO: 16-0172 | DRILLING METHOD: 2" Dual Tube Geoprobe |
| DATE BEGAN: 7/24/2017 | DEPTH TO WATER: N/A |
| DATE FINISHED: 7/24/2017 | TOTAL DEPTH: 12' |
| BORING NO: 03-SB-06 | FIELD SPECIALIST: Samir Raman & Kennita Jones |
| BORING LOCATION: AOC #3 - Towards southwest corner of AOC #3 | |



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | | | | |
|----|---|-----|-----|--|----|---|--|---|---|--|------------------------------|
| 0 | | | | | | ML: Dark brown, sandy SILT, with some well-graded gravel | | * Sample collected from 0'-1' interval for laboratory analysis @ 0.5' bgs 1" red brick seam | | | |
| 1 | 1 | 2.0 | 0.0 | | | | | | | | |
| 2 | | | | | | | | | | | @ 2' bgs 2" glass/ slag seam |
| 3 | 2 | 2.0 | 0.5 | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | 3 | 1.5 | 0.1 | | | | | | | | |
| 6 | | | | | SM | | | | | | |
| 7 | 4 | 1.5 | 0.0 | | | @ 7' bgs color change to black/ brown | | * Sample collected from 6'-8' interval for laboratory analysis | | | |
| 8 | | | | | | | | @ 8' bgs 1" red brick/ tan poorly-graded sand seam | | | |
| 9 | 5 | 0.5 | 0.0 | | | SP: Tan, poorly-graded SAND, with some well-graded gravel | | | | | |
| 10 | | | | | | | | | | | |
| 11 | 6 | 0.5 | 0.0 | | | | | | @ 12' bgs 2" glass/ red brick seam | | |
| 12 | | | | | | | | | Bottom of boring @ 12' bgs due to probe refusal | | |

03-SB-07 FIELD BORING LOG

| | |
|---|---|
| PROJECT NAME: NICTD West Lake Corridor | DRILLING COMPANY: Direct Push Analytical Corp. |
| PROJECT NO: 16-0172 | DRILLING METHOD: 2" Dual Tube Geoprobe |
| DATE BEGAN: 7/24/2017 | DEPTH TO WATER: N/A |
| DATE FINISHED: 7/24/2017 | TOTAL DEPTH: 4' |
| BORING NO: 03-SB-07 | FIELD SPECIALIST: Samir Raman & Kennita Jones |
| BORING LOCATION: AOC #3 - Towards southwest corner of Djuric Trucking facility | |



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|---|---|-----|-----|--|----|-------------------------------|--|--|
| 0 | | | | | | ASPHALT: ASPHALT | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 0.5 | 0.0 | | SM | ML: Dark brown, gravelly SILT | | |
| 2 | | | | | | | | |
| 3 | 2 | 0.5 | 0.0 | | | | | |
| 4 | | | | | | | | Bottom of boring @ 4' bgs due to probe refusal |

03-SB-08 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 12'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 16'

BORING NO: 03-SB-08

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #3 - Towards the center of the southern border of the Djuric Trucking facility



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|--|--|--|
| 0 | | | | | | FILL: Black FILL, with some well-graded gravel and asphalt | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 1.7 | | | | | |
| 2 | | | | | | | | |
| 3 | 2 | 1.5 | 2.1 | | SM | SM: Gray/ tan, silty SAND, with few well-graded gravel | | |
| 4 | | | | | | | | |
| 5 | 3 | 1.5 | 0.0 | | | | | |
| 6 | | | | | | | | |
| 7 | 4 | 1.5 | 0.0 | | | | | |
| 8 | | | | | | | | |
| 9 | 5 | 1.0 | 0.0 | | | | | |
| 10 | | | | | | | | |
| 11 | 6 | 1.0 | 0.0 | | VM | | | |
| 12 | | | | ▼ | | | | |
| 13 | 7 | 1.0 | 0.0 | | | | | |
| 14 | | | | | W | | | |
| 15 | 8 | 1.0 | 0.1 | | | | | |
| 16 | | | | | | | | Bottom of boring @ 16' bgs |

03-SB-09 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 7'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 12'

BORING NO: 03-SB-09

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #3 - Towards the entrance to the 4714 Sheffield Avenue building



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|--|--|--|
| 0 | | | | | | FILL: Black FILL/ asphalt | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 0.3 | | | @ 1' bgs color change to white, with no asphalt | | |
| 2 | | | | | SM | SM: Tan, silty SAND, with few well-graded gravel | | * Sample collected from 6'-8' interval for laboratory analysis |
| 3 | 2 | 1.5 | 0.0 | | | | | |
| 4 | | | | | | | | |
| 5 | 3 | 1.5 | 0.0 | | VM | | | |
| 6 | | | | ▼ | | | | |
| 7 | 4 | 1.5 | 0.0 | | | | | |
| 8 | | | | | | | | |
| 9 | 5 | 1.5 | 0.1 | | W | | | |
| 10 | | | | | | | | |
| 11 | 6 | 1.5 | 0.0 | | | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |

04-SB-01 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/24/2017

DEPTH TO WATER: 8'

DATE FINISHED: 7/24/2017

TOTAL DEPTH: 16'

BORING NO: 04-SB-01

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #4 - Towards the northern portion of the trailer staging area



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|


| | | | | | | | | |
|----|---|-----|-----|---|----|--|--|--|
| 0 | | | | | | FILL: Black/ gray FILL, with some well-graded gravel and asphalt | | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.5 | 0.1 | | SM | | | |
| 2 | | | | | | | | |
| 3 | 2 | 1.5 | 0.3 | | | | | |
| 4 | | | | | | ML: Black, clayey SILT, with few well-graded gravel | | * Sample collected from 6'-8' interval for laboratory analysis |
| 5 | 3 | 1.5 | 0.7 | | | | | |
| 6 | | | | | | SM: Tan, silty SAND, with few well-graded gravel | | |
| 7 | 4 | 1.5 | 0.7 | | | | | |
| 8 | | | | ▼ | | @ 10' bgs color change to gray | | |
| 9 | 5 | 1.5 | 0.3 | | W | | | |
| 10 | | | | | | | | |
| 11 | 6 | 1.5 | 0.1 | | | | | |
| 12 | | | | | | | | |
| 13 | 7 | 1.5 | 0.0 | | | | | |
| 14 | | | | | | Bottom of boring @ 12' bgs | | |
| 15 | 8 | 1.5 | 0.0 | | | | | |
| 16 | | | | | | | | |

04-SB-02 FIELD BORING LOG

| | |
|--|---|
| PROJECT NAME: NICTD West Lake Corridor | DRILLING COMPANY: Direct Push Analytical Corp. |
| PROJECT NO: 16-0172 | DRILLING METHOD: 2" Dual Tube Geoprobe |
| DATE BEGAN: 7/25/2017 | DEPTH TO WATER: N/A |
| DATE FINISHED: 7/25/2017 | TOTAL DEPTH: 2' |
| BORING NO: 04-SB-02 | FIELD SPECIALIST: Samir Raman & Kennita Jones |
| BORING LOCATION: AOC #4 - Towards the western portion of Mickey's Auto & Truck facility | |



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|---|---|------|-----|--|----|------------------------|---|--|
| 0 | | | | | | FILL: Black/ gray FILL |  | * Sample collected from 0'-1' interval for laboratory analysis Bottom of boring @ 2' bgs due to probe refusal |
| 1 | 1 | 0.25 | 0.3 | | SM | | | |
| 2 | | | | | | | | |

04-SB-03 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/25/2017

DEPTH TO WATER: 6'

DATE FINISHED: 7/25/2017

TOTAL DEPTH: 12'




BORING NO: 04-SB-03

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #4 - Side yard of 228 Marble Street



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|--|--|---|
| 0 | | | | | | TOPSOIL: TOPSOIL/ organics |  | * Sample collected from 0'-1' interval for laboratory analysis @ 1' bgs 1" silty sand seam |
| 1 | 1 | 2.0 | 0.7 | | SM | ML: Tan/ brown, sandy SILT, with few well-graded gravel |  | |
| 2 | | | | | | SP: Brown, poorly-graded SAND, with trace well-graded gravel |  | |
| 3 | 2 | 2.0 | 0.3 | | | @ 2' bgs color change to black | | |
| 4 | | | | | | @ 3' bgs color change to gray/ brown | | |
| 5 | 3 | 2.0 | 0.7 | | VM | | | |
| 6 | | | | ▼ | | @ 6' bgs color change to brown | | * Sample collected from 4'-6' interval for laboratory analysis |
| 7 | 4 | 2.0 | 0.3 | | | | | |
| 8 | | | | | | | | |
| 9 | 5 | 2.0 | 0.2 | | W | | | |
| 10 | | | | | | @ 10' bgs color change to light gray | | |
| 11 | 6 | 2.0 | 0.2 | | | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |

04-SB-04 FIELD BORING LOG

PROJECT NAME: NICTD West Lake Corridor

DRILLING COMPANY: Direct Push Analytical Corp.

PROJECT NO: 16-0172

DRILLING METHOD: 2" Dual Tube Geoprobe

DATE BEGAN: 7/25/2017

DEPTH TO WATER: 8'

DATE FINISHED: 7/25/2017

TOTAL DEPTH: 12'



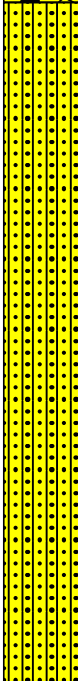
BORING NO: 04-SB-04

FIELD SPECIALIST: Samir Raman & Kennita Jones

BORING LOCATION: AOC #4 - Front yard of 240 Marble Street



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

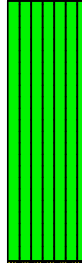
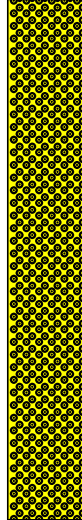
| | | | | | | | | | | | | |
|----|---|-----|-----|---|----|--|--|--|--|--|--|----------------------------|
| 0 | | | | | | TOPSOIL: TOPSOIL |  | * Sample collected from 0'-1' interval for laboratory analysis | | | | |
| 1 | 1 | 1.5 | 0.0 | | | FILL: Black/ gray FILL |  | | | | | |
| 2 | | | | | SM | SM: Tan, silty SAND, with few well-graded gravel |  | @ 3' bgs 2" silty clay seam | | | | |
| 3 | 2 | 1.5 | 0.1 | | | | | | | | | |
| 4 | | | | | M | | | | | | | |
| 5 | 3 | 1.5 | 0.5 | | | | | | | | | |
| 6 | | | | | VM | | | | | | | |
| 7 | 4 | 1.5 | 0.3 | | | | | | | | | |
| 8 | | | | ▼ | W | | | | | | | |
| 9 | 5 | 1.5 | 0.6 | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | 6 | 1.5 | 0.1 | | | | | | | | | |
| 12 | | | | | | | | | | | | Bottom of boring @ 12' bgs |

04-SB-05 FIELD BORING LOG

| | |
|---|---|
| PROJECT NAME: NICTD West Lake Corridor | DRILLING COMPANY: Direct Push Analytical Corp. |
| PROJECT NO: 16-0172 | DRILLING METHOD: 2" Dual Tube Geoprobe |
| DATE BEGAN: 7/25/2017 | DEPTH TO WATER: 7' |
| DATE FINISHED: 7/25/2017 | TOTAL DEPTH: 12' |
| BORING NO: 04-SB-05 | FIELD SPECIALIST: Samir Raman & Kennita Jones |
| BORING LOCATION: AOC #4 - Towards the southeastern portion of Mickey's Auto & Truck facility | |



| DEPTH (FT) | SAMPLE | RECOVERY (FT) | PID (ppm) | WATER TABLE | MOISTURE | DESCRIPTION | GRAPHIC | SAMPLES/NOTES |
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|
|------------|--------|---------------|-----------|-------------|----------|-------------|---------|---------------|

| | | | | | | | | |
|----|---|-----|-----|---|----|--|--|--|
| 0 | | | | | | ML: Black SILT, with some well-graded gravel |  | * Sample collected from 0'-1' interval for laboratory analysis |
| 1 | 1 | 1.0 | 0.3 | | | | | |
| 2 | | | | | | | | |
| 3 | 2 | 1.0 | 1.2 | | SM | | | |
| 4 | | | | | | SP: Gray/ brown, poorly-graded SAND |  | |
| 5 | 3 | 2.0 | 0.7 | | | @ 5.5' bgs color change to brown | | |
| 6 | | | | | VM | | | |
| 7 | 4 | 2.0 | 0.3 | ▼ | | | | * Sample collected from 6'-8' interval for laboratory analysis |
| 8 | | | | | | | | |
| 9 | 5 | 2.0 | 0.0 | | | | | |
| 10 | | | | | W | | | |
| 11 | 6 | 2.0 | 0.0 | | | | | |
| 12 | | | | | | | | Bottom of boring @ 12' bgs |



West Lake Corridor
Phase II ESA Report

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West Lake Corridor
Phase II ESA Report

Appendix C. Tables



West Lake Corridor
Phase II ESA Report

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TABLE 1.1-1
NICTD Westlake Corridor - AOC Summary Table
Subsurface Site Investigation

| EDR No. | Facility Name | Facility Address | HazMat Tech Report Database Listings and Analysis | Quick Metric Site Summary | Distance from Corridor | Property Acquisition Area | Excavation Area (Y or N) | Priority (High, Med, Low) | HazMat Tech Report Priority | Conduct Phase II (Y or N) | REC No./GIS Reference No. |
|---------|--|--------------------------------|---|--|----------------------------|---------------------------|--------------------------|---------------------------|-----------------------------|---------------------------|---------------------------|
| 63 | NIPSCO Corp MGP | Wilcox and Hohman | This site is listed in the Manufactured Gas Plants (MGP) database. No further information is provided within the EDR report. AECOM's online research indicates that this site was operated by NIPSCO as a manufactured gas plant, which was first constructed in 1900. Manufactured gas was produced using coal carbonization and water gas processes from 1904 through approximately 1930. Records indicate that the site was then used as a gas transfer station from an East Chicago, Indiana, facility until approximately 1950. Several aboveground and underground storage tanks were installed for use on the site. By 1951 the facility was shut down, the site buildings were abandoned, and the property converted to a supply yard and storage area for NIPSCO. Based on the historical use of this site as a manufactured gas plant, this site is considered a REC. | Listed on the EDR MGP database. According to AECOM, the site operated as a NIPSCO manufactured gas plant from at least 1900 to 1930 and a gas transfer station between at least 1930 and 1950. Been shut down since 1951, and was later converted into a supply yard and storage area for NIPSCO. Residual impacts from MGP facility were identified in 1998, resulting in the site being identified as IDEM VRP #6980801. Remediation at the site has been ongoing since 1998. The current remediation system at the site consists of a groundwater pretreatment system and a barrier wall keyed into the lower clay unit to minimize pumping volumes needed to achieve hydraulic containment. A pumping system lowers groundwater levels within the barrier wall and the pre-treatment system consisting of bag filters and activated carbon treats the extracted groundwater before discharge to the municipal sewer. Operation of the system began in winter 2008/2009. The most recent sampling from the effluent sampling from the groundwater pretreatment system (9/20/16) did not have any COCs above IDEM RCG residential tap SLs. | | Y | Y | Med | High | Y | 2 |
| 63 | [none listed] | 5004 South Hohman Avenue | This site is listed in the EDR Historical Auto Stations database. The database listings indicate that this site operated as Best Auto Repair in 1999 and 2000 and as European Auto Werks [sic] in 2001 and 2003. Based on the apparent use of this for auto repair operations, this site is considered a REC. | Listed on EDR Hist Auto Stat database as Best Auto Repair in 1999 and 2000 and European Auto Werks Inc in 2001 and 2003. Google maps street view shows that the former on-site building has been razed. No further details. | | Y | Y | Med | Med | Y | 3 |
| 54 | Dombrowski & Holmes/ currently Djuric Trucing Inc | 4805 Sheffield Avenue | This site is listed in the CERC-NFRAP database. The database listing indicates that the site was added to the CERLCA program in 1980. Preliminary assessment that year classified the site as a high priority for further assessment. However, following a site inspection later in 1980, the site did not qualify for the NPL and was delisted as a NFRAP site. Based on the industrial history of this site and the lack of details concerning cleanup and site closure, this site is considered a REC. | Listen on the CERC-NFRAP database in 1980 as a higher priority facility for further assessment. Not reported in 1995. Dombrowski & Holmes is a recycling services company. No further details. Site is currently occupied by Djuric Trucking Inc | East adjacent to Corridor | Y | Y | Med | High | Y | 4 |
| 51 | Peter L. Olenik | 4703 Hohman Avenue (FID #8522) | This site is listed in the UST and LUST databases. The UST list identifies five USTs as permanently out of service at this site. The LUST database listing indicates that the site has one open LUST incident. Based on the open status of the LUST incident and the proximity to the proposed Project, this site represents a REC. | Listed on the UST database for 5 out of service USTs. In 1999, IDEM sent a letter requesting further site investigation be conducted at the site due to very high TPH concentrations in samples taken from the former UST pits. A follow up request for further site investigation was sent by IDEM in 2009. In 2012, a request for an extension for site investigation at the site was sent to IDEM by the site. The IDEM VFC does not contain any information detailing any further investigations at the site. | 200 feet east of Corridor | N | N | High | High | Y | 6 |
| 35 | Polish Army Veterans Association | 241-243 Gostlin Street | These sites are listed in the US Brownfields and AUL databases. According to the Brownfields reports for the Polish Army Veterans Association #1 and #2, which were obtained via the CIMC database, these sites have been assessed under the Brownfields program, but cleanup of the sites has not yet begun. Based on the current status, these sites represent a REC. | Listed on the Brownfields (Brownfields #4020011) and AUL databases. A Limited Subsurface Investigation was conducted at the site in 2002 that revealed high concentrations of several COCs. A restrictive covenant has been issued for the site stating that the site can only be used as a well maintained asphalt parking lot. The IDEM VFC does not contain any information detailing any further investigations at the site. | 400 feet north of Corridor | N | N | High | High | Y | 8 |
| 122 | Speedway Station #7680 | 444 Ridge Road (FID #3528) | This facility is listed in the SPILL database in association with four spill events; on the UST database in association with six "Permanently Out of Service" and five "Currently in Use" USTs; on the LUST database in association with one incident that has received "NFA - Conditional Closure" status; and on the AUL database in association with an environmental restrictive covenant from a LUST incident. The AUL listing indicates that activity and use limitations are in place over the entire property, including construction restrictions, groundwater use restrictions, residential use restrictions, and paved or concrete cap engineering barrier restrictions. Based on the conditional nature of the LUST NFA status and the presence of five in-service USTs, this site represents a REC. | The site is currently a filling station. Listed on the UST database for 6 former and 5 current USTs. Following the removal of two gasoline USTs from the site, a LUST case (LUST #199408513) was assigned to the site and remediation occurred between approximately 1994 and 2011. An AUL placed on the site that includes construction, residential, groundwater use, and paved or concrete cap engineering barrier restrictions. No subsurface remediation or monitoring activities have occurred at the site since 2011. | 350 feet east of Corridor | N | N | High | High | Y | 15 |
| 122 | Duke of Oil - Oil and Suds | 449 Ridge Road (FID #14669) | Historically, this site has been in use as an oil change/car servicing facility since at least 1988. This facility is listed in the UST database as having one 4,000-gallon UST (contents described as "other") and one 3,000-gallon used oil UST, both listed as "Currently in Use" and both listed as installed in 1988. Based on the presence of these USTs and the age of the USTs, this site is considered a REC. | The site has been occupied by Duke of Oil since at least 1988. They area an oil change service facility. Listed on the UST database for two currently in use used oil/other USTs. | 500 feet east of Corridor | N | N | High | Med | Y | 16 |
| 121 | Phillips Petroleum Manor Ridge 66/ Citgo Gas Station | 323 Ridge Road (FID #7559) | Historically, this site has been in use as a gas station since at least 1961. This site is listed in the UST database in association with three "Currently in Use" gasoline USTs and one "Permanently Out of Service" used oil UST; on the SPILL database; and on the LUST. The LUST database listing indicates that one LUST incident has affected the soil and groundwater at this site, and the status of the LUST incident is described as monitored natural attenuation. Based on the active status of this LUST and the presence of known contamination in the soil and groundwater at this site, this facility represents a REC. | The site has been a gas station since at least 1961. The site is listed on the SPILLS database for a 100 gallon unleaded gasoline spill in 1989. The site has a LUST case (LUST #200311508) that has resulted in quarterly monitoring at the site. The most recent Monitoring Report for the site, dated October 31, 2016, indicated that benzene contamination remains towards the eastern border of the site. | West adjacent to Corridor | N | N | High | High | Y | 17 |
| 109 | Ridgeway III/ Mobil Gas Station and Car Wash | 260 165th Street | Historically, this site has been in use as a gas station since at least 1996. This site is listed in the UST database with three "Currently in Use" 12,000-gallon gasoline USTs. Based on the presence of the three USTs and the use of this site as a gas station with car wash, this site is considered a REC. | The site has been occupied by a filling station since at least 1996. According to the UST database, the site has three 12,000-gallon gasoline USTs. No further details. | West adjacent to Corridor | N | N | High | High | Y | 20 |

TABLE 1.1-1

| | | | | | | | | | | | |
|--------|---|--|---|--|--------------------------------|---|---|------|------|---|----|
| | MRL Enterprises | 421 E Locust Street | This facility appeared to be a scrap yard, based on the presence of machinery and scrap materials throughout the exterior portion of the site lot. A banner on the side of the building stated that this facility has been in service for at least 30 years (1977-2007). Based on the industrial nature of this facility and the fact that the facility has been in operation since at least 1977, this site is considered a REC. | According to the Hazmat Tech Report, the site appears to have been used as a scrap yard since at least 1977. Not listed on the database search. No further details. | 100 feet east of Corridor | N | N | High | High | Y | 22 |
| 101 | Henry Pratt Co/Specialty Steel Co. | 403 Conkey Street | Historically, this site was improved with an industrial building by at least 1938. This site is listed in the RCRA-CESQG database, which indicates that the site has been in operation as "Henry Pratt Co." and has generated hazardous waste since at least 1994. Forty-two violations are listed in association with this facility's RCRA hazardous waste generator status. All violations are listed as having achieved compliance on January 17, 2002. This site is also listed in the SPILL database in association with a 1998 spill of a "metallic substance." Based on the industrial history of this site, the noted RCRA violations, and the 1998 SPILL incident, this site is considered a REC. | Listed on the SPILLS database for a spill in 1998 of an unreported amount of a 'metallic substance'. Listed on the RCRA-CESQG for many violations between 1997 and 2002, all of which achieved compliance in 2002. According to the HazMat Tech Report, the site has been developed with an industrial building since at least 1938. No further details. | East adjacent to Corridor | N | N | High | High | Y | 25 |
| | Northlake Auto Recycling | 105 Industrial Road | Identified as a REC based on use as an auto salvage/scrap facility. | Been occupied by an auto salvage/scrap facility since before 1998. | West adjacent to Corridor | N | N | High | Med | Y | 34 |
| | Calumet Industrial Corridor | N of Plummer Ave and W of Hohman | The Calumet industrial corridor has been improved with industrial facilities starting as early as 1886 through the present. Between 1886 and 1951, industrial facilities located throughout this area included George Hammond's Packing House, JJ Brehm & Son Co. (coal yard and bulk oil station), Whole Coffee and Spices (coffee roaster and warehouse facility), American Chemical Service, Pratt Food Co. - Hammond Plant (stock feed and "remedies" manufacturer), and others. The historical industrial uses of the "Calumet Industrial Corridor" area are considered a REC. | | West adjacent to Corridor | Y | Y | High | High | Y | 35 |
| | Marble Street Industrial Corridor | W of Sheffield Lane and N and S sides of Marble Street | This area has been improved with industrial facilities starting as early as 1915. Between 1915 and 1930, industrial occupants included Federal Cement Tile Co., the Prest-O-Lite Co. (a manufacturer of acetylene gas), Standard Oil Co. of Indiana Bulk Oil Yard, Hammond Foundry Co., Champion Corporation (manufacturer of farm machinery and auto bodies), Page & Jones Chemical Co. Inc., and others. The historical industrial uses in this area are considered a REC. | | East adjacent to Corridor | Y | Y | High | High | Y | 36 |
| 34 | Ridgway IV | 21 Gostlin Street (FID #22606) | This site is listed in the UST database in association with three USTs that are listed as "Currently In Use." Based on the presence and use of these USTs and the proximity of this site to the proposed Project, this site is considered a REC. | The site appears to have been developed with a filling station since at least 1998. According to the UST database the site currently has 3 USTs on-site and no former USTs. No further details. | 200 feet northeast of Corridor | N | N | High | High | Y | 41 |
| 29, 21 | CSX Burnham Yard/Scrap Metal Services LLC/ Indiana Harbor Belt Railroad | 14200 Block/13830, Brainard Avenue | This site is listed in the UST database in association with one UST that is listed as "Exempt from Registration." This site appears to be located within the footprint of the Commuter Rail Alternative alignment. Based on the presence and use of these USTs and the proximity of this site to the proposed Project, this site is considered a REC. This site is listed in the RCRA-CESQG database. The database listing indicates that the site has been in operation and generating hazardous waste since at least 1993. Three violations are listed for this site that appear to be unresolved/open. This site is listed in the UST database with one 1,000-gallon fuel oil UST that is listed as "Exempt from Registration." Based on the facility name and location of this listing, this site appears to be located within the footprint of the Commuter Rail Alternative alignment. Based on the presence and use of this UST and the proximity of this site to the proposed Project, this site is considered a REC. | Listed on the UST database for one 'exempt from registration' heating oil UST. Also listed on the LUST database for Incident Number 940991. | North adjacent to Corridor | N | N | High | Med | Y | 42 |

TABLE 4.1-2
NICTD Westlake Corridor - AOC 2 NIPSCO Site
Subsurface Site Investigation

Soil Analytical Results
All Units Reported in milligrams per kilogram (mg/kg)

| Sample ID | 02-SB-01 (0-2) | 02-SB-01 (18-20) | 02-SB-02 (0-2) | 02-SB-02 (16-18) | 02-SB-03 (0-2) | 02-SB-03 (10-12) | 02-SB-04 (0-2) | 02-SB-04 (10-12) | 02-SB-05 (0-2) | 02-SB-05 (6-8) | 02-SB-06 (0-2) | 02-SB-06 (12-14) | 02-SB-07 (0-1) | 02-SB-07 (6-8) | RCG Soil Migration to Groundwater (MTG) | RCG 2017 Direct Contact Residential | RCG 2017 Direct Contact (Com/Ind) | RCG 2017 Direct Contact (Excavation) |
|--|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|--|--|--------------------------------------|---|
| RCRA Metals | | | | | | | | | | | | | | | | | | |
| Arsenic | 7.8 | 7.2 | 3.6 | 3.4 | 6.7 | 4.6 | 5.7 | 8.6 | 10.1 | 2.4 | 11.4 | 1.5 | 4.7 | 1.8 | 5.9 | 9.5 | 30 | 920 |
| Barium | 112 | 42.1 | 4.8 | 24.8 | 115 | 39.1 | 87.4 | 13.5 | 143 | 4.7 | 39.7 | 3.5 | 47.0 | 5.3 | 1,700 | 2,100 | 100,000 | 100,000 |
| Cadmium | 0.89 | BDL | BDL | BDL | 0.68 | BDL | BDL | BDL | 0.57 | BDL | BDL | BDL | BDL | BDL | Not Established | 99 | 980 | 1,900 |
| Chromium | 60.2 | 17.5 | 3.0 | 8.3 | 24.8 | 8.9 | 16.0 | 5.9 | 23.5 | 3.8 | 14.6 | 2.9 | 8.3 | 4.4 | 1,000,000 | Not Established | Not Established | Not Established |
| Lead | 142 | 6.9 | 3.4 | 5.3 | 94.5 | 5.5 | 68.2 | 5.0 | 60.4 | 3.9 | 90.5 | 2.5 | 42.3 | 5.0 | 270 | 400 | 800 | 1,000 |
| Mercury | 7.4 | BDL | BDL | BDL | 7.7 | BDL | 6.8 | BDL | 18.7 | BDL | 7.0 | BDL | BDL | BDL | 2.1 | 3.1 | 3.1 | 3.1 |
| All Other RCRA Metals | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |
| Poly Aromatic Hydrocarbons (PAHs) | | | | | | | | | | | | | | | | | | |
| Acenaphthene | 1.1 | 14.3 | 0.012 | 240 | 0.68 | 0.091 | 0.041 | BDL | 0.21 | 0.55 | BDL | BDL | 0.022 | 0.075 | 110 | 5,000 | 45,000 | 100,000 |
| Acenaphthylene | 4.8 | 0.96 | 0.024 | 8.1 | 1.2 | 0.016 | 0.37 | BDL | 5.2 | 0.16 | 3.2 | BDL | 0.016 | 0.057 | Not Established | Not Established | Not Established | Not Established |
| Anthracene | 5.1 | 3.6 | 0.021 | 86.7 | 1.7 | 0.040 | 0.18 | BDL | 1.3 | 1.2 | 0.96 | BDL | 0.023 | 0.074 | 1,200 | 25,000 | 100,000 | 100,000 |
| Benzo(a)anthracene | 12.8 | 2.9 | 0.027 | 76.5 | 3.3 | 0.034 | 0.57 | BDL | 1.8 | 0.69 | 1.8 | BDL | 0.015 | 0.051 | 0.85 | 2.2 | 29 | 1600 |
| Benzo(a)pyrene | 7.4 | 1.9 | 0.033 | 57.6 | 2.4 | 0.025 | 0.43 | BDL | 1.1 | 0.25 | 1.0 | BDL | 0.0094 | 0.034 | 4.7 | 0.2094 | 2.9 | 160 |
| Benzo(b)fluoranthene | 4.8 | 0.86 | 0.018 | 26.2 | 1.9 | 0.012 | 0.39 | BDL | 1.8 | 0.14 | 1.8 | BDL | 0.0077 | 0.028 | 8.2 | 2.2 | 29 | 1600 |
| Benzo(g,h,i)perylene | 4.8 | 0.86 | 0.027 | 12.5 | 1.7 | 0.010 | 0.37 | BDL | 1.9 | 0.12 | 1.9 | BDL | 0.0065 | 0.020 | Not Established | Not Established | Not Established | Not Established |
| Benzo(k)fluoranthene | 7.8 | 1.2 | 0.024 | 33.8 | 1.8 | 0.016 | 0.38 | BDL | 2.0 | 0.093 | 1.6 | BDL | 0.0090 | 0.029 | 80 | 22 | 290 | 16000 |
| Chrysene | 11.8 | 2.5 | 0.032 | 58.6 | 3.5 | 0.027 | 0.70 | BDL | 3.0 | 0.91 | 2.9 | BDL | 0.01 | 0.046 | 250 | 220 | 2900 | 100000 |
| Dibenz(a,h)anthracene | 1.4 | 0.23 | 0.0064 | 3.3 | 0.54 | BDL | 0.13 | BDL | 0.9 | 0.064 | 0.81 | BDL | BDL | BDL | 2.6 | 0.22 | 2.9 | 160 |
| Fluoranthene | 16.3 | 4.9 | 0.031 | 125 | 4.5 | 0.060 | 0.62 | 0.0075 | 1.7 | 0.74 | 1.4 | BDL | 0.058 | 0.21 | 1,800 | 3,400 | 30,000 | 68,000 |
| Fluorene | 0.31 | 6.0 | BDL | 123 | 0.51 | 0.045 | BDL | BDL | 0.86 | 0.82 | 0.46 | BDL | 0.063 | 0.24 | 110 | 3,400 | 30,000 | 68,000 |
| Indeno(1,2,3-cd) | 3.8 | 0.70 | 0.019 | 9.8 | 1.4 | 0.0096 | 0.31 | BDL | 1.6 | 0.076 | 1.5 | BDL | 0.0059 | 0.019 | 27 | 2.2 | 29 | 1600 |
| 1-Methylnaphthalene | 0.75 | 10.1 | 0.014 | 170 | 0.52 | 0.058 | 0.080 | BDL | 0.90 | 1.8 | 0.29 | 0.018 | 1.3 | 5.4 | 1.2 | 250 | 390 | 390 |
| 2-Methylnaphthalene | 0.65 | 20.3 | 0.019 | 253 | 0.50 | 0.083 | 0.077 | 0.0090 | 1.0 | BDL | 0.35 | BDL | 2.2 | 7.5 | 3.7 | 340 | 3,000 | 6,800 |
| Naphthalene | 1.1 | 53.4 | 0.059 | 600 | 0.98 | 0.14 | 0.16 | 0.029 | 1.4 | BDL | 0.36 | 0.026 | BDL | BDL | 0.11 | 53 | 170 | 3,100 |
| Phenathrene | 5.2 | 18.5 | 0.031 | 328 | 5.0 | 0.16 | 0.55 | 0.012 | 1.4 | 0.16 | 1.1 | BDL | 0.1 | 0.32 | Not Established | Not Established | Not Established | Not Established |
| Pyrene | 24.7 | 6.8 | 0.047 | 170 | 5.8 | 0.079 | 0.91 | BDL | 2.3 | 1.3 | 2.5 | BDL | 0.042 | 0.14 | 260 | 2,500 | 23,000 | 51,000 |
| All Other PAHs | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |
| Volitile Organic Compounds (VOCs) | | | | | | | | | | | | | | | | | | |
| Benzene | BDL | 3.3 | BDL | 20.2 | 0.0058 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.051 | 17 | 51 | 1,800 |
| n-Butylbenzene | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.95 | BDL | BDL | BDL | BDL | 64 | 110 | 110 | 110 |
| Ethylbenzene | BDL | 16.7 | BDL | 80.6 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 16 | 81 | 250 | 480 |
| Isopropylbenzene (Cumene) | BDL | 0.71 | BDL | 4.7 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Not Established | Not Established | Not Established | Not Established |
| Naphthalene | BDL | 139 | BDL | 874 | BDL | 0.010 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.11 | 53 | 170 | 3,100 |
| Toulene | BDL | 0.83 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 14 | 820 | 820 | 820 |
| 1,2,4-Trimethylbenzene | BDL | 3.3 | BDL | 20.9 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.44 | 81 | 220 | 220 |
| 1,3,5-Trimethylbenzene | BDL | 0.48 | BDL | 6.3 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 3.4 | 180 | 180 | 180 |
| Xylene | BDL | 9.6 | BDL | 49.5 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 200 | 260 | 260 | 260 |
| All Other VOCs | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |

BDL = Below Detection Limits
N/A = Not Analyzed

Results compared to the Indiana Department of Environmental Mangement (IDEM), Remediation Closure Guide (RCG) screening levels (Appendix A), as updated July 2017.

| | |
|-------------|---|
| Bold | Denotes analyte detected above laboratory detection limit |
| Bold | Detected concentration exceeds soil migration to groundwater (MTG) screening levels |
| Bold | Detected concentration exceeds Residential Direct Contact screening levels |
| Bold | Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels |
| Bold | Detected concentration exceeds Excavation Direct Contact screening levels |



TABLE 4.2-1
 NICTD Westlake Corridor - AOC 3 Dombrowski & Holmes Site
 Subsurface Site Investigation

Soil Analytical Results
 All Units Reported in milligrams per kilogram (mg/kg)

| Sample ID | 03-SB-01 (0-1) | 03-SB-01 (6-8) | 03-SB-02 (0-1) | 03-SB-02 (6-8) | 03-SB-03 (0-1) | 03-SB-03 (6-8) | 03-SB-04 (0-1) | 03-SB-04 (4-6) | 03-SB-05 (0-1) | 03-SB-05 (8-10) | 03-SB-06 (0-1) | 03-SB-06 (6-8) | 03-SB-07 (0-1) | 03-SB-08 (0-1) | 03-SB-08 (10-12) | 03-SB-09 (0-1) | 03-SB-09 (6-8) | RCG Soil Migration to Groundwater (MTG) | RCG 2017 Direct Contact Residential | RCG 2017 Direct Contact (Com/Ind) | RCG 2017 Direct Contact (Excavation) |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|--|--|--------------------------------------|---|
| RCRA Metals | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | 6.7 | 3.7 | 12.8 | 2.8 | 8.8 | 26.4 | 39 | 2.8 | 15.3 | 14.1 | 7.0 | 43.2 | BDL | 32.5 | 2.1 | 2.4 | 2.2 | 5.9 | 9.5 | 30 | 920 |
| Barium | 85.2 | 11.8 | 139 | 4.6 | 233 | 260 | 191 | 6.4 | 123 | 184 | 48.4 | 275 | 26.6 | 189 | 8.7 | 4.0 | 4.3 | 1,700 | 2,100 | 100,000 | 100,000 |
| Cadmium | 1.3 | BDL | 4.1 | BDL | 2.7 | 1.1 | 1.7 | BDL | 1.8 | 1.1 | 0.69 | 3.5 | BDL | 1.4 | BDL | BDL | BDL | Not Established | 99 | 980 | 1,900 |
| Chromium | 127 | 5.8 | 151 | 4.1 | 35.7 | 17.8 | 978 | 5.2 | 119 | 12.9 | 31.5 | 248 | 747 | 501 | 4.1 | 2.8 | 4.2 | 1,000,000 | Not Established | Not Established | Not Established |
| Lead | 279 | 7.0 | 768 | 3.6 | 218 | 252 | 2,020 | 4.0 | 319 | 192 | 846 | 2,680 | 50.8 | 304 | 6.0 | 2.7 | 4.0 | 270 | 400 | 800 | 1,000 |
| Mercury | 0.24 | BDL | 0.59 | BDL | 0.38 | 0.45 | BDL | 0.36 | 0.8 | 0.45 | 1.9 | 0.48 | BDL | BDL | BDL | BDL | BDL | 2.1 | 3.1 | 3.1 | 3.1 |
| Selenium | BDL | BDL | BDL | BDL | 1.5 | BDL | 1.3 | BDL | 1.2 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 5.3 | 550 | 5,800 | 9,800 |
| Silver | BDL | BDL | BDL | BDL | 0.88 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 16 | 550 | 5,800 | 9,800 |
| Poly Aromatic Hydrocarbons (PAHs) | | | | | | | | | | | | | | | | | | | | | |
| Acenaphthene | BDL | BDL | 0.57 | BDL | 0.19 | BDL | 0.052 | BDL | 0.056 | 0.63 | 0.14 | 0.058 | BDL | 0.14 | BDL | 0.14 | BDL | 110 | 5,000 | 45,000 | 100,000 |
| Acenaphthylene | BDL | BDL | BDL | BDL | 3.5 | 0.012 | 0.03 | BDL | 0.66 | 0.21 | 0.98 | 0.042 | BDL | BDL | BDL | BDL | BDL | Not Established | Not Established | Not Established | Not Established |
| Anthracene | BDL | BDL | 1.5 | BDL | 2.3 | 0.019 | 0.046 | BDL | 0.42 | 3.0 | 1.1 | 0.17 | 0.028 | BDL | BDL | 0.14 | BDL | 1,200 | 25,000 | 100,000 | 100,000 |
| Benzo[a]anthracene | 0.16 | 0.013 | 2.1 | BDL | 1.9 | 0.12 | 0.14 | BDL | 0.46 | 6.7 | 1.7 | 0.24 | 0.14 | 0.043 | 0.0071 | 0.22 | BDL | 0.85 | 2.2 | 29 | 1600 |
| Benzo[a]pyrene | 0.19 | 0.012 | 2.3 | BDL | 3.9 | 0.12 | 0.12 | BDL | 0.75 | 4.5 | 2.00 | 0.17 | 0.21 | BDL | BDL | 0.18 | BDL | 4.7 | 2.2 | 2.9 | 160 |
| Benzo[b]fluoranthene | 0.2 | 0.011 | 2.5 | BDL | 2.6 | 0.13 | 0.13 | BDL | 0.4 | 3.5 | 1.7 | 0.26 | 0.24 | 0.041 | 0.0067 | 0.19 | BDL | 8.2 | 2.2 | 29 | 1600 |
| Benzo[g,h,i]perylene | 0.21 | 0.0082 | 1.8 | BDL | 3.2 | 0.086 | 0.11 | BDL | 0.63 | 2.7 | 1.4 | 0.19 | 0.19 | 0.044 | 0.0073 | 0.12 | BDL | Not Established | Not Established | Not Established | Not Established |
| Benzo[k]fluoranthene | 0.14 | 0.0089 | 1.6 | BDL | 1.9 | 0.088 | 0.13 | BDL | 0.45 | 3.6 | 1.2 | 0.16 | 0.16 | BDL | BDL | 0.15 | BDL | 80 | 22 | 290 | 16000 |
| Chrysene | 0.18 | 0.015 | 2.4 | BDL | 2.4 | 0.13 | 0.17 | BDL | 0.52 | 7.2 | 1.8 | 0.34 | 0.20 | 0.12 | 0.011 | 0.25 | BDL | 250 | 220 | 2900 | 100000 |
| Dibenz[a,h]anthracene | 0.086 | BDL | 0.57 | BDL | 0.84 | 0.028 | 0.036 | BDL | 0.15 | 0.81 | 0.42 | 0.058 | 0.055 | BDL | BDL | 0.045 | BDL | 2.6 | 0.22 | 2.9 | 160 |
| Fluoranthene | 0.25 | 0.031 | 5.2 | BDL | 1.4 | 0.14 | 0.34 | BDL | 0.4 | 14.3 | 2.9 | 0.69 | 0.33 | 0.19 | 0.020 | 0.71 | BDL | 1,800 | 3,400 | 30,000 | 68,000 |
| Fluorene | BDL | BDL | 0.75 | BDL | BDL | 0.051 | BDL | BDL | BDL | 1.1 | BDL | 0.054 | BDL | 0.059 | BDL | 0.16 | BDL | 110 | 3,400 | 30,000 | 68,000 |
| Indeno[1,2,3-cd] | 0.16 | BDL | 1.5 | BDL | 2.2 | 0.076 | 0.085 | BDL | 0.42 | 2.3 | 1.2 | 0.14 | 0.15 | BDL | BDL | 0.11 | BDL | 27 | 2.2 | 29 | 1600 |
| 1-Methylnaphthalene | BDL | BDL | 0.33 | BDL | 0.21 | 0.024 | 0.15 | BDL | 0.062 | 0.41 | 0.11 | 0.13 | BDL | 0.18 | BDL | 0.048 | BDL | 1.2 | 250 | 390 | 390 |
| 2-Methylnaphthalene | BDL | BDL | 0.5 | BDL | 0.37 | 0.033 | 0.3 | BDL | 0.1 | 0.41 | 0.15 | 0.20 | BDL | 0.28 | BDL | 0.059 | BDL | 3.7 | 340 | 3,000 | 6,800 |
| Naphthalene | BDL | 0.0077 | 0.61 | BDL | 0.44 | 0.032 | 0.37 | BDL | 0.15 | 0.63 | 0.20 | 0.55 | BDL | 0.32 | BDL | 0.083 | BDL | 0.11 | 53 | 170 | 3,100 |
| Phenanthrene | 0.1 | 0.026 | 4.6 | BDL | 0.8 | 0.071 | 0.38 | BDL | 0.24 | 17.2 | 1.5 | 1.2 | 0.25 | 0.42 | 0.02 | 0.82 | BDL | Not Established | Not Established | Not Established | Not Established |
| Pyrene | 0.24 | 0.031 | 4.9 | BDL | 2.5 | 0.12 | 0.28 | BDL | 0.7 | 16.5 | 2.9 | 0.49 | 0.26 | 0.17 | 0.019 | 0.55 | BDL | 260 | 2,500 | 23,000 | 51,000 |
| All Other PAHs | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |
| Volatile Organic Compounds (VOCs) | | | | | | | | | | | | | | | | | | | | | |
| Acetone | BDL | 0.14 | 0.24 | BDL | BDL | 0.26 | BDL | BDL | BDL | BDL | 0.12 | BDL | BDL | BDL | BDL | BDL | BDL | 57 | 85,000 | 100,000 | 100,000 |
| Carbon disulfide | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.022 | BDL | BDL | BDL | BDL | BDL | BDL | 4.8 | 740 | 740 | 740 |
| n-Hexane | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.091 | BDL | BDL | 0.151 | BDL | BDL | 210 | 140 | 140 | 140 |
| Naphthalene | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.27 | BDL | 0.085 | BDL | 0.11 | 53 | 170 | 3,100 |
| All Other VOCs | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |

BDL = Below Detection Limits
 N/A = Not Analyzed
 ##J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit

Results compared to the Indiana Department of Environmental Management (IDEM), Remediation Closure Guide (RCG) screening levels (Appendix A), as updated July 2017

| | |
|-------------|---|
| Bold | Denotes analyte detected above laboratory detection limit |
| Bold | Detected concentration exceeds soil migration to groundwater (MTG) screening levels |
| Bold | Detected concentration exceeds Residential Direct Contact screening levels |
| Bold | Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels |
| Bold | Detected concentration exceeds Excavation Direct Contact screening levels |

TABLE 4.2-2
NICTD Westlake Corridor - AOC 3 Dombrowski & Holmes Site
Subsurface Site Investigation

Groundwater Analytical Results

All Units Reported in micrograms per liter (µg/L)

| Sample ID | 03-SB-02W | 03-SB-02-FW | 03-SB-05W | 03-SB-05-FW | 03-SB-08W | 03-SB-08-FW | RCG Groundwater Residential Tap | RCG Groundwater Residential Vapor Exposure | RCG Groundwater Commercial/Industrial Vapor Exposure |
|--|-----------|-------------|-----------|-------------|-----------|-------------|---------------------------------|--|--|
| Date Collected | 7/24/2017 | 7/24/2017 | 7/24/2017 | 7/24/2017 | 7/24/2017 | 7/24/2017 | | | |
| RCRA Metals | | | | | | | | | |
| Barium | 13.6 | 13.1 | 63.0 | 59.7 | 65.0 | 69.6 | 2,000 | Not Established | Not Established |
| Chromium | BDL | BDL | BDL | BDL | 10.6 | BDL | 100 | Not Established | Not Established |
| Lead | BDL | BDL | 14.2 | BDL | BDL | BDL | 15 | Not Established | Not Established |
| All Other RCRA Metals | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | |
| Poly Aromatic Hydrocarbons (PAHs) | | | | | | | | | |
| All PAHs | BDL | N/A | BDL | N/A | BDL | N/A | Compound Specific | | |
| Volatile Organic Compounds (VOCs) | | | | | | | | | |
| All VOCs | BDL | N/A | BDL | N/A | BDL | N/A | Compound Specific | | |

BDL = Below Detection Limits

N/A = Not Analyzed

Sample IDs ending in '-FW' are field filtered groundwater samples

| | |
|-------------|--|
| Bold | Detected concentration |
| Bold | Detected concentration exceeds Groundwater Tap Residential screening levels |
| Bold | Detected concentration exceeds RCG 2017 Vapor Exposure Residential screening levels |
| Bold | Detected concentration exceeds RCG 2017 Vapor Exposure Commercial/ Industrial screening levels |

Results compared to the Indiana Department of Environmental Mangement (IDEM), Remediation Closure Guide (RCG) screening levels (Appendix A), as updated



TABLE 4.3-1
NICTD Westlake Corridor - AOC 4 Marble Street Industrial Corridor Site
Subsurface Site Investigation

Soil Analytical Results

All Units Reported in milligrams per kilogram (mg/kg)

| Sample ID | 04-SB-01 (0-1) | 04-SB-01 (6-8) | 04-SB-02 (0-1) | 04-SB-03 (0-1) | 04-SB-03 (4-6) | 04-SB-04 (0-1) | 04-SB-04 (6-8) | 04-SB-05 (0-1) | 04-SB-05 (6-8) | RCG Soil Migration to Groundwater (MTG) | RCG 2017 Direct Contact Residential | RCG 2017 Direct Contact (Com/Ind) | RCG 2017 Direct Contact (Excavation) |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|--|--------------------------------------|---|
| Date Collected | 7/24/2017 | 7/24/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | | | | |
| RCRA Metals | | | | | | | | | | | | | |
| Arsenic | 11.1 | 8.1 | 4.9 | 6.9 | 1.9 | 8.1 | 2.3 | 6.1 | 3.8 | 5.9 | 9.5 | 30 | 920 |
| Barium | 108 | 17.6 | 75.1 | 179 | 8.2 | 169 | 5.6 | 124 | 5.6 | 1,700 | 2,100 | 100,000 | 100,000 |
| Cadmium | 6.1 | BDL | 1.3 | 1.1 | BDL | 0.84 | BDL | 2.2 | BDL | Not Established | 99 | 980 | 1,900 |
| Chromium | 365 | 18.2 | 205 | 59.3 | 3.3 | 26.0 | 3.7 | 417 | 3.8 | 1,000,000 | Not Established | Not Established | Not Established |
| Lead | 433 | 25.7 | 76.8 | 125 | 3.3 | 114 | 3.7 | 122 | 4.4 | 270 | 400 | 800 | 1,000 |
| Silver | 1.7 | BDL | 3.3 | BDL | BDL | BDL | BDL | 2.1 | BDL | 16 | 550 | 5,800 | 9,800 |
| Selenium | 1.4 | BDL | BDL | 1.3 | BDL | BDL | BDL | BDL | BDL | 5.3 | 550 | 5,800 | 9,800 |
| Mercury | BDL | BDL | 0.47 | 0.27 | BDL | 0.84 | BDL | BDL | BDL | 2.1 | 3.1 | 3.1 | 3.1 |
| Polychlorinated Biphenyls (PCBs) | | | | | | | | | | | | | |
| PCB-1254 (Aroclor 1254) | 0.18 | BDL | 0.64 | BDL | BDL | BDL | BDL | 0.16 | BDL | 0.41 | 1.7 | 9.7 | 33 |
| PCB-1260 (Aroclor 1260) | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.12 | BDL | 1.1 | 3.4 | 9.9 | 570 |
| Poly Aromatic Hydrocarbons (PAHs) | | | | | | | | | | | | | |
| Acenaphthene | 0.048 | BDL | 0.28 | 0.039 | BDL | BDL | BDL | 0.27 | 0.029 | 110 | 5,000 | 45,000 | 100,000 |
| Acenaphthylene | 0.35 | BDL | BDL | 0.29 | BDL | 0.13 | BDL | BDL | 0.020 | Not Established | Not Established | Not Established | Not Established |
| Anthracene | 0.56 | BDL | 0.24 | 0.26 | BDL | 0.088 | BDL | 1.0 | 0.021 | 1,200 | 25,000 | 100,000 | 100,000 |
| Benzo(a)anthracene | 0.93 | BDL | 0.22 | 0.39 | BDL | 0.25 | BDL | 2.0 | 0.021 | 0.85 | 2.2 | 29 | 1600 |
| Benzo(a)pyrene | 0.81 | BDL | 0.31 | 0.33 | BDL | 0.18 | BDL | 1.0 | 0.019 | 4.7 | 0.22 | 2.9 | 160 |
| Benzo(b)fluoranthene | 0.80 | BDL | 0.31 | 0.36 | BDL | 0.16 | BDL | 1.3 | 0.016 | 8.2 | 2.2 | 29 | 1600 |
| Benzo(g,h,i)perylene | 0.56 | 0.0069 | 0.62 | 0.33 | BDL | 0.15 | BDL | 0.53 | 0.014 | Not Established | Not Established | Not Established | Not Established |
| Benzo(k)fluoranthene | 0.65 | BDL | 0.22 | 0.28 | BDL | 0.19 | BDL | 0.91 | 0.016 | 80 | 22 | 290 | 16000 |
| Chrysene | 0.91 | BDL | 0.35 | 0.58 | BDL | 0.27 | BDL | 2.1 | 0.022 | 250 | 220 | 2900 | 100000 |
| Dibenz(a,h)anthracene | 0.17 | BDL | 0.11 | 0.091 | BDL | 0.048 | BDL | 0.17 | BDL | 2.6 | 0.22 | 2.9 | 160 |
| Fluoranthene | 2.2 | BDL | 0.62 | 0.58 | BDL | 0.36 | BDL | 4.5 | 0.055 | 1,800 | 3,400 | 30,000 | 68,000 |
| Fluorene | 0.26 | BDL | 0.19 | 0.042 | BDL | BDL | BDL | 0.49 | 0.073 | 110 | 3,400 | 30,000 | 68,000 |
| Indeno(1,2,3-cd) pyrene | 0.49 | BDL | 0.28 | 0.23 | BDL | 0.12 | BDL | 0.48 | 0.012 | 27 | 2.2 | 29 | 1600 |
| 1-Methylnaphthalene | 0.13 | BDL | 0.25 | 0.36 | BDL | BDL | BDL | 0.12 | 1.6 | 1.2 | 250 | 390 | 390 |
| 2-Methylnaphthalene | 0.16 | BDL | 0.42 | 0.43 | BDL | 0.031 | BDL | 0.16 | 3.2 | 3.7 | 340 | 3,000 | 6,800 |
| Naphthalene | 0.21 | BDL | 0.31 | 0.38 | BDL | BDL | BDL | 0.21 | 0.24 | 0.11 | 53 | 170 | 3,100 |
| Phenanthrene | 1.9 | 0.0073 | 0.97 | 1.0 | BDL | 0.17 | BDL | 4.1 | 0.12 | Not Established | Not Established | Not Established | Not Established |
| Pyrene | 1.9 | 0.0066 | 0.66 | 0.8 | BDL | 0.47 | BDL | 4.2 | 0.043 | 260 | 2,500 | 23,000 | 51,000 |
| All Other PAHs | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |
| Volatile Organic Compounds (VOCs) | | | | | | | | | | | | | |
| Acetone | BDL | 0.14 | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 57 | 85,000 | 100,000 | 100,000 |
| Carbon disulfide | BDL | BDL | 0.027 | BDL | BDL | BDL | BDL | BDL | BDL | 4.8 | 740 | 740 | 740 |
| 4-Methyl-2-pentanone (MIBK) | BDL | BDL | 0.092 | BDL | BDL | BDL | BDL | BDL | BDL | 28 | 3,400 | 3,400 | 3,400 |
| Naphthalene | BDL | BDL | BDL | BDL | BDL | BDL | BDL | 0.0092 | BDL | 0.11 | 53 | 170 | 3,100 |
| All Other VOCs | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | | |

BDL = Below Detection Limits
N/A = Not Analyzed

Results compared to the Indiana Department of Environmental Management (IDEM), Remediation Closure Guide (RCG) screening levels (Appendix A), as updated July 2017.

| | |
|-------------|---|
| Bold | Denotes analyte detected above laboratory detection limit |
| Bold | Detected concentration exceeds soil migration to groundwater (MTG) screening levels |
| Bold | Detected concentration exceeds Residential Direct Contact screening levels |
| Bold | Detected concentration exceeds Commercial/ Industrial Direct Contact screening levels |
| Bold | Detected concentration exceeds Excavation Direct Contact screening levels |



TABLE 4.3-2
NICTD Westlake Corridor - AOC 4 Marble Street Industrial Corridor Site
Subsurface Site Investigation

Groundwater Analytical Results

All Units Reported in micrograms per liter (µg/L)

| Sample ID | 04-SB-01W | 04-SB-01-FW | 04-SB-03W | 04-SB-03-FW | 04-SB-05W | 04-SB-05-FW | RCG Groundwater Residential Tap | RCG Groundwater Residential Vapor Exposure | RCG Groundwater Commercial/Industrial Vapor Exposure |
|--|-------------|-------------|-------------|-------------|-------------|-------------|---------------------------------|--|--|
| Date Collected | 7/24/2017 | 7/24/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | 7/25/2017 | | | |
| RCRA Metals | | | | | | | | | |
| Arsenic | BDL | BDL | 31.5 | 28.4 | BDL | BDL | 10 | Not Established | Not Established |
| Barium | 96.6 | 85.9 | 68.5 | 59.0 | 64.3 | 39.8 | 2,000 | Not Established | Not Established |
| Chromium | 33.5 | 21.8 | 15.6 | BDL | 30.2 | 15.0 | 100 | Not Established | Not Established |
| Lead | 60.0 | 40.5 | BDL | BDL | 36.9 | BDL | 15 | Not Established | Not Established |
| All Other RCRA Metals | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | |
| Polychlorinated Bisphenyls (PCBs) | | | | | | | | | |
| All PCBs | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | |
| Poly Aromatic Hydrocarbons (PAHs) | | | | | | | | | |
| All PAHs | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | |
| Volatile Organic Compounds (VOCs) | | | | | | | | | |
| All VOCs | BDL | BDL | BDL | BDL | BDL | BDL | Compound Specific | | |

BDL = Below Detection Limits
 N/A = Not Analyzed

Sample IDs ending in '-FW' are field filtered groundwater samples

| | |
|-------------|--|
| Bold | Detected concentration |
| Bold | Detected concentration exceeds Groundwater Tap Residential screening levels |
| Bold | Detected concentration exceeds RCG 2017 Vapor Exposure Residential screening levels |
| Bold | Detected concentration exceeds RCG 2017 Vapor Exposure Commercial/ Industrial screening levels |

Results compared to the Indiana Department of Environmental Mangement (IDEM), Remediation Closure Guide (RCG) screening levels (Appendix A), as updated





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Appendix D. Definitions and Acronyms



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DEFINITIONS

Activity and Use Limitations – legal or physical restrictions or limitations on the use of, or access to, a site or facility: 1) to reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment.

Actual Knowledge – the knowledge actually possessed by an individual who is a real person, rather than an entity.

Adjoining Properties – any real property or properties the border of which is contiguous or partially contiguous with that of the property, or that would be contiguous or partially contiguous with that of the property but for a street, road, etc.

All Appropriate Inquiry – inquiry constituting “all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice” as defined in CERCLA, 42 USC 9601(35)(B).

Contaminant: any solid, semisolid, liquid, or gaseous matter, or any odor, radioactive material, pollutant as defined in the Federal Waste Pollution Control Act, hazardous waste as defined by the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as amended, or any combination thereof, from whatever source, that: (A) is injurious to human health, plant or animal life, or property; (B) interferes unreasonably with the enjoyment of life or property; or (C) is otherwise volatile of this article or rules adopted under this article.

Engineering Controls (EC) – physical modifications to a site or facility (for example, capping, slurry walls, or point of use water treatment) to reduce or eliminate the potential for exposure to hazardous substances or petroleum products in the soil or ground water on the property.

Environmental Lien – a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property.

Environmental Professional – a person meeting the education, training, and experience requirements set forth in 40 CFR 312.10(b). The person may be an independent contractor or an employee of the user.

Free Product: the separate phase material present in concentrations greater than a contaminant's residual saturation point.

Fill Dirt/Material – dirt, soil, and, other earth, or material, that is obtained off-site, that is used to fill holes or depressions, create mounds, raise the grade, etc. (does not include limited quantities used for landscaping purposes)

Geophysical techniques: tests (including magnetometer surveys, ground penetrating radar, electrical resistivity, and seismic refraction) used to locate buried metallic objects, such as USTs, and to map groundwater pathways.

Groundwater: subsurface water in a zone of saturation, which can be brought to the surface of the ground or surface waters, through wells, springs, seepage, or other discharge areas. A zone of saturation is where the voids and pore spaces in the rock, soil or geological materials are filled with water.

Hazardous substance: a substance defined as a hazardous substance pursuant to CERCLA 42 U.S.C. §9601(13), as interpreted by EPA regulations and the courts: “A) any substance designated pursuant to section 1231(B)(2)(A) of Title 33, B) any element, compounds, mixture, solution, or substance designated pursuant to section 9602 of this title, C) any *hazardous waste* having the characteristics identified under or listed pursuant to section 3001 of RCRA (1972) as amended, D) any toxic pollutant listed under section 1317(a) of Title 33, E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and F), any imminently hazardous chemical substance or mixture with respect to which the EPA has taken action pursuant to section 2606 of Title 15. The term does not include petroleum products, natural gas, etc.

Institutional Controls (IC) – a legal or administrative restriction (for example, “deed restrictions,” restrictive covenants, easements, or zoning) on the use of, or access to, a site or facility to 1) reduce or eliminate potential exposure to hazardous substances or petroleum products in the soil or groundwater on the property or 2) to prevent activities that could interfere with the effectiveness of a response action, in order to ensure maintenance of a condition of no significant risk to public health or the environment.

Obvious – that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the property.

Owner – generally the fee owner of record of the property.

Petroleum: petroleum asphalt and crude oil or any part of petroleum asphalt or crude oil that is liquid at standard conditions of temperature and pressure [sixty (60) degrees Fahrenheit] and fourteen and seven-tenths (14.7) pounds per square inch absolute.

Property – the real property that is the subject of the environmental site assessment. Real property includes buildings and other fixtures and improvements located on the property and affixed to the land.

Reasonably Ascertainable – information that is (1) publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable

Recorded Land Title Records – records of historical fee ownership, which may include leases, land contracts, and AULs on or of the property.

Release: defined by federal and most state laws as any spilling, leaking, pouring, dumping, emitting, discharging, injecting, escaping, leaching, or disposing of hazardous substances or petroleum products into structures, or onto the ground, ground water, or surface water of a property.

Sump: a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

Wetlands: those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

ACRONYMS

| | | | |
|---------|---|-------|---|
| ACM | Asbestos Containing Material | | 1986, (aka Title III of SARA), 42 USC §11001-11050 |
| AHERA | Asbestos Hazard Emergency Response Act of 1986, 40 CFR 763 | ERIS | Environmental Risk Inventory System |
| AST | Aboveground Storage Tank | | |
| ASTM | American Society for Testing and Materials | ERNS | Emergency Response Notification System |
| ATSDR | Agency for Toxic Substances and Disease Registry | ERO | Extended Range Organics |
| AUL | Activity Use Limitation | ESA | Phase I Environmental Site Assessment |
| BGS | Below Ground Surface | FID | Flame-ionization Detector |
| BTEX | Benzene, Toluene, Ethylbenzene, and Total Xylenes | FINDS | Facility Index System |
| CAA | Clean Air Act (42 USC §7412) | FOIA | Freedom of Information Act (5 USC §552 as amended) |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act of 1980 (as amended, 42 USC §9601) | FR | Federal Register |
| | | GRO | Gasoline Range Organics |
| CERCLIS | Comprehensive Environmental Response, Compensation and Liability Information System | HCS | (OSHA) Hazard Communication Standard |
| | | HRS | Hazard Ranking System, 29 CFR 300 App. A |
| CFR | Code of Federal Regulations | ICs | Institutional Controls |
| COC | Chemical of Concern | IDEM | Indiana Department of Environmental Management |
| CWA | Clean Water Act | LLPs | Landowner Liability Protections under the Brownfields Amendment |
| DNR | (Indiana) Department of Natural Resources | LUST | Leaking Underground Storage Tank |
| DOT | Department of Transportation | LQG | Large Quantity Generator |
| DPW | (Indianapolis) Department of Public Works | MCL | Maximum Contaminant Levels (as defined by EPA under the SDWA) |
| DRO | Diesel Range Organics | MSDSs | Material Safety Data Sheets |
| EC | Environmental Covenant | MTBE | Methyl tert-butyl ether |
| EPA | (Federal) Environmental Protection Agency | NFA | No Further Action |
| EPCRA | (Federal) Emergency Planning and Community Right-to-Know Act of | | |

| | | | |
|---------|---|------|--|
| NFRAP | No Further Remedial Action Planned | SDWA | Safe Drinking Water Act |
| NEPA | National Environmental Policy Act | SIC | Standard Industrial Classification |
| NESHAPS | National Emissions Standards for Hazardous Air Pollutants | SPCC | Spill Prevention Control and Countermeasure |
| NPL | National Priorities List | SQG | Small Quantity Generator |
| O & M: | Operations and Maintenance | SVOC | Semi-volatile Organic Compounds |
| OSHA | Occupational Health & Safety Administration | SWMU | Solid Waste Management Unit |
| PACM | Presumed Asbestos Containing Material | TCE | Trichloroethene |
| PAHs | Polycyclic Aromatic Hydrocarbons (also known as PNAs) | TPH | Total Petroleum Hydrocarbons |
| PCBs | Polychlorinated Biphenyls | TSCA | (Federal) Toxic Substance Control Act |
| PCE | Perchloroethylene (Tetrachloroethylene) | TSD | Treatment, Storage and Disposal (facilities) |
| PID | Photo-ionization Detector | USC | United States Code |
| PNAs | Polynuclear Aromatic Hydrocarbons (also known as PAHs) | USGS | United States Geological Survey |
| PPM | Parts Per Million | UST | Underground Storage Tank |
| PRP | Potentially Responsible Party | VOCs | Volatile Organic Compounds |
| QA/QC | Quality Assurance/Quality Control | | |
| RACM | Regulated Asbestos Containing Material | | |
| RCRA | Resource Conservation and Recovery Act (42 USC §6901) | | |
| RI/FS | Remedial Investigation & Feasibility Study | | |
| RPTA | (Indiana) Responsible Property Transfer Act (1990) | | |
| RQ | Reportable Quantity | | |
| SARA | (Federal) Superfund Amendment and Reauthorization Act | | |
| SBOH | (Indiana) State Board of Health | | |



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Appendix E. Laboratory Analytical Results



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August 04, 2017

Samir Raman
Metric
6971 Hillside Court
Indianapolis, IN 46250


RE: Project: NICTD Westlake Corridor
Pace Project No.: 50176301

Dear Samir Raman:

Enclosed are the analytical results for sample(s) received by the laboratory on July 26, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Ms. Kennita Jones, Metric



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268

Illinois Certification #: 003971

Indiana Certification #: C-49-06

Kansas/NELAP Certification #:E-10177

Kentucky UST Certification #: 80226

Kentucky WW Certification #:98019

Ohio VAP Certification #: CL-0065

Oklahoma Certification #: 2016-075

Texas Certification #: T104704355-16-10

West Virginia Certification #: 330

Wisconsin Certification #: 999788130

USDA Soil Permit #: P330-16-00257

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|-------------|------------------|--------|----------------|----------------|
| 50176301001 | 03-SB-01 (0-1) | Solid | 07/24/17 14:55 | 07/26/17 15:20 |
| 50176301002 | 03-SB-01 (6-8) | Solid | 07/24/17 14:55 | 07/26/17 15:20 |
| 50176301003 | 03-SB-02 (0-1) | Solid | 07/24/17 13:30 | 07/26/17 15:20 |
| 50176301004 | 03-SB-02 (6-8) | Solid | 07/24/17 13:40 | 07/26/17 15:20 |
| 50176301005 | 03-SB-03 (0-1) | Solid | 07/24/17 13:25 | 07/26/17 15:20 |
| 50176301006 | 03-SB-03 (6-8) | Solid | 07/24/17 13:25 | 07/26/17 15:20 |
| 50176301007 | 03-SB-04 (0-1) | Solid | 07/24/17 17:05 | 07/26/17 15:20 |
| 50176301008 | 03-SB-04 (4-6) | Solid | 07/24/17 17:05 | 07/26/17 15:20 |
| 50176301009 | 03-SB-05 (0-1) | Solid | 07/24/17 11:55 | 07/26/17 15:20 |
| 50176301010 | 03-SB-05 (8-10) | Solid | 07/24/17 12:05 | 07/26/17 15:20 |
| 50176301011 | 03-SB-06 (0-1) | Solid | 07/24/17 12:00 | 07/26/17 15:20 |
| 50176301012 | 03-SB-06 (6-8) | Solid | 07/24/17 12:00 | 07/26/17 15:20 |
| 50176301013 | 03-SB-07 (0-1) | Solid | 07/24/17 18:10 | 07/26/17 15:20 |
| 50176301014 | 03-SB-08 (0-1) | Solid | 07/24/17 18:10 | 07/26/17 15:20 |
| 50176301015 | 03-SB-08 (10-12) | Solid | 07/24/17 18:20 | 07/26/17 15:20 |
| 50176301016 | 03-SB-09 (0-1) | Solid | 07/24/17 17:20 | 07/26/17 15:20 |
| 50176301017 | 03-SB-09 (6-8) | Solid | 07/24/17 17:25 | 07/26/17 15:20 |
| 50176301018 | 04-SB-01 (0-1) | Solid | 07/24/17 15:10 | 07/26/17 15:20 |
| 50176301019 | 04-SB-01 (6-8) | Solid | 07/24/17 15:30 | 07/26/17 15:20 |
| 50176301020 | 03-SB-02 W | Water | 07/24/17 14:00 | 07/26/17 15:20 |
| 50176301021 | 03-SB-05 W | Water | 07/24/17 12:30 | 07/26/17 15:20 |
| 50176301022 | 03-SB-08 W | Water | 07/24/17 18:25 | 07/26/17 15:20 |
| 50176301023 | 03-SB-02-FW | Water | 07/24/17 14:00 | 07/26/17 15:20 |
| 50176301024 | 03-SB-05-FW | Water | 07/24/17 12:30 | 07/26/17 15:20 |
| 50176301025 | 03-SB-08-FW | Water | 07/24/17 18:25 | 07/26/17 15:20 |
| 50176301026 | 04-SB-01 W | Water | 07/24/17 15:40 | 07/26/17 15:20 |
| 50176301027 | 04-SB-01-F W | Water | 07/24/17 15:40 | 07/26/17 15:20 |
| 50176301028 | 04-SB-02 (0-1) | Solid | 07/25/17 10:40 | 07/26/17 15:20 |
| 50176301029 | 04-SB-03 (0-1) | Solid | 07/25/17 11:25 | 07/26/17 15:20 |
| 50176301030 | 04-SB-03 (4-6) | Solid | 07/25/17 11:25 | 07/26/17 15:20 |
| 50176301031 | 04-SB-04 (0-1) | Solid | 07/25/17 11:30 | 07/26/17 15:20 |
| 50176301032 | 04-SB-04 (6-8) | Solid | 07/25/17 11:40 | 07/26/17 15:20 |
| 50176301033 | 04-SB-05 (0-1) | Solid | 07/25/17 09:40 | 07/26/17 15:20 |
| 50176301034 | 04-SB-05 (6-8) | Solid | 07/25/17 09:40 | 07/26/17 15:20 |
| 50176301035 | 02-SB-07 (0-1) | Solid | 07/25/17 13:10 | 07/26/17 15:20 |
| 50176301036 | 02-SB-07 (6-8) | Solid | 07/25/17 13:20 | 07/26/17 15:20 |
| 50176301037 | 04-SB-03 W | Water | 07/25/17 11:45 | 07/26/17 15:20 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|-------------|--------------|--------|----------------|----------------|
| 50176301038 | 04-SB-05 W | Water | 07/25/17 10:10 | 07/26/17 15:20 |
| 50176301039 | 04-SB-03-F W | Water | 07/25/17 11:45 | 07/26/17 15:20 |
| 50176301040 | 04-SB-05-F W | Water | 07/25/17 10:10 | 07/26/17 15:20 |
| 50176301041 | Trip Blank | Water | 07/25/17 08:00 | 07/26/17 15:20 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|----------------|-----------------|----------|-------------------|
| 50176301001 | 03-SB-01 (0-1) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301002 | 03-SB-01 (6-8) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301003 | 03-SB-02 (0-1) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301004 | 03-SB-02 (6-8) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301005 | 03-SB-03 (0-1) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301006 | 03-SB-03 (6-8) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301007 | 03-SB-04 (0-1) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301008 | 03-SB-04 (4-6) | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|------------------|-----------------|----------|-------------------|
| 50176301009 | 03-SB-05 (0-1) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301010 | 03-SB-05 (8-10) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301011 | 03-SB-06 (0-1) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301012 | 03-SB-06 (6-8) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301013 | 03-SB-07 (0-1) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301014 | 03-SB-08 (0-1) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301015 | 03-SB-08 (10-12) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|----------------|---------------------|----------|-------------------|
| 50176301016 | 03-SB-09 (0-1) | SM 2540G | EJS | 1 |
| | | EPA 6010 | MJC | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| 50176301017 | 03-SB-09 (6-8) | SM 2540G | EJS | 1 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| 50176301018 | 04-SB-01 (0-1) | SM 2540G | EJS | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| 50176301019 | 04-SB-01 (6-8) | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301020 | 03-SB-02 W | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 6010 | DMT | 7 |
| | | EPA 7470 | JGJ | 1 |
| 50176301021 | 03-SB-05 W | EPA 8270 by SIM LVE | TBP | 20 |
| | | EPA 8260 | ALA | 73 |
| | | EPA 6010 | DMT | 7 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8270 by SIM LVE | TBP | 20 |
| 50176301022 | 03-SB-08 W | EPA 8260 | ALA | 73 |
| | | EPA 6010 | DMT | 7 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8270 by SIM LVE | TBP | 20 |
| | | EPA 8260 | ALA | 73 |
| 50176301023 | 03-SB-02-FW | EPA 6010 | MJC | 7 |
| | | EPA 7470 | ILP | 1 |

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|----------------|---------------------|----------|-------------------|
| 50176301024 | 03-SB-05-FW | EPA 6010 | MJC | 7 |
| | | EPA 7470 | ILP | 1 |
| 50176301025 | 03-SB-08-FW | EPA 6010 | MJC | 7 |
| | | EPA 7470 | ILP | 1 |
| 50176301026 | 04-SB-01 W | EPA 8082 | BJW | 8 |
| | | EPA 6010 | DMT | 7 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8270 by SIM LVE | TBP | 20 |
| 50176301027 | 04-SB-01-F W | EPA 8260 | ALA | 73 |
| | | EPA 6010 | MJC | 7 |
| 50176301028 | 04-SB-02 (0-1) | EPA 7470 | ILP | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| 50176301029 | 04-SB-03 (0-1) | SM 2540G | EJS | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| 50176301030 | 04-SB-03 (4-6) | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301031 | 04-SB-04 (0-1) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50176301032 | 04-SB-04 (6-8) | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| | | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|----------------|---------------------|----------|-------------------|
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301033 | 04-SB-05 (0-1) | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301034 | 04-SB-05 (6-8) | EPA 8082 | NPW | 8 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301035 | 02-SB-07 (0-1) | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301036 | 02-SB-07 (6-8) | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | TMW | 73 |
| | | SM 2540G | EJS | 1 |
| 50176301037 | 04-SB-03 W | EPA 8082 | BJW | 8 |
| | | EPA 6010 | DMT | 7 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8270 by SIM LVE | TBP | 20 |
| | | EPA 8260 | ALA | 73 |
| 50176301038 | 04-SB-05 W | EPA 8082 | BJW | 8 |
| | | EPA 6010 | DMT | 7 |
| | | EPA 7470 | JGJ | 1 |
| | | EPA 8270 by SIM LVE | TBP | 20 |
| | | EPA 8260 | ALA | 73 |
| 50176301039 | 04-SB-03-F W | EPA 6010 | MJC | 7 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|--------------|----------|----------|-------------------|
| 50176301040 | 04-SB-05-F W | EPA 7470 | ILP | 1 |
| | | EPA 6010 | MJC | 7 |
| 50176301041 | Trip Blank | EPA 7470 | ILP | 1 |
| | | EPA 8260 | ALA | 73 |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301001 | 03-SB-01 (0-1) | | | | | |
| EPA 6010 | Arsenic | 6.7 | mg/kg | 0.98 | 07/31/17 12:49 | |
| EPA 6010 | Barium | 85.2 | mg/kg | 0.98 | 07/31/17 12:49 | |
| EPA 6010 | Cadmium | 1.3 | mg/kg | 0.49 | 07/31/17 12:49 | |
| EPA 6010 | Chromium | 127 | mg/kg | 0.98 | 07/31/17 12:49 | |
| EPA 6010 | Lead | 279 | mg/kg | 0.98 | 07/31/17 12:49 | |
| EPA 7471 | Mercury | 0.24 | mg/kg | 0.21 | 08/03/17 17:24 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.16 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.19 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.20 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.21 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.14 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Chrysene | 0.18 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.086 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Fluoranthene | 0.25 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.16 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Phenanthrene | 0.10 | mg/kg | 0.054 | 07/28/17 02:15 | |
| EPA 8270 by SIM | Pyrene | 0.24 | mg/kg | 0.054 | 07/28/17 02:15 | |
| SM 2540G | Percent Moisture | 8.1 | % | 0.10 | 07/27/17 12:30 | |
| 50176301002 | 03-SB-01 (6-8) | | | | | |
| EPA 6010 | Arsenic | 3.7 | mg/kg | 1.4 | 07/31/17 12:51 | |
| EPA 6010 | Barium | 11.8 | mg/kg | 1.4 | 07/31/17 12:51 | |
| EPA 6010 | Chromium | 5.8 | mg/kg | 1.4 | 07/31/17 12:51 | |
| EPA 6010 | Lead | 7.0 | mg/kg | 1.4 | 07/31/17 12:51 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.013 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.012 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.011 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.0082 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.0089 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Chrysene | 0.015 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Fluoranthene | 0.031 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Naphthalene | 0.0077 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Phenanthrene | 0.026 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8270 by SIM | Pyrene | 0.031 | mg/kg | 0.0071 | 07/28/17 02:32 | |
| EPA 8260 | Acetone | 0.14 | mg/kg | 0.12 | 07/31/17 16:13 | 4d |
| SM 2540G | Percent Moisture | 29.7 | % | 0.10 | 07/27/17 12:30 | |
| 50176301003 | 03-SB-02 (0-1) | | | | | |
| EPA 6010 | Arsenic | 12.8 | mg/kg | 0.95 | 07/31/17 12:53 | |
| EPA 6010 | Barium | 139 | mg/kg | 0.95 | 07/31/17 12:53 | |
| EPA 6010 | Cadmium | 4.1 | mg/kg | 0.47 | 07/31/17 12:53 | |
| EPA 6010 | Chromium | 151 | mg/kg | 0.95 | 07/31/17 12:53 | |
| EPA 6010 | Lead | 768 | mg/kg | 0.95 | 07/31/17 12:53 | |
| EPA 7471 | Mercury | 0.59 | mg/kg | 0.23 | 08/03/17 17:32 | |
| EPA 8270 by SIM | Acenaphthylene | 0.57 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Anthracene | 1.5 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 2.1 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 2.3 | mg/kg | 0.28 | 07/28/17 02:50 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50176301003 | 03-SB-02 (0-1) | | | | | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 2.5 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 1.8 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 1.6 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Chrysene | 2.4 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.57 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Fluoranthene | 5.2 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Fluorene | 0.75 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 1.5 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.33 | mg/kg | 0.28 | 07/28/17 02:50 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.50 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Naphthalene | 0.61 | mg/kg | 0.28 | 07/28/17 02:50 | ED |
| EPA 8270 by SIM | Phenanthrene | 4.6 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8270 by SIM | Pyrene | 4.9 | mg/kg | 0.28 | 07/28/17 02:50 | |
| EPA 8260 | Acetone | 0.24 | mg/kg | 0.12 | 07/29/17 08:37 | 3d |
| SM 2540G | Percent Moisture | 11.4 | % | 0.10 | 07/27/17 12:30 | |
| 50176301004 | 03-SB-02 (6-8) | | | | | |
| EPA 6010 | Arsenic | 2.8 | mg/kg | 1.1 | 07/31/17 13:00 | |
| EPA 6010 | Barium | 4.6 | mg/kg | 1.1 | 07/31/17 13:00 | |
| EPA 6010 | Chromium | 4.1 | mg/kg | 1.1 | 07/31/17 13:00 | |
| EPA 6010 | Lead | 3.6 | mg/kg | 1.1 | 07/31/17 13:00 | |
| SM 2540G | Percent Moisture | 18.8 | % | 0.10 | 07/27/17 12:30 | |
| 50176301005 | 03-SB-03 (0-1) | | | | | |
| EPA 6010 | Arsenic | 8.8 | mg/kg | 1.1 | 07/31/17 13:02 | |
| EPA 6010 | Barium | 233 | mg/kg | 1.1 | 07/31/17 13:02 | |
| EPA 6010 | Cadmium | 2.7 | mg/kg | 0.57 | 07/31/17 13:02 | |
| EPA 6010 | Chromium | 35.7 | mg/kg | 1.1 | 07/31/17 13:02 | |
| EPA 6010 | Lead | 218 | mg/kg | 1.1 | 07/31/17 13:02 | |
| EPA 6010 | Selenium | 1.5 | mg/kg | 1.1 | 07/31/17 13:02 | |
| EPA 6010 | Silver | 0.88 | mg/kg | 0.57 | 07/31/17 13:02 | |
| EPA 7471 | Mercury | 1.7 | mg/kg | 0.26 | 08/03/17 17:36 | |
| EPA 8270 by SIM | Acenaphthene | 0.19 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Acenaphthylene | 3.5 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Anthracene | 2.3 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 1.9 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 3.9 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 2.6 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 3.2 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 1.9 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Chrysene | 2.4 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.84 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Fluoranthene | 1.4 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 2.2 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.21 | mg/kg | 0.065 | 07/28/17 03:24 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.37 | mg/kg | 0.065 | 07/28/17 03:24 | |
| EPA 8270 by SIM | Naphthalene | 0.44 | mg/kg | 0.065 | 07/28/17 03:24 | ED |
| EPA 8270 by SIM | Phenanthrene | 0.80 | mg/kg | 0.065 | 07/28/17 03:24 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301005 | 03-SB-03 (0-1) | | | | | |
| EPA 8270 by SIM | Pyrene | 2.5 | mg/kg | 0.065 | 07/28/17 03:24 | |
| SM 2540G | Percent Moisture | 23.8 | % | 0.10 | 07/27/17 12:30 | |
| 50176301006 | 03-SB-03 (6-8) | | | | | |
| EPA 6010 | Arsenic | 26.4 | mg/kg | 1.2 | 07/31/17 13:13 | |
| EPA 6010 | Barium | 260 | mg/kg | 1.2 | 07/31/17 13:13 | |
| EPA 6010 | Cadmium | 1.1 | mg/kg | 0.62 | 07/31/17 13:13 | |
| EPA 6010 | Chromium | 17.8 | mg/kg | 1.2 | 07/31/17 13:13 | |
| EPA 6010 | Lead | 252 | mg/kg | 1.2 | 07/31/17 13:13 | |
| EPA 7471 | Mercury | 0.38 | mg/kg | 0.29 | 08/03/17 17:38 | |
| EPA 8270 by SIM | Acenaphthylene | 0.012 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Anthracene | 0.019 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.12 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.12 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.13 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.086 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.088 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Chrysene | 0.13 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.028 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Fluoranthene | 0.14 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.076 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.024 | mg/kg | 0.0070 | 07/28/17 03:42 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.033 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Naphthalene | 0.032 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Phenanthrene | 0.071 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8270 by SIM | Pyrene | 0.12 | mg/kg | 0.0070 | 07/28/17 03:42 | |
| EPA 8260 | Acetone | 0.26 | mg/kg | 0.13 | 07/29/17 10:17 | 3d |
| SM 2540G | Percent Moisture | 29.1 | % | 0.10 | 07/27/17 12:30 | |
| 50176301007 | 03-SB-04 (0-1) | | | | | |
| EPA 6010 | Arsenic | 39.0 | mg/kg | 1.0 | 07/31/17 13:55 | |
| EPA 6010 | Barium | 191 | mg/kg | 1.0 | 07/31/17 13:55 | |
| EPA 6010 | Cadmium | 1.7 | mg/kg | 0.52 | 07/31/17 13:55 | |
| EPA 6010 | Chromium | 978 | mg/kg | 1.0 | 07/31/17 13:55 | |
| EPA 6010 | Lead | 2020 | mg/kg | 1.0 | 07/31/17 13:55 | |
| EPA 6010 | Selenium | 1.3 | mg/kg | 1.0 | 07/31/17 13:55 | |
| EPA 7471 | Mercury | 0.45 | mg/kg | 0.22 | 08/03/17 17:45 | |
| EPA 8270 by SIM | Acenaphthene | 0.052 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Acenaphthylene | 0.030 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Anthracene | 0.046 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.14 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.12 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.13 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.11 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.13 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Chrysene | 0.17 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.036 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Fluoranthene | 0.34 | mg/kg | 0.028 | 07/28/17 03:59 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301007 | 03-SB-04 (0-1) | | | | | |
| EPA 8270 by SIM | Fluorene | 0.051 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.085 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.15 | mg/kg | 0.028 | 07/28/17 03:59 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.30 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Naphthalene | 0.37 | mg/kg | 0.028 | 07/28/17 03:59 | ED |
| EPA 8270 by SIM | Phenanthrene | 0.38 | mg/kg | 0.028 | 07/28/17 03:59 | |
| EPA 8270 by SIM | Pyrene | 0.28 | mg/kg | 0.028 | 07/28/17 03:59 | |
| SM 2540G | Percent Moisture | 10.4 | % | 0.10 | 07/27/17 12:30 | |
| 50176301008 | 03-SB-04 (4-6) | | | | | |
| EPA 6010 | Arsenic | 2.8 | mg/kg | 1.2 | 07/31/17 13:22 | |
| EPA 6010 | Barium | 6.4 | mg/kg | 1.2 | 07/31/17 13:22 | |
| EPA 6010 | Chromium | 5.2 | mg/kg | 1.2 | 07/31/17 13:22 | |
| EPA 6010 | Lead | 4.0 | mg/kg | 1.2 | 07/31/17 13:22 | |
| SM 2540G | Percent Moisture | 16.1 | % | 0.10 | 07/27/17 12:31 | |
| 50176301009 | 03-SB-05 (0-1) | | | | | |
| EPA 6010 | Arsenic | 15.3 | mg/kg | 1.1 | 07/31/17 13:57 | |
| EPA 6010 | Barium | 123 | mg/kg | 1.1 | 07/31/17 13:57 | |
| EPA 6010 | Cadmium | 1.8 | mg/kg | 0.56 | 07/31/17 13:57 | |
| EPA 6010 | Chromium | 119 | mg/kg | 1.1 | 07/31/17 13:57 | |
| EPA 6010 | Lead | 319 | mg/kg | 1.1 | 07/31/17 13:57 | |
| EPA 6010 | Selenium | 1.2 | mg/kg | 1.1 | 07/31/17 13:57 | |
| EPA 7471 | Mercury | 0.36 | mg/kg | 0.23 | 08/03/17 17:49 | |
| EPA 8270 by SIM | Acenaphthene | 0.056 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Acenaphthylene | 0.66 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Anthracene | 0.42 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.46 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.75 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.40 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.63 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.45 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Chrysene | 0.52 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.15 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Fluoranthene | 0.40 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.42 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.062 | mg/kg | 0.029 | 07/28/17 04:34 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.10 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Naphthalene | 0.15 | mg/kg | 0.029 | 07/28/17 04:34 | ED |
| EPA 8270 by SIM | Phenanthrene | 0.24 | mg/kg | 0.029 | 07/28/17 04:34 | |
| EPA 8270 by SIM | Pyrene | 0.70 | mg/kg | 0.029 | 07/28/17 04:34 | |
| SM 2540G | Percent Moisture | 12.3 | % | 0.10 | 07/27/17 12:31 | |
| 50176301010 | 03-SB-05 (8-10) | | | | | |
| EPA 6010 | Arsenic | 14.1 | mg/kg | 1.1 | 07/31/17 13:59 | |
| EPA 6010 | Barium | 184 | mg/kg | 1.1 | 07/31/17 13:59 | |
| EPA 6010 | Cadmium | 1.1 | mg/kg | 0.53 | 07/31/17 13:59 | |
| EPA 6010 | Chromium | 12.9 | mg/kg | 1.1 | 07/31/17 13:59 | |
| EPA 6010 | Lead | 192 | mg/kg | 1.1 | 07/31/17 13:59 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301010 | 03-SB-05 (8-10) | | | | | |
| EPA 7471 | Mercury | 0.80 | mg/kg | 0.26 | 08/03/17 17:51 | |
| EPA 8270 by SIM | Acenaphthene | 0.63 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Acenaphthylene | 0.21 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Anthracene | 3.0 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 6.7 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 4.5 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 3.5 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 2.7 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 3.6 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Chrysene | 7.2 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.81 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Fluoranthene | 14.3 | mg/kg | 0.16 | 07/28/17 19:29 | |
| EPA 8270 by SIM | Fluorene | 1.1 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 2.3 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.41 | mg/kg | 0.031 | 07/28/17 04:52 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.41 | mg/kg | 0.031 | 07/28/17 04:52 | |
| EPA 8270 by SIM | Naphthalene | 0.63 | mg/kg | 0.031 | 07/28/17 04:52 | ED |
| EPA 8270 by SIM | Phenanthrene | 17.2 | mg/kg | 0.16 | 07/28/17 19:29 | |
| EPA 8270 by SIM | Pyrene | 16.5 | mg/kg | 0.16 | 07/28/17 19:29 | |
| EPA 8260 | Carbon disulfide | 0.022 | mg/kg | 0.015 | 07/29/17 12:31 | |
| SM 2540G | Percent Moisture | 20.6 | % | 0.10 | 07/27/17 12:31 | |
| 50176301011 | 03-SB-06 (0-1) | | | | | |
| EPA 6010 | Arsenic | 7.0 | mg/kg | 1.1 | 07/31/17 14:01 | |
| EPA 6010 | Barium | 48.4 | mg/kg | 1.1 | 07/31/17 14:01 | |
| EPA 6010 | Cadmium | 0.69 | mg/kg | 0.53 | 07/31/17 14:01 | |
| EPA 6010 | Chromium | 31.5 | mg/kg | 1.1 | 07/31/17 14:01 | |
| EPA 6010 | Lead | 846 | mg/kg | 1.1 | 07/31/17 14:01 | |
| EPA 7471 | Mercury | 0.45 | mg/kg | 0.21 | 08/03/17 17:53 | |
| EPA 8270 by SIM | Acenaphthene | 0.14 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Acenaphthylene | 0.98 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Anthracene | 1.1 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 1.7 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 2.0 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 1.7 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 1.4 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 1.2 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Chrysene | 1.8 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.42 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Fluoranthene | 2.9 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 1.2 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.11 | mg/kg | 0.055 | 07/28/17 05:09 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.15 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Naphthalene | 0.20 | mg/kg | 0.055 | 07/28/17 05:09 | ED |
| EPA 8270 by SIM | Phenanthrene | 1.5 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8270 by SIM | Pyrene | 2.9 | mg/kg | 0.055 | 07/28/17 05:09 | |
| EPA 8260 | Acetone | 0.12 | mg/kg | 0.11 | 07/31/17 16:47 | 4d |
| SM 2540G | Percent Moisture | 9.7 | % | 0.10 | 07/27/17 12:31 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301012 | 03-SB-06 (6-8) | | | | | |
| EPA 6010 | Arsenic | 43.2 | mg/kg | 1.1 | 07/31/17 14:03 | |
| EPA 6010 | Barium | 275 | mg/kg | 1.1 | 07/31/17 14:03 | |
| EPA 6010 | Cadmium | 3.5 | mg/kg | 0.54 | 07/31/17 14:03 | |
| EPA 6010 | Chromium | 248 | mg/kg | 1.1 | 07/31/17 14:03 | |
| EPA 6010 | Lead | 2680 | mg/kg | 1.1 | 07/31/17 14:03 | |
| EPA 7471 | Mercury | 1.9 | mg/kg | 0.24 | 08/03/17 17:55 | |
| EPA 8270 by SIM | Acenaphthene | 0.058 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Acenaphthylene | 0.042 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Anthracene | 0.17 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.24 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.17 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.26 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.19 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.16 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Chrysene | 0.34 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.058 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Fluoranthene | 0.69 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Fluorene | 0.054 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.14 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.13 | mg/kg | 0.030 | 07/28/17 05:26 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.20 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Naphthalene | 0.55 | mg/kg | 0.030 | 07/28/17 05:26 | ED |
| EPA 8270 by SIM | Phenanthrene | 1.2 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8270 by SIM | Pyrene | 0.49 | mg/kg | 0.030 | 07/28/17 05:26 | |
| EPA 8260 | n-Hexane | 0.091 | mg/kg | 0.0060 | 07/31/17 17:20 | |
| SM 2540G | Percent Moisture | 18.2 | % | 0.10 | 07/27/17 12:31 | |
| 50176301013 | 03-SB-07 (0-1) | | | | | |
| EPA 6010 | Barium | 26.6 | mg/kg | 9.1 | 07/31/17 14:37 | |
| EPA 6010 | Chromium | 747 | mg/kg | 9.1 | 07/31/17 14:37 | |
| EPA 6010 | Lead | 50.8 | mg/kg | 9.1 | 07/31/17 14:37 | |
| EPA 7471 | Mercury | 0.48 | mg/kg | 0.21 | 08/03/17 17:57 | |
| EPA 8270 by SIM | Anthracene | 0.028 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.14 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.21 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.24 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.19 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.16 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Chrysene | 0.20 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.055 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Fluoranthene | 0.33 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.15 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Phenanthrene | 0.25 | mg/kg | 0.026 | 07/28/17 05:44 | |
| EPA 8270 by SIM | Pyrene | 0.26 | mg/kg | 0.026 | 07/28/17 05:44 | |
| SM 2540G | Percent Moisture | 6.0 | % | 0.10 | 07/27/17 15:09 | |
| 50176301014 | 03-SB-08 (0-1) | | | | | |
| EPA 6010 | Arsenic | 32.5 | mg/kg | 1.1 | 07/31/17 14:08 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|-------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301014 | 03-SB-08 (0-1) | | | | | |
| EPA 6010 | Barium | 189 | mg/kg | 1.1 | 07/31/17 14:08 | |
| EPA 6010 | Cadmium | 1.4 | mg/kg | 0.55 | 07/31/17 14:08 | |
| EPA 6010 | Chromium | 501 | mg/kg | 1.1 | 07/31/17 14:08 | |
| EPA 6010 | Lead | 304 | mg/kg | 1.1 | 07/31/17 14:08 | |
| EPA 8270 by SIM | Acenaphthene | 0.14 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.043 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.041 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.044 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Chrysene | 0.12 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Fluoranthene | 0.19 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Fluorene | 0.059 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.18 | mg/kg | 0.029 | 07/28/17 06:01 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.28 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Naphthalene | 0.32 | mg/kg | 0.029 | 07/28/17 06:01 | ED |
| EPA 8270 by SIM | Phenanthrene | 0.42 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8270 by SIM | Pyrene | 0.17 | mg/kg | 0.029 | 07/28/17 06:01 | |
| EPA 8260 | n-Hexane | 0.15J | mg/kg | 0.16 | 08/02/17 18:53 | J |
| EPA 8260 | Naphthalene | 0.27 | mg/kg | 0.16 | 08/02/17 02:06 | |
| SM 2540G | Percent Moisture | 14.7 | % | 0.10 | 07/27/17 15:09 | |
| 50176301015 | 03-SB-08 (10-12) | | | | | |
| EPA 6010 | Arsenic | 2.1 | mg/kg | 1.1 | 07/31/17 13:24 | |
| EPA 6010 | Barium | 8.7 | mg/kg | 1.1 | 07/31/17 13:24 | |
| EPA 6010 | Chromium | 4.1 | mg/kg | 1.1 | 07/31/17 13:24 | |
| EPA 6010 | Lead | 6.0 | mg/kg | 1.1 | 07/31/17 13:24 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.0071 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.0067 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.0073 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| EPA 8270 by SIM | Chrysene | 0.011 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| EPA 8270 by SIM | Fluoranthene | 0.020 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| EPA 8270 by SIM | Phenanthrene | 0.020 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| EPA 8270 by SIM | Pyrene | 0.019 | mg/kg | 0.0061 | 07/28/17 06:19 | |
| SM 2540G | Percent Moisture | 18.7 | % | 0.10 | 07/27/17 15:10 | |
| 50176301016 | 03-SB-09 (0-1) | | | | | |
| EPA 6010 | Arsenic | 2.4 | mg/kg | 1.0 | 07/31/17 13:26 | |
| EPA 6010 | Barium | 4.0 | mg/kg | 1.0 | 07/31/17 13:26 | |
| EPA 6010 | Chromium | 2.8 | mg/kg | 1.0 | 07/31/17 13:26 | |
| EPA 6010 | Lead | 2.7 | mg/kg | 1.0 | 07/31/17 13:26 | |
| EPA 8270 by SIM | Acenaphthene | 0.14 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Anthracene | 0.14 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.22 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.18 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.19 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.12 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.15 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Chrysene | 0.25 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.045 | mg/kg | 0.026 | 07/28/17 06:36 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|-------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301016 | 03-SB-09 (0-1) | | | | | |
| EPA 8270 by SIM | Fluoranthene | 0.71 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Fluorene | 0.16 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.11 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.048 | mg/kg | 0.026 | 07/28/17 06:36 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.059 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Naphthalene | 0.083 | mg/kg | 0.026 | 07/28/17 06:36 | ED |
| EPA 8270 by SIM | Phenanthrene | 0.82 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8270 by SIM | Pyrene | 0.55 | mg/kg | 0.026 | 07/28/17 06:36 | |
| EPA 8260 | Naphthalene | 0.085 | mg/kg | 0.0080 | 07/31/17 19:01 | |
| SM 2540G | Percent Moisture | 3.9 | % | 0.10 | 07/27/17 15:10 | |
| 50176301017 | 03-SB-09 (6-8) | | | | | |
| EPA 6010 | Arsenic | 2.2 | mg/kg | 1.2 | 07/29/17 03:07 | |
| EPA 6010 | Barium | 4.3 | mg/kg | 1.2 | 07/29/17 03:07 | |
| EPA 6010 | Chromium | 4.2 | mg/kg | 1.2 | 07/29/17 03:07 | |
| EPA 6010 | Lead | 4.0 | mg/kg | 1.2 | 07/29/17 03:07 | |
| SM 2540G | Percent Moisture | 19.2 | % | 0.10 | 07/27/17 15:10 | |
| 50176301018 | 04-SB-01 (0-1) | | | | | |
| EPA 8082 | PCB-1254 (Aroclor 1254) | 0.18 | mg/kg | 0.12 | 07/28/17 11:51 | |
| EPA 6010 | Arsenic | 11.1 | mg/kg | 1.0 | 07/29/17 03:09 | |
| EPA 6010 | Barium | 108 | mg/kg | 1.0 | 07/29/17 03:09 | |
| EPA 6010 | Cadmium | 6.1 | mg/kg | 0.51 | 07/29/17 03:09 | |
| EPA 6010 | Chromium | 365 | mg/kg | 1.0 | 07/29/17 03:09 | |
| EPA 6010 | Lead | 433 | mg/kg | 1.0 | 07/29/17 03:09 | |
| EPA 6010 | Selenium | 1.4 | mg/kg | 1.0 | 07/29/17 03:09 | |
| EPA 6010 | Silver | 1.7 | mg/kg | 0.51 | 07/29/17 03:09 | |
| EPA 8270 by SIM | Acenaphthene | 0.048 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Acenaphthylene | 0.35 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Anthracene | 0.56 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.93 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.81 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.80 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.56 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.65 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Chrysene | 0.91 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.17 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Fluoranthene | 2.2 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Fluorene | 0.26 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.49 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.13 | mg/kg | 0.029 | 07/28/17 07:11 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.16 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Naphthalene | 0.21 | mg/kg | 0.029 | 07/28/17 07:11 | ED |
| EPA 8270 by SIM | Phenanthrene | 1.9 | mg/kg | 0.029 | 07/28/17 07:11 | |
| EPA 8270 by SIM | Pyrene | 1.9 | mg/kg | 0.029 | 07/28/17 07:11 | |
| SM 2540G | Percent Moisture | 14.5 | % | 0.10 | 07/27/17 15:10 | |
| 50176301019 | 04-SB-01 (6-8) | | | | | |
| EPA 6010 | Arsenic | 8.1 | mg/kg | 1.1 | 07/29/17 03:11 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50176301019 | 04-SB-01 (6-8) | | | | | |
| EPA 6010 | Barium | 17.6 | mg/kg | 1.1 | 07/29/17 03:11 | |
| EPA 6010 | Chromium | 18.2 | mg/kg | 1.1 | 07/29/17 03:11 | |
| EPA 6010 | Lead | 25.7 | mg/kg | 1.1 | 07/29/17 03:11 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.0069 | mg/kg | 0.0061 | 07/28/17 07:28 | |
| EPA 8270 by SIM | Phenanthrene | 0.0073 | mg/kg | 0.0061 | 07/28/17 07:28 | |
| EPA 8270 by SIM | Pyrene | 0.0066 | mg/kg | 0.0061 | 07/28/17 07:28 | |
| EPA 8260 | Acetone | 0.14 | mg/kg | 0.10 | 07/31/17 20:41 | 4d |
| SM 2540G | Percent Moisture | 18.5 | % | 0.10 | 07/27/17 15:10 | |
| 50176301020 | 03-SB-02 W | | | | | |
| EPA 6010 | Barium | 13.6 | ug/L | 10.0 | 07/29/17 00:07 | |
| 50176301021 | 03-SB-05 W | | | | | |
| EPA 6010 | Barium | 63.0 | ug/L | 10.0 | 07/29/17 00:09 | |
| EPA 6010 | Lead | 14.2 | ug/L | 10.0 | 07/29/17 00:09 | |
| 50176301022 | 03-SB-08 W | | | | | |
| EPA 6010 | Barium | 65.0 | ug/L | 10.0 | 07/29/17 00:12 | |
| EPA 6010 | Chromium | 10.6 | ug/L | 10.0 | 07/29/17 00:12 | |
| 50176301023 | 03-SB-02-FW | | | | | |
| EPA 6010 | Barium, Dissolved | 13.1 | ug/L | 10.0 | 07/31/17 12:03 | |
| 50176301024 | 03-SB-05-FW | | | | | |
| EPA 6010 | Barium, Dissolved | 59.7 | ug/L | 10.0 | 07/31/17 12:05 | |
| 50176301025 | 03-SB-08-FW | | | | | |
| EPA 6010 | Barium, Dissolved | 69.6 | ug/L | 10.0 | 07/31/17 12:08 | |
| 50176301026 | 04-SB-01 W | | | | | |
| EPA 6010 | Barium | 96.6 | ug/L | 10.0 | 07/29/17 00:23 | |
| EPA 6010 | Chromium | 33.5 | ug/L | 10.0 | 07/29/17 00:23 | |
| EPA 6010 | Lead | 60.0 | ug/L | 10.0 | 07/29/17 00:23 | |
| 50176301027 | 04-SB-01-F W | | | | | |
| EPA 6010 | Barium, Dissolved | 85.9 | ug/L | 10.0 | 07/31/17 12:10 | |
| EPA 6010 | Chromium, Dissolved | 21.8 | ug/L | 10.0 | 07/31/17 12:10 | |
| EPA 6010 | Lead, Dissolved | 40.5 | ug/L | 10.0 | 07/31/17 12:10 | |
| 50176301028 | 04-SB-02 (0-1) | | | | | |
| EPA 8082 | PCB-1254 (Aroclor 1254) | 0.64 | mg/kg | 0.36 | 07/28/17 15:22 | |
| EPA 6010 | Arsenic | 4.9 | mg/kg | 1.0 | 07/29/17 03:13 | |
| EPA 6010 | Barium | 75.1 | mg/kg | 1.0 | 07/29/17 03:13 | |
| EPA 6010 | Cadmium | 1.3 | mg/kg | 0.51 | 07/29/17 03:13 | |
| EPA 6010 | Chromium | 205 | mg/kg | 1.0 | 07/29/17 03:13 | |
| EPA 6010 | Lead | 76.8 | mg/kg | 1.0 | 07/29/17 03:13 | |
| EPA 6010 | Silver | 3.3 | mg/kg | 0.51 | 07/29/17 03:13 | |
| EPA 7471 | Mercury | 0.47 | mg/kg | 0.25 | 08/03/17 18:19 | |
| EPA 8270 by SIM | Acenaphthene | 0.28 | mg/kg | 0.030 | 07/28/17 07:46 | M1 |
| EPA 8270 by SIM | Anthracene | 0.24 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.22 | mg/kg | 0.030 | 07/28/17 07:46 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|-----------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301028 | 04-SB-02 (0-1) | | | | | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.31 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.31 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.62 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.22 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Chrysene | 0.35 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.11 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Fluoranthene | 0.62 | mg/kg | 0.030 | 07/28/17 07:46 | M1 |
| EPA 8270 by SIM | Fluorene | 0.19 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.28 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.25 | mg/kg | 0.030 | 07/28/17 07:46 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.42 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8270 by SIM | Naphthalene | 0.31 | mg/kg | 0.030 | 07/28/17 07:46 | ED |
| EPA 8270 by SIM | Phenanthrene | 0.97 | mg/kg | 0.030 | 07/28/17 07:46 | M1 |
| EPA 8270 by SIM | Pyrene | 0.66 | mg/kg | 0.030 | 07/28/17 07:46 | |
| EPA 8260 | Carbon disulfide | 0.027 | mg/kg | 0.016 | 07/31/17 21:14 | |
| EPA 8260 | 4-Methyl-2-pentanone (MIBK) | 0.092 | mg/kg | 0.039 | 07/31/17 21:14 | |
| SM 2540G | Percent Moisture | 16.6 | % | 0.10 | 07/27/17 15:10 | |
| 50176301029 | 04-SB-03 (0-1) | | | | | |
| EPA 6010 | Arsenic | 6.9 | mg/kg | 0.99 | 07/29/17 03:15 | |
| EPA 6010 | Barium | 179 | mg/kg | 0.99 | 07/29/17 03:15 | |
| EPA 6010 | Cadmium | 1.1 | mg/kg | 0.49 | 07/29/17 03:15 | |
| EPA 6010 | Chromium | 59.3 | mg/kg | 0.99 | 07/29/17 03:15 | |
| EPA 6010 | Lead | 125 | mg/kg | 0.99 | 07/29/17 03:15 | |
| EPA 6010 | Selenium | 1.3 | mg/kg | 0.99 | 07/29/17 03:15 | |
| EPA 7471 | Mercury | 0.27 | mg/kg | 0.25 | 08/03/17 18:25 | |
| EPA 8270 by SIM | Acenaphthene | 0.039 | mg/kg | 0.029 | 07/27/17 17:34 | R1 |
| EPA 8270 by SIM | Acenaphthylene | 0.29 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Anthracene | 0.26 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.39 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.33 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.36 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.33 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.28 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Chrysene | 0.58 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.091 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Fluoranthene | 0.58 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Fluorene | 0.042 | mg/kg | 0.029 | 07/27/17 17:34 | R1 |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.23 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.36 | mg/kg | 0.029 | 07/27/17 17:34 | M1, N2, R1 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.43 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Naphthalene | 0.38 | mg/kg | 0.029 | 07/27/17 17:34 | ED, M1, R1 |
| EPA 8270 by SIM | Phenanthrene | 1.0 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| EPA 8270 by SIM | Pyrene | 0.80 | mg/kg | 0.029 | 07/27/17 17:34 | M1, R1 |
| SM 2540G | Percent Moisture | 15.0 | % | 0.10 | 07/27/17 15:10 | |
| 50176301030 | 04-SB-03 (4-6) | | | | | |
| EPA 6010 | Arsenic | 1.9 | mg/kg | 1.2 | 07/29/17 03:21 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|-------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301030 | 04-SB-03 (4-6) | | | | | |
| EPA 6010 | Barium | 8.2 | mg/kg | 1.2 | 07/29/17 03:21 | |
| EPA 6010 | Chromium | 3.3 | mg/kg | 1.2 | 07/29/17 03:21 | |
| EPA 6010 | Lead | 3.3 | mg/kg | 1.2 | 07/29/17 03:21 | |
| SM 2540G | Percent Moisture | 20.3 | % | 0.10 | 07/27/17 15:10 | |
| 50176301031 | 04-SB-04 (0-1) | | | | | |
| EPA 6010 | Arsenic | 8.1 | mg/kg | 1.1 | 07/29/17 03:24 | |
| EPA 6010 | Barium | 169 | mg/kg | 1.1 | 07/29/17 03:24 | |
| EPA 6010 | Cadmium | 0.84 | mg/kg | 0.53 | 07/29/17 03:24 | |
| EPA 6010 | Chromium | 26.0 | mg/kg | 1.1 | 07/29/17 03:24 | |
| EPA 6010 | Lead | 114 | mg/kg | 1.1 | 07/29/17 03:24 | |
| EPA 7471 | Mercury | 0.84 | mg/kg | 0.25 | 08/03/17 18:38 | |
| EPA 8270 by SIM | Acenaphthylene | 0.13 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Anthracene | 0.088 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.25 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.18 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.16 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.15 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.19 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Chrysene | 0.27 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.048 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Fluoranthene | 0.36 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.12 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.031 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Phenanthrene | 0.17 | mg/kg | 0.031 | 07/27/17 18:43 | |
| EPA 8270 by SIM | Pyrene | 0.47 | mg/kg | 0.031 | 07/27/17 18:43 | |
| SM 2540G | Percent Moisture | 18.8 | % | 0.10 | 07/27/17 15:10 | |
| 50176301032 | 04-SB-04 (6-8) | | | | | |
| EPA 6010 | Arsenic | 2.3 | mg/kg | 1.2 | 07/29/17 03:26 | |
| EPA 6010 | Barium | 5.6 | mg/kg | 1.2 | 07/29/17 03:26 | |
| EPA 6010 | Chromium | 3.7 | mg/kg | 1.2 | 07/29/17 03:26 | |
| EPA 6010 | Lead | 3.7 | mg/kg | 1.2 | 07/29/17 03:26 | |
| SM 2540G | Percent Moisture | 18.9 | % | 0.10 | 07/27/17 15:12 | |
| 50176301033 | 04-SB-05 (0-1) | | | | | |
| EPA 8082 | PCB-1254 (Aroclor 1254) | 0.16 | mg/kg | 0.10 | 07/28/17 13:04 | |
| EPA 8082 | PCB-1260 (Aroclor 1260) | 0.12 | mg/kg | 0.10 | 07/28/17 13:04 | |
| EPA 6010 | Arsenic | 6.1 | mg/kg | 0.89 | 07/29/17 03:28 | |
| EPA 6010 | Barium | 124 | mg/kg | 0.89 | 07/29/17 03:28 | |
| EPA 6010 | Cadmium | 2.2 | mg/kg | 0.45 | 07/29/17 03:28 | |
| EPA 6010 | Chromium | 417 | mg/kg | 0.89 | 07/29/17 03:28 | |
| EPA 6010 | Lead | 122 | mg/kg | 0.89 | 07/29/17 03:28 | |
| EPA 6010 | Silver | 2.1 | mg/kg | 0.45 | 07/29/17 03:28 | |
| EPA 8270 by SIM | Acenaphthene | 0.27 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Anthracene | 1.0 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 2.0 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 1.0 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 1.3 | mg/kg | 0.025 | 07/27/17 19:17 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50176301033 | 04-SB-05 (0-1) | | | | | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.53 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.91 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Chrysene | 2.1 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.17 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Fluoranthene | 4.5 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Fluorene | 0.49 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.48 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.12 | mg/kg | 0.025 | 07/27/17 19:17 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.16 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Naphthalene | 0.21 | mg/kg | 0.025 | 07/27/17 19:17 | ED |
| EPA 8270 by SIM | Phenanthrene | 4.1 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8270 by SIM | Pyrene | 4.2 | mg/kg | 0.025 | 07/27/17 19:17 | |
| EPA 8260 | Naphthalene | 0.0092 | mg/kg | 0.0050 | 08/01/17 01:58 | |
| SM 2540G | Percent Moisture | 1.7 | % | 0.10 | 07/27/17 15:12 | |
| 50176301034 | 04-SB-05 (6-8) | | | | | |
| EPA 6010 | Arsenic | 3.8 | mg/kg | 1.0 | 07/29/17 03:30 | |
| EPA 6010 | Barium | 5.6 | mg/kg | 1.0 | 07/29/17 03:30 | |
| EPA 6010 | Chromium | 3.8 | mg/kg | 1.0 | 07/29/17 03:30 | |
| EPA 6010 | Lead | 4.4 | mg/kg | 1.0 | 07/29/17 03:30 | |
| EPA 8270 by SIM | Acenaphthene | 0.029 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Acenaphthylene | 0.020 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Anthracene | 0.021 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.021 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.019 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.016 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.014 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.016 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Chrysene | 0.022 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Fluoranthene | 0.055 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Fluorene | 0.073 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.012 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 1.6 | mg/kg | 0.0058 | 07/27/17 19:35 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 3.2 | mg/kg | 0.029 | 07/28/17 18:37 | |
| EPA 8270 by SIM | Naphthalene | 0.24 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Phenanthrene | 0.12 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| EPA 8270 by SIM | Pyrene | 0.043 | mg/kg | 0.0058 | 07/27/17 19:35 | |
| SM 2540G | Percent Moisture | 14.6 | % | 0.10 | 07/27/17 15:12 | |
| 50176301035 | 02-SB-07 (0-1) | | | | | |
| EPA 6010 | Arsenic | 4.7 | mg/kg | 1.1 | 07/29/17 03:40 | |
| EPA 6010 | Barium | 47.0 | mg/kg | 1.1 | 07/29/17 03:40 | |
| EPA 6010 | Chromium | 8.3 | mg/kg | 1.1 | 07/29/17 03:40 | |
| EPA 6010 | Lead | 42.3 | mg/kg | 1.1 | 07/29/17 03:40 | |
| EPA 8270 by SIM | Acenaphthene | 0.022 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Acenaphthylene | 0.016 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Anthracene | 0.023 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.015 | mg/kg | 0.0058 | 07/27/17 19:52 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50176301035 | 02-SB-07 (0-1) | | | | | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.0094 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.0077 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.0065 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.0090 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Chrysene | 0.014 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Fluoranthene | 0.058 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Fluorene | 0.063 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.0059 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 1.3 | mg/kg | 0.0058 | 07/27/17 19:52 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 2.2 | mg/kg | 0.029 | 07/28/17 18:55 | |
| EPA 8270 by SIM | Phenanthrene | 0.10 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| EPA 8270 by SIM | Pyrene | 0.042 | mg/kg | 0.0058 | 07/27/17 19:52 | |
| SM 2540G | Percent Moisture | 13.8 | % | 0.10 | 07/27/17 15:12 | |
| 50176301036 | 02-SB-07 (6-8) | | | | | |
| EPA 6010 | Arsenic | 1.8 | mg/kg | 1.2 | 07/29/17 03:46 | |
| EPA 6010 | Barium | 5.3 | mg/kg | 1.2 | 07/29/17 03:46 | |
| EPA 6010 | Chromium | 4.4 | mg/kg | 1.2 | 07/29/17 03:46 | |
| EPA 6010 | Lead | 5.0 | mg/kg | 1.2 | 07/29/17 03:46 | |
| EPA 8270 by SIM | Acenaphthene | 0.075 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Acenaphthylene | 0.057 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Anthracene | 0.074 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.051 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.034 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.028 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.020 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.029 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Chrysene | 0.046 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Fluoranthene | 0.21 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Fluorene | 0.24 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.019 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 5.4 | mg/kg | 0.063 | 07/28/17 19:12 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 7.5 | mg/kg | 0.063 | 07/28/17 19:12 | |
| EPA 8270 by SIM | Phenanthrene | 0.32 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| EPA 8270 by SIM | Pyrene | 0.14 | mg/kg | 0.0063 | 07/27/17 20:09 | |
| SM 2540G | Percent Moisture | 20.7 | % | 0.10 | 07/27/17 15:12 | |
| 50176301037 | 04-SB-03 W | | | | | |
| EPA 6010 | Arsenic | 31.5 | ug/L | 10.0 | 07/29/17 00:25 | |
| EPA 6010 | Barium | 68.5 | ug/L | 10.0 | 07/29/17 00:25 | |
| EPA 6010 | Chromium | 15.6 | ug/L | 10.0 | 07/29/17 00:25 | |
| 50176301038 | 04-SB-05 W | | | | | |
| EPA 6010 | Barium | 64.3 | ug/L | 10.0 | 07/29/17 00:27 | |
| EPA 6010 | Chromium | 30.2 | ug/L | 10.0 | 07/29/17 00:27 | |
| EPA 6010 | Lead | 36.9 | ug/L | 10.0 | 07/29/17 00:27 | |
| 50176301039 | 04-SB-03-F W | | | | | |
| EPA 6010 | Arsenic, Dissolved | 28.4 | ug/L | 10.0 | 07/31/17 12:12 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50176301039 | 04-SB-03-F W | | | | | |
| EPA 6010 | Barium, Dissolved | 59.0 | ug/L | 10.0 | 07/31/17 12:12 | |
| 50176301040 | 04-SB-05-F W | | | | | |
| EPA 6010 | Barium, Dissolved | 39.8 | ug/L | 10.0 | 07/31/17 12:34 | |
| EPA 6010 | Chromium, Dissolved | 15.0 | ug/L | 10.0 | 07/31/17 12:34 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-01 (0-1) **Lab ID: 50176301001** Collected: 07/24/17 14:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 6.7 | mg/kg | 0.98 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7440-38-2 | |
| Barium | 85.2 | mg/kg | 0.98 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7440-39-3 | |
| Cadmium | 1.3 | mg/kg | 0.49 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7440-43-9 | |
| Chromium | 127 | mg/kg | 0.98 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7440-47-3 | |
| Lead | 279 | mg/kg | 0.98 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7439-92-1 | |
| Selenium | ND | mg/kg | 0.98 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.49 | 1 | 07/28/17 12:00 | 07/31/17 12:49 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 0.24 | mg/kg | 0.21 | 1 | 08/03/17 09:30 | 08/03/17 17:24 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 120-12-7 | |
| Benzo(a)anthracene | 0.16 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 56-55-3 | |
| Benzo(a)pyrene | 0.19 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.20 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.21 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.14 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 207-08-9 | |
| Chrysene | 0.18 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.086 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 53-70-3 | |
| Fluoranthene | 0.25 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.16 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 91-20-3 | ED |
| Phenanthrene | 0.10 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 85-01-8 | |
| Pyrene | 0.24 | mg/kg | 0.054 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 37 | % | 30-94 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 39 | % | 27-102 | 10 | 07/27/17 11:27 | 07/28/17 02:15 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.026 | 1 | | 07/29/17 08:03 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-01 (0-1) **Lab ID: 50176301001** Collected: 07/24/17 14:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.010 | 1 | | 07/29/17 08:03 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 07/29/17 08:03 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.026 | 1 | | 07/29/17 08:03 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-01 (0-1) **Lab ID: 50176301001** Collected: 07/24/17 14:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.10 | 1 | | 07/29/17 08:03 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0052 | 1 | | 07/29/17 08:03 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.010 | 1 | | 07/29/17 08:03 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 116 | % | 69-136 | 1 | | 07/29/17 08:03 | 1868-53-7 | |
| Toluene-d8 (S) | 113 | % | 64-150 | 1 | | 07/29/17 08:03 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 82 | % | 51-142 | 1 | | 07/29/17 08:03 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 8.1 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

Sample: 03-SB-01 (6-8) **Lab ID: 50176301002** Collected: 07/24/17 14:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 3.7 | mg/kg | 1.4 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7440-38-2 | |
| Barium | 11.8 | mg/kg | 1.4 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.69 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7440-43-9 | |
| Chromium | 5.8 | mg/kg | 1.4 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7440-47-3 | |
| Lead | 7.0 | mg/kg | 1.4 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.4 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.69 | 1 | 07/28/17 12:00 | 07/31/17 12:51 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.27 | 1 | 08/03/17 09:30 | 08/03/17 17:30 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 120-12-7 | |
| Benzo(a)anthracene | 0.013 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 56-55-3 | |
| Benzo(a)pyrene | 0.012 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.011 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.0082 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.0089 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 207-08-9 | |
| Chrysene | 0.015 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 53-70-3 | |
| Fluoranthene | 0.031 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 91-57-6 | |
| Naphthalene | 0.0077 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 91-20-3 | |
| Phenanthrene | 0.026 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 85-01-8 | |
| Pyrene | 0.031 | mg/kg | 0.0071 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 45 | % | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 35 | % | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 02:32 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | 0.14 | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 67-64-1 | 4d |
| Acrolein | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.030 | 1 | | 07/31/17 16:13 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-01 (6-8) **Lab ID: 50176301002** Collected: 07/24/17 14:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.012 | 1 | | 07/31/17 16:13 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.024 | 1 | | 07/31/17 16:13 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.030 | 1 | | 07/31/17 16:13 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0069 | 1 | | 08/01/17 21:22 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-01 (6-8) **Lab ID: 50176301002** Collected: 07/24/17 14:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.12 | 1 | | 07/31/17 16:13 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0060 | 1 | | 07/31/17 16:13 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.012 | 1 | | 07/31/17 16:13 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 32 | % | 69-136 | 1 | | 07/31/17 16:13 | 1868-53-7 | S2 |
| Toluene-d8 (S) | 102 | % | 64-150 | 1 | | 07/31/17 16:13 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 96 | % | 51-142 | 1 | | 07/31/17 16:13 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 29.7 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-02 (0-1) Lab ID: 50176301003 Collected: 07/24/17 13:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 12.8 | mg/kg | 0.95 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7440-38-2 | |
| Barium | 139 | mg/kg | 0.95 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7440-39-3 | |
| Cadmium | 4.1 | mg/kg | 0.47 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7440-43-9 | |
| Chromium | 151 | mg/kg | 0.95 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7440-47-3 | |
| Lead | 768 | mg/kg | 0.95 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7439-92-1 | |
| Selenium | ND | mg/kg | 0.95 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.47 | 1 | 07/28/17 12:00 | 07/31/17 12:53 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 0.59 | mg/kg | 0.23 | 1 | 08/03/17 09:30 | 08/03/17 17:32 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 83-32-9 | |
| Acenaphthylene | 0.57 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 208-96-8 | |
| Anthracene | 1.5 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 120-12-7 | |
| Benzo(a)anthracene | 2.1 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 56-55-3 | |
| Benzo(a)pyrene | 2.3 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 50-32-8 | |
| Benzo(b)fluoranthene | 2.5 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 205-99-2 | |
| Benzo(g,h,i)perylene | 1.8 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 191-24-2 | |
| Benzo(k)fluoranthene | 1.6 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 207-08-9 | |
| Chrysene | 2.4 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.57 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 53-70-3 | |
| Fluoranthene | 5.2 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 206-44-0 | |
| Fluorene | 0.75 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 1.5 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 193-39-5 | |
| 1-Methylnaphthalene | 0.33 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.50 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 91-57-6 | |
| Naphthalene | 0.61 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 91-20-3 | ED |
| Phenanthrene | 4.6 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 85-01-8 | |
| Pyrene | 4.9 | mg/kg | 0.28 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 130 | % | 30-94 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 321-60-8 | S4 |
| p-Terphenyl-d14 (S) | 139 | % | 27-102 | 10 | 07/27/17 11:27 | 07/28/17 02:50 | 1718-51-0 | S4 |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | 0.24 | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 67-64-1 | 3d |
| Acrolein | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.029 | 1 | | 07/29/17 08:37 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-02 (0-1) Lab ID: 50176301003 Collected: 07/24/17 13:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.012 | 1 | | 07/29/17 08:37 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.023 | 1 | | 07/29/17 08:37 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.029 | 1 | | 07/29/17 08:37 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-02 (0-1) **Lab ID: 50176301003** Collected: 07/24/17 13:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.12 | 1 | | 07/29/17 08:37 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0058 | 1 | | 07/29/17 08:37 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.012 | 1 | | 07/29/17 08:37 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 110 | % | 69-136 | 1 | | 07/29/17 08:37 | 1868-53-7 | |
| Toluene-d8 (S) | 114 | % | 64-150 | 1 | | 07/29/17 08:37 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 82 | % | 51-142 | 1 | | 07/29/17 08:37 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 11.4 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-02 (6-8) Lab ID: 50176301004 Collected: 07/24/17 13:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 2.8 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7440-38-2 | |
| Barium | 4.6 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.56 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7440-43-9 | |
| Chromium | 4.1 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7440-47-3 | |
| Lead | 3.6 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.56 | 1 | 07/28/17 12:00 | 07/31/17 13:00 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.25 | 1 | 08/03/17 09:30 | 08/03/17 17:34 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 40 | %. | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 35 | %. | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 03:07 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.022 | 1 | | 07/29/17 09:11 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-02 (6-8) **Lab ID: 50176301004** Collected: 07/24/17 13:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.0087 | 1 | | 07/29/17 09:11 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.017 | 1 | | 07/29/17 09:11 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.022 | 1 | | 07/29/17 09:11 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-02 (6-8) **Lab ID: 50176301004** Collected: 07/24/17 13:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.087 | 1 | | 07/29/17 09:11 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0043 | 1 | | 07/29/17 09:11 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.0087 | 1 | | 07/29/17 09:11 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 107 | % | 69-136 | 1 | | 07/29/17 09:11 | 1868-53-7 | |
| Toluene-d8 (S) | 100 | % | 64-150 | 1 | | 07/29/17 09:11 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 96 | % | 51-142 | 1 | | 07/29/17 09:11 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 18.8 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

Sample: 03-SB-03 (0-1) **Lab ID: 50176301005** Collected: 07/24/17 13:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 8.8 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7440-38-2 | |
| Barium | 233 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7440-39-3 | |
| Cadmium | 2.7 | mg/kg | 0.57 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7440-43-9 | |
| Chromium | 35.7 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7440-47-3 | |
| Lead | 218 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7439-92-1 | |
| Selenium | 1.5 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7782-49-2 | |
| Silver | 0.88 | mg/kg | 0.57 | 1 | 07/28/17 12:00 | 07/31/17 13:02 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 1.7 | mg/kg | 0.26 | 1 | 08/03/17 09:30 | 08/03/17 17:36 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.19 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 83-32-9 | |
| Acenaphthylene | 3.5 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 208-96-8 | |
| Anthracene | 2.3 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 120-12-7 | |
| Benzo(a)anthracene | 1.9 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 56-55-3 | |
| Benzo(a)pyrene | 3.9 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 50-32-8 | |
| Benzo(b)fluoranthene | 2.6 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 205-99-2 | |
| Benzo(g,h,i)perylene | 3.2 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 191-24-2 | |
| Benzo(k)fluoranthene | 1.9 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 207-08-9 | |
| Chrysene | 2.4 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.84 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 53-70-3 | |
| Fluoranthene | 1.4 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 2.2 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 193-39-5 | |
| 1-Methylnaphthalene | 0.21 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.37 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 91-57-6 | |
| Naphthalene | 0.44 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 91-20-3 | ED |
| Phenanthrene | 0.80 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 85-01-8 | |
| Pyrene | 2.5 | mg/kg | 0.065 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 42 | % | 30-94 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 49 | % | 27-102 | 10 | 07/27/17 11:27 | 07/28/17 03:24 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.040 | 1 | | 07/29/17 09:44 | 78-93-3 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-03 (0-1) **Lab ID: 50176301005** Collected: 07/24/17 13:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.016 | 1 | | 07/29/17 09:44 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.032 | 1 | | 07/29/17 09:44 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.040 | 1 | | 07/29/17 09:44 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 79-34-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-03 (0-1) **Lab ID: 50176301005** Collected: 07/24/17 13:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.16 | 1 | | 07/29/17 09:44 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0081 | 1 | | 07/29/17 09:44 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.016 | 1 | | 07/29/17 09:44 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 115 | % | 69-136 | 1 | | 07/29/17 09:44 | 1868-53-7 | |
| Toluene-d8 (S) | 118 | % | 64-150 | 1 | | 07/29/17 09:44 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 83 | % | 51-142 | 1 | | 07/29/17 09:44 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 23.8 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-03 (6-8) **Lab ID: 50176301006** Collected: 07/24/17 13:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 26.4 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7440-38-2 | |
| Barium | 260 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7440-39-3 | |
| Cadmium | 1.1 | mg/kg | 0.62 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7440-43-9 | |
| Chromium | 17.8 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7440-47-3 | |
| Lead | 252 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.62 | 1 | 07/28/17 12:00 | 07/31/17 13:13 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.38 | mg/kg | 0.29 | 1 | 08/03/17 09:30 | 08/03/17 17:38 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 83-32-9 | |
| Acenaphthylene | 0.012 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 208-96-8 | |
| Anthracene | 0.019 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 120-12-7 | |
| Benzo(a)anthracene | 0.12 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 56-55-3 | |
| Benzo(a)pyrene | 0.12 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.13 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.086 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.088 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 207-08-9 | |
| Chrysene | 0.13 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.028 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 53-70-3 | |
| Fluoranthene | 0.14 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.076 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 193-39-5 | |
| 1-Methylnaphthalene | 0.024 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.033 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 91-57-6 | |
| Naphthalene | 0.032 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 91-20-3 | |
| Phenanthrene | 0.071 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 85-01-8 | |
| Pyrene | 0.12 | mg/kg | 0.0070 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 55 | % | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 51 | % | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 03:42 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | 0.26 | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 67-64-1 | 3d |
| Acrolein | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.033 | 1 | | 07/29/17 10:17 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-03 (6-8) Lab ID: 50176301006 Collected: 07/24/17 13:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.013 | 1 | | 07/29/17 10:17 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.026 | 1 | | 07/29/17 10:17 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.033 | 1 | | 07/29/17 10:17 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-03 (6-8) **Lab ID: 50176301006** Collected: 07/24/17 13:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.13 | 1 | | 07/29/17 10:17 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0065 | 1 | | 07/29/17 10:17 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.013 | 1 | | 07/29/17 10:17 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 110 | % | 69-136 | 1 | | 07/29/17 10:17 | 1868-53-7 | |
| Toluene-d8 (S) | 117 | % | 64-150 | 1 | | 07/29/17 10:17 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 84 | % | 51-142 | 1 | | 07/29/17 10:17 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 29.1 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-04 (0-1) **Lab ID: 50176301007** Collected: 07/24/17 17:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 39.0 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7440-38-2 | |
| Barium | 191 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7440-39-3 | |
| Cadmium | 1.7 | mg/kg | 0.52 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7440-43-9 | |
| Chromium | 978 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7440-47-3 | |
| Lead | 2020 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7439-92-1 | |
| Selenium | 1.3 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.52 | 1 | 07/28/17 12:00 | 07/31/17 13:55 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 0.45 | mg/kg | 0.22 | 1 | 08/03/17 09:30 | 08/03/17 17:45 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.052 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 83-32-9 | |
| Acenaphthylene | 0.030 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 208-96-8 | |
| Anthracene | 0.046 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 120-12-7 | |
| Benzo(a)anthracene | 0.14 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 56-55-3 | |
| Benzo(a)pyrene | 0.12 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.13 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.11 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.13 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 207-08-9 | |
| Chrysene | 0.17 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.036 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 53-70-3 | |
| Fluoranthene | 0.34 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 206-44-0 | |
| Fluorene | 0.051 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.085 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 193-39-5 | |
| 1-Methylnaphthalene | 0.15 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.30 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 91-57-6 | |
| Naphthalene | 0.37 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 91-20-3 | ED |
| Phenanthrene | 0.38 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 85-01-8 | |
| Pyrene | 0.28 | mg/kg | 0.028 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 36 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 37 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 03:59 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.022 | 1 | | 07/29/17 10:51 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-04 (0-1) **Lab ID: 50176301007** Collected: 07/24/17 17:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.0089 | 1 | | 07/29/17 10:51 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.018 | 1 | | 07/29/17 10:51 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.022 | 1 | | 07/29/17 10:51 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 79-34-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-04 (0-1) **Lab ID: 50176301007** Collected: 07/24/17 17:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.089 | 1 | | 07/29/17 10:51 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0045 | 1 | | 07/29/17 10:51 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.0089 | 1 | | 07/29/17 10:51 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 108 | % | 69-136 | 1 | | 07/29/17 10:51 | 1868-53-7 | |
| Toluene-d8 (S) | 104 | % | 64-150 | 1 | | 07/29/17 10:51 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 90 | % | 51-142 | 1 | | 07/29/17 10:51 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 10.4 | % | 0.10 | 1 | | 07/27/17 12:30 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-04 (4-6) Lab ID: 50176301008 Collected: 07/24/17 17:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 2.8 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7440-38-2 | |
| Barium | 6.4 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.58 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7440-43-9 | |
| Chromium | 5.2 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7440-47-3 | |
| Lead | 4.0 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.58 | 1 | 07/28/17 12:00 | 07/31/17 13:22 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.23 | 1 | 08/03/17 09:30 | 08/03/17 17:47 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0059 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 59 | % | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 54 | % | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 04:17 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 07/29/17 11:24 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-04 (4-6) **Lab ID: 50176301008** Collected: 07/24/17 17:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 07/29/17 11:24 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 07/29/17 11:24 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 07/29/17 11:24 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-04 (4-6) **Lab ID: 50176301008** Collected: 07/24/17 17:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 07/29/17 11:24 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0053 | 1 | | 07/29/17 11:24 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 07/29/17 11:24 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 07/29/17 11:24 | 1868-53-7 | |
| Toluene-d8 (S) | 99 | % | 64-150 | 1 | | 07/29/17 11:24 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 93 | % | 51-142 | 1 | | 07/29/17 11:24 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 16.1 | % | 0.10 | 1 | | 07/27/17 12:31 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-05 (0-1) Lab ID: 50176301009 Collected: 07/24/17 11:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 15.3 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7440-38-2 | |
| Barium | 123 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7440-39-3 | |
| Cadmium | 1.8 | mg/kg | 0.56 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7440-43-9 | |
| Chromium | 119 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7440-47-3 | |
| Lead | 319 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7439-92-1 | |
| Selenium | 1.2 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.56 | 1 | 07/28/17 12:00 | 07/31/17 13:57 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.36 | mg/kg | 0.23 | 1 | 08/03/17 09:30 | 08/03/17 17:49 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.056 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 83-32-9 | |
| Acenaphthylene | 0.66 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 208-96-8 | |
| Anthracene | 0.42 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 120-12-7 | |
| Benzo(a)anthracene | 0.46 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 56-55-3 | |
| Benzo(a)pyrene | 0.75 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.40 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.63 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.45 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 207-08-9 | |
| Chrysene | 0.52 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.15 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 53-70-3 | |
| Fluoranthene | 0.40 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.42 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 193-39-5 | |
| 1-Methylnaphthalene | 0.062 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.10 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 91-57-6 | |
| Naphthalene | 0.15 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 91-20-3 | ED |
| Phenanthrene | 0.24 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 85-01-8 | |
| Pyrene | 0.70 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 31 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 31 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 04:34 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.033 | 1 | | 07/29/17 11:58 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-05 (0-1) Lab ID: 50176301009 Collected: 07/24/17 11:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.013 | 1 | | 07/29/17 11:58 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.026 | 1 | | 07/29/17 11:58 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.033 | 1 | | 07/29/17 11:58 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-05 (0-1) **Lab ID: 50176301009** Collected: 07/24/17 11:55 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.13 | 1 | | 07/29/17 11:58 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0066 | 1 | | 07/29/17 11:58 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.013 | 1 | | 07/29/17 11:58 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 07/29/17 11:58 | 1868-53-7 | |
| Toluene-d8 (S) | 116 | % | 64-150 | 1 | | 07/29/17 11:58 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 86 | % | 51-142 | 1 | | 07/29/17 11:58 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 12.3 | % | 0.10 | 1 | | 07/27/17 12:31 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-05 (8-10) Lab ID: 50176301010 Collected: 07/24/17 12:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 14.1 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7440-38-2 | |
| Barium | 184 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7440-39-3 | |
| Cadmium | 1.1 | mg/kg | 0.53 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7440-43-9 | |
| Chromium | 12.9 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7440-47-3 | |
| Lead | 192 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.53 | 1 | 07/28/17 12:00 | 07/31/17 13:59 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 0.80 | mg/kg | 0.26 | 1 | 08/03/17 09:30 | 08/03/17 17:51 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.63 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 83-32-9 | |
| Acenaphthylene | 0.21 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 208-96-8 | |
| Anthracene | 3.0 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 120-12-7 | |
| Benzo(a)anthracene | 6.7 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 56-55-3 | |
| Benzo(a)pyrene | 4.5 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 50-32-8 | |
| Benzo(b)fluoranthene | 3.5 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 205-99-2 | |
| Benzo(g,h,i)perylene | 2.7 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 191-24-2 | |
| Benzo(k)fluoranthene | 3.6 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 207-08-9 | |
| Chrysene | 7.2 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.81 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 53-70-3 | |
| Fluoranthene | 14.3 | mg/kg | 0.16 | 25 | 07/27/17 11:27 | 07/28/17 19:29 | 206-44-0 | |
| Fluorene | 1.1 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 2.3 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 193-39-5 | |
| 1-Methylnaphthalene | 0.41 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.41 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 91-57-6 | |
| Naphthalene | 0.63 | mg/kg | 0.031 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 91-20-3 | ED |
| Phenanthrene | 17.2 | mg/kg | 0.16 | 25 | 07/27/17 11:27 | 07/28/17 19:29 | 85-01-8 | |
| Pyrene | 16.5 | mg/kg | 0.16 | 25 | 07/27/17 11:27 | 07/28/17 19:29 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 57 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 59 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 04:52 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.037 | 1 | | 07/29/17 12:31 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-05 (8-10) **Lab ID: 50176301010** Collected: 07/24/17 12:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 98-06-6 | |
| Carbon disulfide | 0.022 | mg/kg | 0.015 | 1 | | 07/29/17 12:31 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.029 | 1 | | 07/29/17 12:31 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.037 | 1 | | 07/29/17 12:31 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-05 (8-10) **Lab ID: 50176301010** Collected: 07/24/17 12:05 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.15 | 1 | | 07/29/17 12:31 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0074 | 1 | | 07/29/17 12:31 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.015 | 1 | | 07/29/17 12:31 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 108 | % | 69-136 | 1 | | 07/29/17 12:31 | 1868-53-7 | |
| Toluene-d8 (S) | 107 | % | 64-150 | 1 | | 07/29/17 12:31 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 89 | % | 51-142 | 1 | | 07/29/17 12:31 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 20.6 | % | 0.10 | 1 | | 07/27/17 12:31 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-06 (0-1) **Lab ID: 50176301011** Collected: 07/24/17 12:00 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 7.0 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7440-38-2 | |
| Barium | 48.4 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7440-39-3 | |
| Cadmium | 0.69 | mg/kg | 0.53 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7440-43-9 | |
| Chromium | 31.5 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7440-47-3 | |
| Lead | 846 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.53 | 1 | 07/28/17 12:00 | 07/31/17 14:01 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.45 | mg/kg | 0.21 | 1 | 08/03/17 09:30 | 08/03/17 17:53 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.14 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 83-32-9 | |
| Acenaphthylene | 0.98 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 208-96-8 | |
| Anthracene | 1.1 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 120-12-7 | |
| Benzo(a)anthracene | 1.7 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 56-55-3 | |
| Benzo(a)pyrene | 2.0 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 50-32-8 | |
| Benzo(b)fluoranthene | 1.7 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 205-99-2 | |
| Benzo(g,h,i)perylene | 1.4 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 191-24-2 | |
| Benzo(k)fluoranthene | 1.2 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 207-08-9 | |
| Chrysene | 1.8 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.42 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 53-70-3 | |
| Fluoranthene | 2.9 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 1.2 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 193-39-5 | |
| 1-Methylnaphthalene | 0.11 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.15 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 91-57-6 | |
| Naphthalene | 0.20 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 91-20-3 | ED |
| Phenanthrene | 1.5 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 85-01-8 | |
| Pyrene | 2.9 | mg/kg | 0.055 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 49 | %. | 30-94 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 51 | %. | 27-102 | 10 | 07/27/17 11:27 | 07/28/17 05:09 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | 0.12 | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 67-64-1 | 4d |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.028 | 1 | | 07/31/17 16:47 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-06 (0-1) Lab ID: 50176301011 Collected: 07/24/17 12:00 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 07/31/17 16:47 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.023 | 1 | | 07/31/17 16:47 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.028 | 1 | | 07/31/17 16:47 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-06 (0-1) **Lab ID: 50176301011** Collected: 07/24/17 12:00 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 07/31/17 16:47 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0056 | 1 | | 07/31/17 16:47 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 07/31/17 16:47 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 07/31/17 16:47 | 1868-53-7 | |
| Toluene-d8 (S) | 112 | % | 64-150 | 1 | | 07/31/17 16:47 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 86 | % | 51-142 | 1 | | 07/31/17 16:47 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 9.7 | % | 0.10 | 1 | | 07/27/17 12:31 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-06 (6-8) Lab ID: 50176301012 Collected: 07/24/17 12:00 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 43.2 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7440-38-2 | |
| Barium | 275 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7440-39-3 | |
| Cadmium | 3.5 | mg/kg | 0.54 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7440-43-9 | |
| Chromium | 248 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7440-47-3 | |
| Lead | 2680 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.54 | 1 | 07/28/17 12:00 | 07/31/17 14:03 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 1.9 | mg/kg | 0.24 | 1 | 08/03/17 09:30 | 08/03/17 17:55 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.058 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 83-32-9 | |
| Acenaphthylene | 0.042 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 208-96-8 | |
| Anthracene | 0.17 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 120-12-7 | |
| Benzo(a)anthracene | 0.24 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 56-55-3 | |
| Benzo(a)pyrene | 0.17 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.26 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.19 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.16 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 207-08-9 | |
| Chrysene | 0.34 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.058 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 53-70-3 | |
| Fluoranthene | 0.69 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 206-44-0 | |
| Fluorene | 0.054 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.14 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 193-39-5 | |
| 1-Methylnaphthalene | 0.13 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.20 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 91-57-6 | |
| Naphthalene | 0.55 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 91-20-3 | ED |
| Phenanthrene | 1.2 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 85-01-8 | |
| Pyrene | 0.49 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 121 | %. | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 321-60-8 | S0 |
| p-Terphenyl-d14 (S) | 123 | %. | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 05:26 | 1718-51-0 | S0 |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.030 | 1 | | 07/31/17 17:20 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-06 (6-8) **Lab ID: 50176301012** Collected: 07/24/17 12:00 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.012 | 1 | | 07/31/17 17:20 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 87-68-3 | |
| n-Hexane | 0.091 | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.024 | 1 | | 07/31/17 17:20 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.030 | 1 | | 07/31/17 17:20 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-06 (6-8) **Lab ID: 50176301012** Collected: 07/24/17 12:00 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.12 | 1 | | 07/31/17 17:20 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0060 | 1 | | 07/31/17 17:20 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.012 | 1 | | 07/31/17 17:20 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 101 | % | 69-136 | 1 | | 07/31/17 17:20 | 1868-53-7 | |
| Toluene-d8 (S) | 103 | % | 64-150 | 1 | | 07/31/17 17:20 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 97 | % | 51-142 | 1 | | 07/31/17 17:20 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 18.2 | % | 0.10 | 1 | | 07/27/17 12:31 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-07 (0-1) Lab ID: 50176301013 Collected: 07/24/17 18:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | ND | mg/kg | 9.1 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7440-38-2 | D3 |
| Barium | 26.6 | mg/kg | 9.1 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 4.5 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7440-43-9 | D3 |
| Chromium | 747 | mg/kg | 9.1 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7440-47-3 | |
| Lead | 50.8 | mg/kg | 9.1 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7439-92-1 | |
| Selenium | ND | mg/kg | 9.1 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7782-49-2 | D3 |
| Silver | ND | mg/kg | 4.5 | 10 | 07/28/17 12:00 | 07/31/17 14:37 | 7440-22-4 | D3 |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.48 | mg/kg | 0.21 | 1 | 08/03/17 09:30 | 08/03/17 17:57 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 208-96-8 | |
| Anthracene | 0.028 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 120-12-7 | |
| Benzo(a)anthracene | 0.14 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 56-55-3 | |
| Benzo(a)pyrene | 0.21 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.24 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.19 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.16 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 207-08-9 | |
| Chrysene | 0.20 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.055 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 53-70-3 | |
| Fluoranthene | 0.33 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.15 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 91-20-3 | ED |
| Phenanthrene | 0.25 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 85-01-8 | |
| Pyrene | 0.26 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 56 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 57 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 05:44 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 17:54 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-07 (0-1) Lab ID: 50176301013 Collected: 07/24/17 18:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.010 | 1 | | 07/31/17 17:54 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 07/31/17 17:54 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 17:54 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-07 (0-1) **Lab ID: 50176301013** Collected: 07/24/17 18:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.10 | 1 | | 07/31/17 17:54 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0051 | 1 | | 07/31/17 17:54 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.010 | 1 | | 07/31/17 17:54 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 107 | % | 69-136 | 1 | | 07/31/17 17:54 | 1868-53-7 | |
| Toluene-d8 (S) | 104 | % | 64-150 | 1 | | 07/31/17 17:54 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 86 | % | 51-142 | 1 | | 07/31/17 17:54 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 6.0 | % | 0.10 | 1 | | 07/27/17 15:09 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-08 (0-1) **Lab ID: 50176301014** Collected: 07/24/17 18:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 32.5 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:08 | 7440-38-2 | |
| Barium | 189 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:08 | 7440-39-3 | |
| Cadmium | 1.4 | mg/kg | 0.55 | 1 | 07/28/17 12:00 | 07/31/17 14:08 | 7440-43-9 | |
| Chromium | 501 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:08 | 7440-47-3 | |
| Lead | 304 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 14:08 | 7439-92-1 | |
| Selenium | ND | mg/kg | 2.2 | 2 | 07/28/17 12:00 | 07/31/17 14:35 | 7782-49-2 | D3 |
| Silver | ND | mg/kg | 0.55 | 1 | 07/28/17 12:00 | 07/31/17 14:08 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.23 | 1 | 08/03/17 09:30 | 08/03/17 17:59 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.14 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 120-12-7 | |
| Benzo(a)anthracene | 0.043 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.041 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.044 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 207-08-9 | |
| Chrysene | 0.12 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 53-70-3 | |
| Fluoranthene | 0.19 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 206-44-0 | |
| Fluorene | 0.059 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 193-39-5 | |
| 1-Methylnaphthalene | 0.18 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.28 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 91-57-6 | |
| Naphthalene | 0.32 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 91-20-3 | ED |
| Phenanthrene | 0.42 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 85-01-8 | |
| Pyrene | 0.17 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 39 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 39 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 06:01 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 67-64-1 | |
| Acrolein | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.80 | 25 | | 08/02/17 02:06 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-08 (0-1) **Lab ID: 50176301014** Collected: 07/24/17 18:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.32 | 25 | | 08/02/17 02:06 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 87-68-3 | |
| n-Hexane | 0.15J | mg/kg | 0.16 | 25 | | 08/02/17 18:53 | 110-54-3 | J |
| 2-Hexanone | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.64 | 25 | | 08/02/17 02:06 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.80 | 25 | | 08/02/17 02:06 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 1634-04-4 | |
| Naphthalene | 0.27 | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-08 (0-1) **Lab ID: 50176301014** Collected: 07/24/17 18:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 3.2 | 25 | | 08/02/17 02:06 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.16 | 25 | | 08/02/17 02:06 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.32 | 25 | | 08/02/17 02:06 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 104 | % | 69-136 | 25 | | 08/02/17 02:06 | 1868-53-7 | 2d |
| Toluene-d8 (S) | 99 | % | 64-150 | 25 | | 08/02/17 02:06 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 108 | % | 51-142 | 25 | | 08/02/17 02:06 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 14.7 | % | 0.10 | 1 | | 07/27/17 15:09 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-08 (10-12) Lab ID: 50176301015 Collected: 07/24/17 18:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 2.1 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7440-38-2 | |
| Barium | 8.7 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.56 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7440-43-9 | |
| Chromium | 4.1 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7440-47-3 | |
| Lead | 6.0 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.56 | 1 | 07/28/17 12:00 | 07/31/17 13:24 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.25 | 1 | 08/03/17 09:30 | 08/03/17 18:02 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 120-12-7 | |
| Benzo(a)anthracene | 0.0071 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.0067 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.0073 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 207-08-9 | |
| Chrysene | 0.011 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 53-70-3 | |
| Fluoranthene | 0.020 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 91-20-3 | |
| Phenanthrene | 0.020 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 85-01-8 | |
| Pyrene | 0.019 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 59 | % | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 54 | % | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 06:19 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.029 | 1 | | 07/29/17 02:29 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-08 (10-12) **Lab ID: 50176301015** Collected: 07/24/17 18:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.012 | 1 | | 07/29/17 02:29 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.023 | 1 | | 07/29/17 02:29 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.029 | 1 | | 07/29/17 02:29 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-08 (10-12) **Lab ID: 50176301015** Collected: 07/24/17 18:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.12 | 1 | | 07/29/17 02:29 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0058 | 1 | | 07/29/17 02:29 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.012 | 1 | | 07/29/17 02:29 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 107 | % | 69-136 | 1 | | 07/29/17 02:29 | 1868-53-7 | |
| Toluene-d8 (S) | 121 | % | 64-150 | 1 | | 07/29/17 02:29 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 79 | % | 51-142 | 1 | | 07/29/17 02:29 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 18.7 | % | 0.10 | 1 | | 07/27/17 15:10 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-09 (0-1) **Lab ID: 50176301016** Collected: 07/24/17 17:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 2.4 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7440-38-2 | |
| Barium | 4.0 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.51 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7440-43-9 | |
| Chromium | 2.8 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7440-47-3 | |
| Lead | 2.7 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.51 | 1 | 07/28/17 12:00 | 07/31/17 13:26 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.21 | 1 | 08/03/17 09:30 | 08/03/17 18:04 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.14 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 208-96-8 | |
| Anthracene | 0.14 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 120-12-7 | |
| Benzo(a)anthracene | 0.22 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 56-55-3 | |
| Benzo(a)pyrene | 0.18 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.19 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.12 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.15 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 207-08-9 | |
| Chrysene | 0.25 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.045 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 53-70-3 | |
| Fluoranthene | 0.71 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 206-44-0 | |
| Fluorene | 0.16 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.11 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 193-39-5 | |
| 1-Methylnaphthalene | 0.048 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.059 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 91-57-6 | |
| Naphthalene | 0.083 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 91-20-3 | ED |
| Phenanthrene | 0.82 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 85-01-8 | |
| Pyrene | 0.55 | mg/kg | 0.026 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 59 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 61 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 06:36 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.040 | 1 | | 07/31/17 19:01 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-09 (0-1) Lab ID: 50176301016 Collected: 07/24/17 17:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.016 | 1 | | 07/31/17 19:01 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.032 | 1 | | 07/31/17 19:01 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.040 | 1 | | 07/31/17 19:01 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 1634-04-4 | |
| Naphthalene | 0.085 | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 79-34-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-09 (0-1) **Lab ID: 50176301016** Collected: 07/24/17 17:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.16 | 1 | | 07/31/17 19:01 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0080 | 1 | | 07/31/17 19:01 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.016 | 1 | | 07/31/17 19:01 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 87 | % | 69-136 | 1 | | 07/31/17 19:01 | 1868-53-7 | |
| Toluene-d8 (S) | 103 | % | 64-150 | 1 | | 07/31/17 19:01 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 94 | % | 51-142 | 1 | | 07/31/17 19:01 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 3.9 | % | 0.10 | 1 | | 07/27/17 15:10 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-09 (6-8) **Lab ID: 50176301017** Collected: 07/24/17 17:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 2.2 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7440-38-2 | |
| Barium | 4.3 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.60 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7440-43-9 | |
| Chromium | 4.2 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7440-47-3 | |
| Lead | 4.0 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.60 | 1 | 07/28/17 12:00 | 07/29/17 03:07 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/03/17 09:30 | 08/03/17 18:12 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 51 | %. | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 46 | %. | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 06:54 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 19:34 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-09 (6-8) **Lab ID: 50176301017** Collected: 07/24/17 17:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.010 | 1 | | 07/31/17 19:34 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.020 | 1 | | 07/31/17 19:34 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 19:34 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 03-SB-09 (6-8) **Lab ID: 50176301017** Collected: 07/24/17 17:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.10 | 1 | | 07/31/17 19:34 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0051 | 1 | | 07/31/17 19:34 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.010 | 1 | | 07/31/17 19:34 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 109 | % | 69-136 | 1 | | 07/31/17 19:34 | 1868-53-7 | |
| Toluene-d8 (S) | 106 | % | 64-150 | 1 | | 07/31/17 19:34 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 89 | % | 51-142 | 1 | | 07/31/17 19:34 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 19.2 | % | 0.10 | 1 | | 07/27/17 15:10 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

Sample: 04-SB-01 (0-1) **Lab ID: 50176301018** Collected: 07/24/17 15:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|--------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | 0.18 | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 72 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 11:51 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 11.1 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7440-38-2 | |
| Barium | 108 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7440-39-3 | |
| Cadmium | 6.1 | mg/kg | 0.51 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7440-43-9 | |
| Chromium | 365 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7440-47-3 | |
| Lead | 433 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7439-92-1 | |
| Selenium | 1.4 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7782-49-2 | |
| Silver | 1.7 | mg/kg | 0.51 | 1 | 07/28/17 12:00 | 07/29/17 03:09 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.23 | 1 | 08/03/17 09:30 | 08/03/17 18:14 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.048 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 83-32-9 | |
| Acenaphthylene | 0.35 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 208-96-8 | |
| Anthracene | 0.56 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 120-12-7 | |
| Benzo(a)anthracene | 0.93 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 56-55-3 | |
| Benzo(a)pyrene | 0.81 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.80 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.56 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.65 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 207-08-9 | |
| Chrysene | 0.91 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.17 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 53-70-3 | |
| Fluoranthene | 2.2 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 206-44-0 | |
| Fluorene | 0.26 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.49 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 193-39-5 | |
| 1-Methylnaphthalene | 0.13 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.16 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 91-57-6 | |
| Naphthalene | 0.21 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 91-20-3 | ED |
| Phenanthrene | 1.9 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 85-01-8 | |
| Pyrene | 1.9 | mg/kg | 0.029 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 70 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 73 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 07:11 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-01 (0-1) **Lab ID: 50176301018** Collected: 07/24/17 15:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 20:07 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 07/31/17 20:07 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-01 (0-1) **Lab ID: 50176301018** Collected: 07/24/17 15:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 07/31/17 20:07 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 20:07 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 07/31/17 20:07 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0053 | 1 | | 07/31/17 20:07 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 07/31/17 20:07 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 07/31/17 20:07 | 1868-53-7 | |
| Toluene-d8 (S) | 113 | % | 64-150 | 1 | | 07/31/17 20:07 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 86 | % | 51-142 | 1 | | 07/31/17 20:07 | 460-00-4 | |

Percent Moisture

Analytical Method: SM 2540G

| | | | | | | | | |
|------------------|-------------|---|------|---|--|----------------|--|--|
| Percent Moisture | 14.5 | % | 0.10 | 1 | | 07/27/17 15:10 | | |
|------------------|-------------|---|------|---|--|----------------|--|--|

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

Sample: 04-SB-01 (6-8) **Lab ID: 50176301019** Collected: 07/24/17 15:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 52 | %. | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 11:59 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 8.1 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7440-38-2 | |
| Barium | 17.6 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.55 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7440-43-9 | |
| Chromium | 18.2 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7440-47-3 | |
| Lead | 25.7 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.55 | 1 | 07/28/17 12:00 | 07/29/17 03:11 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/03/17 09:30 | 08/03/17 18:16 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.0069 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 91-20-3 | |
| Phenanthrene | 0.0073 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 85-01-8 | |
| Pyrene | 0.0066 | mg/kg | 0.0061 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 64 | %. | 30-94 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 57 | %. | 27-102 | 1 | 07/27/17 11:27 | 07/28/17 07:28 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-01 (6-8) **Lab ID: 50176301019** Collected: 07/24/17 15:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | 0.14 | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 67-64-1 | 4d |
| Acrolein | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 20:41 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.010 | 1 | | 07/31/17 20:41 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-01 (6-8) **Lab ID: 50176301019** Collected: 07/24/17 15:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 07/31/17 20:41 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.026 | 1 | | 07/31/17 20:41 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.10 | 1 | | 07/31/17 20:41 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0052 | 1 | | 07/31/17 20:41 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.010 | 1 | | 07/31/17 20:41 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 109 | % | 69-136 | 1 | | 07/31/17 20:41 | 1868-53-7 | |
| Toluene-d8 (S) | 100 | % | 64-150 | 1 | | 07/31/17 20:41 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 92 | % | 51-142 | 1 | | 07/31/17 20:41 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 18.5 | % | 0.10 | 1 | | 07/27/17 15:10 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

| Sample: 03-SB-02 W | Lab ID: 50176301020 | Collected: 07/24/17 14:00 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | |
| Arsenic | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7440-38-2 | |
| Barium | 13.6 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7440-39-3 | |
| Cadmium | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7440-43-9 | |
| Chromium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7440-47-3 | |
| Lead | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7439-92-1 | |
| Selenium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7782-49-2 | |
| Silver | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:07 | 7440-22-4 | |
| 7470 Mercury | | | | | | | | |
| Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | | |
| Mercury | ND | ug/L | 2.0 | 1 | 07/28/17 19:41 | 07/29/17 10:38 | 7439-97-6 | |
| 8270 MSSV PAHLV | | | | | | | | |
| Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.50 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 206-44-0 | |
| Fluorene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 91-20-3 | |
| Phenanthrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 85-01-8 | |
| Pyrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 54 | % | 15-87 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 66 | % | 10-116 | 1 | 07/26/17 23:40 | 07/27/17 16:57 | 1718-51-0 | |
| 8260 MSV | | | | | | | | |
| Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 07/29/17 02:15 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 07/29/17 02:15 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 07/29/17 02:15 | 107-13-1 | L2 |
| Benzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 07/29/17 02:15 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 104-51-8 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-02 W | Lab ID: 50176301020 | Collected: 07/24/17 14:00 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|---------------------|-----------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 07/29/17 02:15 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 67-66-3 | |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 07/29/17 02:15 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-34-3 | L2 |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 156-60-5 | L2 |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 07/29/17 02:15 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 07/29/17 02:15 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 07/29/17 02:15 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 98-82-8 | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-09-2 | L2 |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 07/29/17 02:15 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 07/29/17 02:15 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 630-20-6 | |
| 1,1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 108-88-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-02 W | | Lab ID: 50176301020 | | Collected: 07/24/17 14:00 | | Received: 07/26/17 15:20 | | Matrix: Water | |
|--------------------------|---------|-----------------------------|--------------|---------------------------|----------|--------------------------|-----------|---------------|--|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual | |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 87-61-6 | | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 120-82-1 | | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 71-55-6 | | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 79-00-5 | | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 79-01-6 | | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 75-69-4 | | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 96-18-4 | | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 95-63-6 | | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:15 | 108-67-8 | | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 07/29/17 02:15 | 108-05-4 | | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 07/29/17 02:15 | 75-01-4 | | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 07/29/17 02:15 | 1330-20-7 | | |
| Surrogates | | | | | | | | | |
| Dibromofluoromethane (S) | 99 | %. | 86-116 | 1 | | 07/29/17 02:15 | 1868-53-7 | | |
| 4-Bromofluorobenzene (S) | 99 | %. | 84-113 | 1 | | 07/29/17 02:15 | 460-00-4 | | |
| Toluene-d8 (S) | 97 | %. | 86-111 | 1 | | 07/29/17 02:15 | 2037-26-5 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-05 W | Lab ID: 50176301021 | Collected: 07/24/17 12:30 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | |
| Arsenic | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7440-38-2 | |
| Barium | 63.0 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7440-39-3 | |
| Cadmium | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7440-43-9 | |
| Chromium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7440-47-3 | |
| Lead | 14.2 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7439-92-1 | |
| Selenium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7782-49-2 | |
| Silver | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:09 | 7440-22-4 | |
| 7470 Mercury | | | | | | | | |
| Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | | |
| Mercury | ND | ug/L | 2.0 | 1 | 07/28/17 19:41 | 07/29/17 10:40 | 7439-97-6 | |
| 8270 MSSV PAHLV | | | | | | | | |
| Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.50 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 206-44-0 | |
| Fluorene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 91-20-3 | |
| Phenanthrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 85-01-8 | |
| Pyrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 50 | % | 15-87 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 50 | % | 10-116 | 1 | 07/26/17 23:40 | 07/27/17 17:08 | 1718-51-0 | |
| 8260 MSV | | | | | | | | |
| Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 07/29/17 02:53 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 07/29/17 02:53 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 07/29/17 02:53 | 107-13-1 | L2 |
| Benzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 07/29/17 02:53 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 104-51-8 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-05 W | Lab ID: 50176301021 | Collected: 07/24/17 12:30 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|---------------------|-----------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 07/29/17 02:53 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 67-66-3 | |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 07/29/17 02:53 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-34-3 | L2 |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 156-60-5 | L2 |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 07/29/17 02:53 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 07/29/17 02:53 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 07/29/17 02:53 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 98-82-8 | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-09-2 | L2 |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 07/29/17 02:53 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 07/29/17 02:53 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 630-20-6 | |
| 1,1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 108-88-3 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-05 W | | Lab ID: 50176301021 | Collected: 07/24/17 12:30 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|--------------------------|---------|-----------------------------|---------------------------|--------------------------|---------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 02:53 | 108-67-8 | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 07/29/17 02:53 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 07/29/17 02:53 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 07/29/17 02:53 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 100 | %. | 86-116 | 1 | | 07/29/17 02:53 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 101 | %. | 84-113 | 1 | | 07/29/17 02:53 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-111 | 1 | | 07/29/17 02:53 | 2037-26-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-08 W | Lab ID: 50176301022 | Collected: 07/24/17 18:25 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | |
| Arsenic | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7440-38-2 | |
| Barium | 65.0 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7440-39-3 | |
| Cadmium | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7440-43-9 | |
| Chromium | 10.6 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7440-47-3 | |
| Lead | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7439-92-1 | |
| Selenium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7782-49-2 | |
| Silver | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:12 | 7440-22-4 | |
| 7470 Mercury | | | | | | | | |
| Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | | |
| Mercury | ND | ug/L | 2.0 | 1 | 07/28/17 19:41 | 07/29/17 10:42 | 7439-97-6 | |
| 8270 MSSV PAHLV | | | | | | | | |
| Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.50 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 206-44-0 | |
| Fluorene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 91-20-3 | |
| Phenanthrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 85-01-8 | |
| Pyrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 62 | % | 15-87 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 51 | % | 10-116 | 1 | 07/26/17 23:40 | 07/27/17 17:20 | 1718-51-0 | |
| 8260 MSV | | | | | | | | |
| Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 07/29/17 03:31 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 07/29/17 03:31 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 07/29/17 03:31 | 107-13-1 | L2 |
| Benzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 07/29/17 03:31 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 104-51-8 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-08 W | Lab ID: 50176301022 | Collected: 07/24/17 18:25 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|---------------------|-----------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 07/29/17 03:31 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 67-66-3 | |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 07/29/17 03:31 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-34-3 | L2 |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 156-60-5 | L2 |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 07/29/17 03:31 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 07/29/17 03:31 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 07/29/17 03:31 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 98-82-8 | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-09-2 | L2 |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 07/29/17 03:31 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 07/29/17 03:31 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 630-20-6 | |
| 1,1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 108-88-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-08 W | | Lab ID: 50176301022 | Collected: 07/24/17 18:25 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|--------------------------|---------|-----------------------------|---------------------------|--------------------------|---------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 03:31 | 108-67-8 | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 07/29/17 03:31 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 07/29/17 03:31 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 07/29/17 03:31 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 86-116 | 1 | | 07/29/17 03:31 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 101 | %. | 84-113 | 1 | | 07/29/17 03:31 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-111 | 1 | | 07/29/17 03:31 | 2037-26-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-02-FW | | Lab ID: 50176301023 | | Collected: 07/24/17 14:00 | Received: 07/26/17 15:20 | Matrix: Water | | |
|--------------------------------|-------------|--|--------------|---------------------------|--------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | |
| Arsenic, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7440-38-2 | |
| Barium, Dissolved | 13.1 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7440-39-3 | |
| Cadmium, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7440-43-9 | |
| Chromium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7440-47-3 | |
| Lead, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7439-92-1 | |
| Selenium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7782-49-2 | |
| Silver, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:03 | 7440-22-4 | |
| 7470 Mercury, Dissolved | | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | |
| Mercury, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 19:53 | 07/31/17 11:06 | 7439-97-6 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-05-FW | | Lab ID: 50176301024 | | Collected: 07/24/17 12:30 | Received: 07/26/17 15:20 | Matrix: Water | | |
|--------------------------------|-------------|--|--------------|---------------------------|--------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | |
| Arsenic, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7440-38-2 | |
| Barium, Dissolved | 59.7 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7440-39-3 | |
| Cadmium, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7440-43-9 | |
| Chromium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7440-47-3 | |
| Lead, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7439-92-1 | |
| Selenium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7782-49-2 | |
| Silver, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:05 | 7440-22-4 | |
| 7470 Mercury, Dissolved | | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | |
| Mercury, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 19:53 | 07/31/17 11:18 | 7439-97-6 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 03-SB-08-FW | | Lab ID: 50176301025 | | Collected: 07/24/17 18:25 | Received: 07/26/17 15:20 | Matrix: Water | | |
|--------------------------------|-------------|--|--------------|---------------------------|--------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | |
| Arsenic, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7440-38-2 | |
| Barium, Dissolved | 69.6 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7440-39-3 | |
| Cadmium, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7440-43-9 | |
| Chromium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7440-47-3 | |
| Lead, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7439-92-1 | |
| Selenium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7782-49-2 | |
| Silver, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:08 | 7440-22-4 | |
| 7470 Mercury, Dissolved | | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | |
| Mercury, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 19:53 | 07/31/17 11:21 | 7439-97-6 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-01 W | Lab ID: 50176301026 | Collected: 07/24/17 15:40 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8082 GCS PCB Waters | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3510 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | ug/L | 0.20 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 69 | % | 10-108 | 1 | 07/27/17 14:07 | 07/28/17 14:42 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | |
| Arsenic | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7440-38-2 | |
| Barium | 96.6 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7440-39-3 | |
| Cadmium | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7440-43-9 | |
| Chromium | 33.5 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7440-47-3 | |
| Lead | 60.0 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7439-92-1 | |
| Selenium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7782-49-2 | |
| Silver | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:23 | 7440-22-4 | |
| 7470 Mercury | | | | | | | | |
| Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | | |
| Mercury | ND | ug/L | 2.0 | 1 | 07/28/17 19:41 | 07/29/17 10:45 | 7439-97-6 | |
| 8270 MSSV PAHLV | | | | | | | | |
| Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.50 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 206-44-0 | |
| Fluorene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 91-20-3 | |
| Phenanthrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 85-01-8 | |
| Pyrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 50 | % | 15-87 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 58 | % | 10-116 | 1 | 07/26/17 23:40 | 07/27/17 17:31 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-01 W | Lab ID: 50176301026 | Collected: 07/24/17 15:40 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|---------------------|-----------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 07/29/17 04:08 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 07/29/17 04:08 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 07/29/17 04:08 | 107-13-1 | L2 |
| Benzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 07/29/17 04:08 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 104-51-8 | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 07/29/17 04:08 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 67-66-3 | |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 07/29/17 04:08 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-34-3 | L2 |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 156-60-5 | L2 |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 07/29/17 04:08 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 07/29/17 04:08 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 07/29/17 04:08 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 98-82-8 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-01 W | | Lab ID: 50176301026 | | Collected: 07/24/17 15:40 | Received: 07/26/17 15:20 | Matrix: Water | | |
|-----------------------------|---------|-----------------------------|--------------|---------------------------|--------------------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-09-2 | L2 |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 07/29/17 04:08 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 07/29/17 04:08 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:08 | 108-67-8 | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 07/29/17 04:08 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 07/29/17 04:08 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 07/29/17 04:08 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 86-116 | 1 | | 07/29/17 04:08 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 84-113 | 1 | | 07/29/17 04:08 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-111 | 1 | | 07/29/17 04:08 | 2037-26-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-01-F W | | Lab ID: 50176301027 | Collected: 07/24/17 15:40 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|--------------------------------|-------------|--|---------------------------|--------------------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | |
| Arsenic, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7440-38-2 | |
| Barium, Dissolved | 85.9 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7440-39-3 | |
| Cadmium, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7440-43-9 | |
| Chromium, Dissolved | 21.8 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7440-47-3 | |
| Lead, Dissolved | 40.5 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7439-92-1 | |
| Selenium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7782-49-2 | |
| Silver, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:10 | 7440-22-4 | |
| 7470 Mercury, Dissolved | | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | |
| Mercury, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 19:53 | 07/31/17 11:23 | 7439-97-6 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-02 (0-1) **Lab ID: 50176301028** Collected: 07/25/17 10:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|-------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | 0.64 | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.36 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 42 | % | 28-111 | 3 | 07/27/17 12:10 | 07/28/17 15:22 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 4.9 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7440-38-2 | |
| Barium | 75.1 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7440-39-3 | |
| Cadmium | 1.3 | mg/kg | 0.51 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7440-43-9 | |
| Chromium | 205 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7440-47-3 | |
| Lead | 76.8 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7782-49-2 | |
| Silver | 3.3 | mg/kg | 0.51 | 1 | 07/28/17 12:00 | 07/29/17 03:13 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.47 | mg/kg | 0.25 | 1 | 08/03/17 09:30 | 08/03/17 18:19 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.28 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 83-32-9 | M1 |
| Acenaphthylene | ND | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 208-96-8 | |
| Anthracene | 0.24 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 120-12-7 | |
| Benzo(a)anthracene | 0.22 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 56-55-3 | |
| Benzo(a)pyrene | 0.31 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.31 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.62 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.22 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 207-08-9 | |
| Chrysene | 0.35 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.11 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 53-70-3 | |
| Fluoranthene | 0.62 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 206-44-0 | M1 |
| Fluorene | 0.19 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.28 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 193-39-5 | |
| 1-Methylnaphthalene | 0.25 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.42 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 91-57-6 | |
| Naphthalene | 0.31 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 91-20-3 | ED |
| Phenanthrene | 0.97 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 85-01-8 | M1 |
| Pyrene | 0.66 | mg/kg | 0.030 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 35 | % | 30-94 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 34 | % | 27-102 | 5 | 07/27/17 11:27 | 07/28/17 07:46 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-02 (0-1) **Lab ID: 50176301028** Collected: 07/25/17 10:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.039 | 1 | | 07/31/17 21:14 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 98-06-6 | |
| Carbon disulfide | 0.027 | mg/kg | 0.016 | 1 | | 07/31/17 21:14 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-02 (0-1) **Lab ID: 50176301028** Collected: 07/25/17 10:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.031 | 1 | | 07/31/17 21:14 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | 0.092 | mg/kg | 0.039 | 1 | | 07/31/17 21:14 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.16 | 1 | | 07/31/17 21:14 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0078 | 1 | | 07/31/17 21:14 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.016 | 1 | | 07/31/17 21:14 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 07/31/17 21:14 | 1868-53-7 | |
| Toluene-d8 (S) | 110 | % | 64-150 | 1 | | 07/31/17 21:14 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 77 | % | 51-142 | 1 | | 07/31/17 21:14 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 16.6 | % | 0.10 | 1 | | 07/27/17 15:10 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-03 (0-1) **Lab ID: 50176301029** Collected: 07/25/17 11:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|--------------|-------|--------------|----|----------------|----------------|------------|--------------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 63 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 12:15 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 6.9 | mg/kg | 0.99 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7440-38-2 | |
| Barium | 179 | mg/kg | 0.99 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7440-39-3 | |
| Cadmium | 1.1 | mg/kg | 0.49 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7440-43-9 | |
| Chromium | 59.3 | mg/kg | 0.99 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7440-47-3 | |
| Lead | 125 | mg/kg | 0.99 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7439-92-1 | |
| Selenium | 1.3 | mg/kg | 0.99 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.49 | 1 | 07/28/17 12:00 | 07/29/17 03:15 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.27 | mg/kg | 0.25 | 1 | 08/03/17 09:33 | 08/03/17 18:25 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.039 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 83-32-9 | R1 |
| Acenaphthylene | 0.29 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 208-96-8 | M1,R1 |
| Anthracene | 0.26 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 120-12-7 | M1,R1 |
| Benzo(a)anthracene | 0.39 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 56-55-3 | M1,R1 |
| Benzo(a)pyrene | 0.33 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 50-32-8 | M1,R1 |
| Benzo(b)fluoranthene | 0.36 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 205-99-2 | M1,R1 |
| Benzo(g,h,i)perylene | 0.33 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 191-24-2 | M1,R1 |
| Benzo(k)fluoranthene | 0.28 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 207-08-9 | M1,R1 |
| Chrysene | 0.58 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 218-01-9 | M1,R1 |
| Dibenz(a,h)anthracene | 0.091 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 53-70-3 | M1,R1 |
| Fluoranthene | 0.58 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 206-44-0 | M1,R1 |
| Fluorene | 0.042 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 86-73-7 | R1 |
| Indeno(1,2,3-cd)pyrene | 0.23 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 193-39-5 | M1,R1 |
| 1-Methylnaphthalene | 0.36 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 90-12-0 | M1,N2, R1 |
| 2-Methylnaphthalene | 0.43 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 91-57-6 | M1,R1 |
| Naphthalene | 0.38 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 91-20-3 | ED,M1, R1 |
| Phenanthrene | 1.0 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 85-01-8 | M1,R1 |
| Pyrene | 0.80 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 129-00-0 | M1,R1 |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 60 | % | 30-94 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 59 | % | 27-102 | 5 | 07/27/17 11:00 | 07/27/17 17:34 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-03 (0-1) **Lab ID: 50176301029** Collected: 07/25/17 11:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.035 | 1 | | 07/31/17 23:44 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.014 | 1 | | 07/31/17 23:44 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-03 (0-1) **Lab ID: 50176301029** Collected: 07/25/17 11:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.028 | 1 | | 07/31/17 23:44 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.035 | 1 | | 07/31/17 23:44 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.14 | 1 | | 07/31/17 23:44 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0070 | 1 | | 07/31/17 23:44 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.014 | 1 | | 07/31/17 23:44 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 119 | % | 69-136 | 1 | | 07/31/17 23:44 | 1868-53-7 | |
| Toluene-d8 (S) | 134 | % | 64-150 | 1 | | 07/31/17 23:44 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 80 | % | 51-142 | 1 | | 07/31/17 23:44 | 460-00-4 | |

Percent Moisture

Analytical Method: SM 2540G

| | | | | | | | | |
|------------------|-------------|---|------|---|--|----------------|--|--|
| Percent Moisture | 15.0 | % | 0.10 | 1 | | 07/27/17 15:10 | | |
|------------------|-------------|---|------|---|--|----------------|--|--|

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-03 (4-6) **Lab ID: 50176301030** Collected: 07/25/17 11:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 65 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 12:23 | 877-09-8 | |
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 1.9 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7440-38-2 | |
| Barium | 8.2 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.59 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7440-43-9 | |
| Chromium | 3.3 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7440-47-3 | |
| Lead | 3.3 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.59 | 1 | 07/28/17 12:00 | 07/29/17 03:21 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/03/17 09:33 | 08/03/17 18:31 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 48 | % | 30-94 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 49 | % | 27-102 | 1 | 07/27/17 11:00 | 07/27/17 18:26 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-03 (4-6) **Lab ID: 50176301030** Collected: 07/25/17 11:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.025 | 1 | | 08/01/17 00:18 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.010 | 1 | | 08/01/17 00:18 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-03 (4-6) **Lab ID: 50176301030** Collected: 07/25/17 11:25 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.020 | 1 | | 08/01/17 00:18 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.025 | 1 | | 08/01/17 00:18 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.10 | 1 | | 08/01/17 00:18 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0051 | 1 | | 08/01/17 00:18 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.010 | 1 | | 08/01/17 00:18 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 08/01/17 00:18 | 1868-53-7 | |
| Toluene-d8 (S) | 106 | % | 64-150 | 1 | | 08/01/17 00:18 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 99 | % | 51-142 | 1 | | 08/01/17 00:18 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 20.3 | % | 0.10 | 1 | | 07/27/17 15:10 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-04 (0-1) **Lab ID: 50176301031** Collected: 07/25/17 11:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|--------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 56 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 12:31 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 8.1 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7440-38-2 | |
| Barium | 169 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7440-39-3 | |
| Cadmium | 0.84 | mg/kg | 0.53 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7440-43-9 | |
| Chromium | 26.0 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7440-47-3 | |
| Lead | 114 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.53 | 1 | 07/28/17 12:00 | 07/29/17 03:24 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 0.84 | mg/kg | 0.25 | 1 | 08/03/17 09:33 | 08/03/17 18:38 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 83-32-9 | |
| Acenaphthylene | 0.13 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 208-96-8 | |
| Anthracene | 0.088 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 120-12-7 | |
| Benzo(a)anthracene | 0.25 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 56-55-3 | |
| Benzo(a)pyrene | 0.18 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.16 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.15 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.19 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 207-08-9 | |
| Chrysene | 0.27 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.048 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 53-70-3 | |
| Fluoranthene | 0.36 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.12 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.031 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 91-20-3 | ED |
| Phenanthrene | 0.17 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 85-01-8 | |
| Pyrene | 0.47 | mg/kg | 0.031 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 22 | % | 30-94 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 321-60-8 | S0 |
| p-Terphenyl-d14 (S) | 32 | % | 27-102 | 5 | 07/27/17 11:00 | 07/27/17 18:43 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-04 (0-1) **Lab ID: 50176301031** Collected: 07/25/17 11:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.047 | 1 | | 08/01/17 00:51 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.019 | 1 | | 08/01/17 00:51 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-04 (0-1) **Lab ID: 50176301031** Collected: 07/25/17 11:30 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.038 | 1 | | 08/01/17 00:51 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.047 | 1 | | 08/01/17 00:51 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.19 | 1 | | 08/01/17 00:51 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0094 | 1 | | 08/01/17 00:51 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.019 | 1 | | 08/01/17 00:51 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 115 | % | 69-136 | 1 | | 08/01/17 00:51 | 1868-53-7 | |
| Toluene-d8 (S) | 123 | % | 64-150 | 1 | | 08/01/17 00:51 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 87 | % | 51-142 | 1 | | 08/01/17 00:51 | 460-00-4 | |

Percent Moisture

Analytical Method: SM 2540G

| | | | | | | | | |
|------------------|-------------|---|------|---|--|----------------|--|--|
| Percent Moisture | 18.8 | % | 0.10 | 1 | | 07/27/17 15:10 | | |
|------------------|-------------|---|------|---|--|----------------|--|--|

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-04 (6-8) **Lab ID: 50176301032** Collected: 07/25/17 11:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 47 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 12:56 | 877-09-8 | |
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 2.3 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7440-38-2 | |
| Barium | 5.6 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.60 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7440-43-9 | |
| Chromium | 3.7 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7440-47-3 | |
| Lead | 3.7 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.60 | 1 | 07/28/17 12:00 | 07/29/17 03:26 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/03/17 09:33 | 08/03/17 18:40 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0061 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 53 | % | 30-94 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 55 | % | 27-102 | 1 | 07/27/17 11:00 | 07/27/17 19:00 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-04 (6-8) **Lab ID: 50176301032** Collected: 07/25/17 11:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 08/01/17 01:25 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/01/17 01:25 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-04 (6-8) **Lab ID: 50176301032** Collected: 07/25/17 11:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.022 | 1 | | 08/01/17 01:25 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 08/01/17 01:25 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/01/17 01:25 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0054 | 1 | | 08/01/17 01:25 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/01/17 01:25 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 117 | % | 69-136 | 1 | | 08/01/17 01:25 | 1868-53-7 | |
| Toluene-d8 (S) | 106 | % | 64-150 | 1 | | 08/01/17 01:25 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 89 | % | 51-142 | 1 | | 08/01/17 01:25 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 18.9 | % | 0.10 | 1 | | 07/27/17 15:12 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-05 (0-1) **Lab ID: 50176301033** Collected: 07/25/17 09:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|-------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | 0.16 | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | 0.12 | mg/kg | 0.10 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 69 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 13:04 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 6.1 | mg/kg | 0.89 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7440-38-2 | |
| Barium | 124 | mg/kg | 0.89 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7440-39-3 | |
| Cadmium | 2.2 | mg/kg | 0.45 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7440-43-9 | |
| Chromium | 417 | mg/kg | 0.89 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7440-47-3 | |
| Lead | 122 | mg/kg | 0.89 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7439-92-1 | |
| Selenium | ND | mg/kg | 0.89 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7782-49-2 | |
| Silver | 2.1 | mg/kg | 0.45 | 1 | 07/28/17 12:00 | 07/29/17 03:28 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.20 | 1 | 08/03/17 09:33 | 08/03/17 18:42 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.27 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 208-96-8 | |
| Anthracene | 1.0 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 120-12-7 | |
| Benzo(a)anthracene | 2.0 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 56-55-3 | |
| Benzo(a)pyrene | 1.0 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 50-32-8 | |
| Benzo(b)fluoranthene | 1.3 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.53 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.91 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 207-08-9 | |
| Chrysene | 2.1 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.17 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 53-70-3 | |
| Fluoranthene | 4.5 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 206-44-0 | |
| Fluorene | 0.49 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.48 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 193-39-5 | |
| 1-Methylnaphthalene | 0.12 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.16 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 91-57-6 | |
| Naphthalene | 0.21 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 91-20-3 | ED |
| Phenanthrene | 4.1 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 85-01-8 | |
| Pyrene | 4.2 | mg/kg | 0.025 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 47 | % | 30-94 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 57 | % | 27-102 | 5 | 07/27/17 11:00 | 07/27/17 19:17 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-05 (0-1) **Lab ID: 50176301033** Collected: 07/25/17 09:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.025 | 1 | | 08/01/17 01:58 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.010 | 1 | | 08/01/17 01:58 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-05 (0-1) **Lab ID: 50176301033** Collected: 07/25/17 09:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.020 | 1 | | 08/01/17 01:58 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.025 | 1 | | 08/01/17 01:58 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 1634-04-4 | |
| Naphthalene | 0.0092 | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.10 | 1 | | 08/01/17 01:58 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0050 | 1 | | 08/01/17 01:58 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.010 | 1 | | 08/01/17 01:58 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 111 | % | 69-136 | 1 | | 08/01/17 01:58 | 1868-53-7 | |
| Toluene-d8 (S) | 103 | % | 64-150 | 1 | | 08/01/17 01:58 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 81 | % | 51-142 | 1 | | 08/01/17 01:58 | 460-00-4 | |

Percent Moisture

Analytical Method: SM 2540G

| | | | | | | | | |
|------------------|------------|---|------|---|--|----------------|--|--|
| Percent Moisture | 1.7 | % | 0.10 | 1 | | 07/27/17 15:12 | | |
|------------------|------------|---|------|---|--|----------------|--|--|

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-05 (6-8) **Lab ID: 50176301034** Collected: 07/25/17 09:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|--------------|-------|--------------|----|----------------|----------------|------------|------|
| 8082 GCS PCB Solids | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3546 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | mg/kg | 0.12 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 62 | % | 28-111 | 1 | 07/27/17 12:10 | 07/28/17 13:12 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 3.8 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7440-38-2 | |
| Barium | 5.6 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.52 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7440-43-9 | |
| Chromium | 3.8 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7440-47-3 | |
| Lead | 4.4 | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.0 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.52 | 1 | 07/28/17 12:00 | 07/29/17 03:30 | 7440-22-4 | |
| 7471 Mercury | | | | | | | | |
| Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.22 | 1 | 08/03/17 09:33 | 08/03/17 18:44 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | | | | | | | |
| Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.029 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 83-32-9 | |
| Acenaphthylene | 0.020 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 208-96-8 | |
| Anthracene | 0.021 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 120-12-7 | |
| Benzo(a)anthracene | 0.021 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 56-55-3 | |
| Benzo(a)pyrene | 0.019 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.016 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.014 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.016 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 207-08-9 | |
| Chrysene | 0.022 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 53-70-3 | |
| Fluoranthene | 0.055 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 206-44-0 | |
| Fluorene | 0.073 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.012 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 193-39-5 | |
| 1-Methylnaphthalene | 1.6 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 3.2 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/28/17 18:37 | 91-57-6 | |
| Naphthalene | 0.24 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 91-20-3 | |
| Phenanthrene | 0.12 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 85-01-8 | |
| Pyrene | 0.043 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 57 | % | 30-94 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 65 | % | 27-102 | 1 | 07/27/17 11:00 | 07/27/17 19:35 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-05 (6-8) **Lab ID: 50176301034** Collected: 07/25/17 09:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 08/01/17 02:32 | 78-93-3 | |
| n-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/01/17 02:32 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 74-88-4 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 04-SB-05 (6-8) **Lab ID: 50176301034** Collected: 07/25/17 09:40 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 08/01/17 02:32 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 08/01/17 02:32 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 79-34-5 | |
| Tetrachloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/01/17 02:32 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0054 | 1 | | 08/01/17 02:32 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/01/17 02:32 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 113 | % | 69-136 | 1 | | 08/01/17 02:32 | 1868-53-7 | |
| Toluene-d8 (S) | 108 | % | 64-150 | 1 | | 08/01/17 02:32 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 98 | % | 51-142 | 1 | | 08/01/17 02:32 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 14.6 | % | 0.10 | 1 | | 07/27/17 15:12 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 02-SB-07 (0-1) **Lab ID: 50176301035** Collected: 07/25/17 13:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 4.7 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7440-38-2 | |
| Barium | 47.0 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.55 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7440-43-9 | |
| Chromium | 8.3 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7440-47-3 | |
| Lead | 42.3 | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.55 | 1 | 07/28/17 12:00 | 07/29/17 03:40 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.22 | 1 | 08/03/17 09:33 | 08/03/17 18:46 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.022 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 83-32-9 | |
| Acenaphthylene | 0.016 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 208-96-8 | |
| Anthracene | 0.023 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 120-12-7 | |
| Benzo(a)anthracene | 0.015 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 56-55-3 | |
| Benzo(a)pyrene | 0.0094 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.0077 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.0065 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.0090 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 207-08-9 | |
| Chrysene | 0.014 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 53-70-3 | |
| Fluoranthene | 0.058 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 206-44-0 | |
| Fluorene | 0.063 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.0059 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 193-39-5 | |
| 1-Methylnaphthalene | 1.3 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 2.2 | mg/kg | 0.029 | 5 | 07/27/17 11:00 | 07/28/17 18:55 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 91-20-3 | |
| Phenanthrene | 0.10 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 85-01-8 | |
| Pyrene | 0.042 | mg/kg | 0.0058 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 50 | % | 30-94 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 58 | % | 27-102 | 1 | 07/27/17 11:00 | 07/27/17 19:52 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.025 | 1 | | 08/01/17 03:05 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 02-SB-07 (0-1) **Lab ID: 50176301035** Collected: 07/25/17 13:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.0098 | 1 | | 08/01/17 03:05 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.020 | 1 | | 08/01/17 03:05 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.025 | 1 | | 08/01/17 03:05 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 02-SB-07 (0-1) **Lab ID: 50176301035** Collected: 07/25/17 13:10 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.098 | 1 | | 08/01/17 03:05 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0049 | 1 | | 08/01/17 03:05 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.0098 | 1 | | 08/01/17 03:05 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 117 | % | 69-136 | 1 | | 08/01/17 03:05 | 1868-53-7 | |
| Toluene-d8 (S) | 119 | % | 64-150 | 1 | | 08/01/17 03:05 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 89 | % | 51-142 | 1 | | 08/01/17 03:05 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 13.8 | % | 0.10 | 1 | | 07/27/17 15:12 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

Sample: 02-SB-07 (6-8) **Lab ID: 50176301036** Collected: 07/25/17 13:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 1.8 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7440-38-2 | |
| Barium | 5.3 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.58 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7440-43-9 | |
| Chromium | 4.4 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7440-47-3 | |
| Lead | 5.0 | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.58 | 1 | 07/28/17 12:00 | 07/29/17 03:46 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/03/17 09:33 | 08/03/17 18:48 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.075 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 83-32-9 | |
| Acenaphthylene | 0.057 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 208-96-8 | |
| Anthracene | 0.074 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 120-12-7 | |
| Benzo(a)anthracene | 0.051 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 56-55-3 | |
| Benzo(a)pyrene | 0.034 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.028 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.020 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.029 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 207-08-9 | |
| Chrysene | 0.046 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 53-70-3 | |
| Fluoranthene | 0.21 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 206-44-0 | |
| Fluorene | 0.24 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.019 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 193-39-5 | |
| 1-Methylnaphthalene | 5.4 | mg/kg | 0.063 | 10 | 07/27/17 11:00 | 07/28/17 19:12 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 7.5 | mg/kg | 0.063 | 10 | 07/27/17 11:00 | 07/28/17 19:12 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 91-20-3 | |
| Phenanthrene | 0.32 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 85-01-8 | |
| Pyrene | 0.14 | mg/kg | 0.0063 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 78 | % | 30-94 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 72 | % | 27-102 | 1 | 07/27/17 11:00 | 07/27/17 20:09 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.034 | 1 | | 08/01/17 03:38 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 02-SB-07 (6-8) **Lab ID: 50176301036** Collected: 07/25/17 13:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.014 | 1 | | 08/01/17 03:38 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.027 | 1 | | 08/01/17 03:38 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.034 | 1 | | 08/01/17 03:38 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

Sample: 02-SB-07 (6-8) **Lab ID: 50176301036** Collected: 07/25/17 13:20 Received: 07/26/17 15:20 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.14 | 1 | | 08/01/17 03:38 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0068 | 1 | | 08/01/17 03:38 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.014 | 1 | | 08/01/17 03:38 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 119 | % | 69-136 | 1 | | 08/01/17 03:38 | 1868-53-7 | |
| Toluene-d8 (S) | 114 | % | 64-150 | 1 | | 08/01/17 03:38 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 86 | % | 51-142 | 1 | | 08/01/17 03:38 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 20.7 | % | 0.10 | 1 | | 07/27/17 15:12 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-03 W | Lab ID: 50176301037 | Collected: 07/25/17 11:45 | Received: 07/26/17 15:20 | Matrix: Water | | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|------------|------|----|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual | |
| 8082 GCS PCB Waters | | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3510 | | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 12674-11-2 | | |
| PCB-1221 (Aroclor 1221) | ND | ug/L | 0.20 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 11104-28-2 | | |
| PCB-1232 (Aroclor 1232) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 11141-16-5 | | |
| PCB-1242 (Aroclor 1242) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 53469-21-9 | | |
| PCB-1248 (Aroclor 1248) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 12672-29-6 | | |
| PCB-1254 (Aroclor 1254) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 11097-69-1 | | |
| PCB-1260 (Aroclor 1260) | ND | ug/L | 0.10 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 11096-82-5 | | |
| Surrogates | | | | | | | | | |
| Tetrachloro-m-xylene (S) | 56 | % | 10-108 | 1 | 07/27/17 14:07 | 07/28/17 15:03 | 877-09-8 | | |
| 6010 MET ICP | | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | | |
| Arsenic | 31.5 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7440-38-2 | | |
| Barium | 68.5 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7440-39-3 | | |
| Cadmium | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7440-43-9 | | |
| Chromium | 15.6 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7440-47-3 | | |
| Lead | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7439-92-1 | | |
| Selenium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7782-49-2 | | |
| Silver | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:25 | 7440-22-4 | | |
| 7470 Mercury | | | | | | | | | |
| Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | | | |
| Mercury | ND | ug/L | 2.0 | 1 | 07/28/17 19:41 | 07/29/17 10:47 | 7439-97-6 | | |
| 8270 MSSV PAHLV | | | | | | | | | |
| Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510 | | | | | | | | | |
| Acenaphthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 83-32-9 | | |
| Acenaphthylene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 208-96-8 | | |
| Anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 120-12-7 | | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 56-55-3 | | |
| Benzo(a)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 50-32-8 | | |
| Benzo(b)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 205-99-2 | | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 191-24-2 | | |
| Benzo(k)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 207-08-9 | | |
| Chrysene | ND | ug/L | 0.50 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 218-01-9 | | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 53-70-3 | | |
| Fluoranthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 206-44-0 | | |
| Fluorene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 86-73-7 | | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 193-39-5 | | |
| 1-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 90-12-0 | | N2 |
| 2-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 91-57-6 | | |
| Naphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 91-20-3 | | |
| Phenanthrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 85-01-8 | | |
| Pyrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 129-00-0 | | |
| Surrogates | | | | | | | | | |
| 2-Fluorobiphenyl (S) | 48 | % | 15-87 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 321-60-8 | | |
| p-Terphenyl-d14 (S) | 52 | % | 10-116 | 1 | 07/26/17 23:40 | 07/27/17 17:42 | 1718-51-0 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-03 W | Lab ID: 50176301037 | Collected: 07/25/17 11:45 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|---------------------|-----------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 07/29/17 04:46 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 07/29/17 04:46 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 07/29/17 04:46 | 107-13-1 | L2 |
| Benzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 07/29/17 04:46 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 104-51-8 | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 07/29/17 04:46 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 67-66-3 | |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 07/29/17 04:46 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-34-3 | L2 |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 156-60-5 | L2 |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 07/29/17 04:46 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 07/29/17 04:46 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 07/29/17 04:46 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 98-82-8 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-03 W | | Lab ID: 50176301037 | Collected: 07/25/17 11:45 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|-----------------------------|---------|-----------------------------|---------------------------|--------------------------|---------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-09-2 | L2 |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 07/29/17 04:46 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 07/29/17 04:46 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 04:46 | 108-67-8 | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 07/29/17 04:46 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 07/29/17 04:46 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 07/29/17 04:46 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 86-116 | 1 | | 07/29/17 04:46 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 100 | %. | 84-113 | 1 | | 07/29/17 04:46 | 460-00-4 | |
| Toluene-d8 (S) | 98 | %. | 86-111 | 1 | | 07/29/17 04:46 | 2037-26-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-05 W | Lab ID: 50176301038 | Collected: 07/25/17 10:10 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|---|---------------------|---------------------------|--------------------------|---------------|----------------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8082 GCS PCB Waters | | | | | | | | |
| Analytical Method: EPA 8082 Preparation Method: EPA 3510 | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ND | ug/L | 0.11 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 12674-11-2 | |
| PCB-1221 (Aroclor 1221) | ND | ug/L | 0.21 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 11104-28-2 | |
| PCB-1232 (Aroclor 1232) | ND | ug/L | 0.11 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 11141-16-5 | |
| PCB-1242 (Aroclor 1242) | ND | ug/L | 0.11 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 53469-21-9 | |
| PCB-1248 (Aroclor 1248) | ND | ug/L | 0.11 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 12672-29-6 | |
| PCB-1254 (Aroclor 1254) | ND | ug/L | 0.11 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 11097-69-1 | |
| PCB-1260 (Aroclor 1260) | ND | ug/L | 0.11 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 11096-82-5 | |
| Surrogates | | | | | | | | |
| Tetrachloro-m-xylene (S) | 54 | % | 10-108 | 1 | 07/27/17 14:07 | 07/28/17 15:24 | 877-09-8 | |
| 6010 MET ICP | | | | | | | | |
| Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | | | |
| Arsenic | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7440-38-2 | |
| Barium | 64.3 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7440-39-3 | |
| Cadmium | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7440-43-9 | |
| Chromium | 30.2 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7440-47-3 | |
| Lead | 36.9 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7439-92-1 | |
| Selenium | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7782-49-2 | |
| Silver | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/29/17 00:27 | 7440-22-4 | |
| 7470 Mercury | | | | | | | | |
| Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | | | |
| Mercury | ND | ug/L | 2.0 | 1 | 07/28/17 19:41 | 07/29/17 10:49 | 7439-97-6 | |
| 8270 MSSV PAHLV | | | | | | | | |
| Analytical Method: EPA 8270 by SIM LVE Preparation Method: EPA 3510 | | | | | | | | |
| Acenaphthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 83-32-9 | |
| Acenaphthylene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 208-96-8 | |
| Anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 120-12-7 | |
| Benzo(a)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 56-55-3 | |
| Benzo(a)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 207-08-9 | |
| Chrysene | ND | ug/L | 0.50 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 53-70-3 | |
| Fluoranthene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 206-44-0 | |
| Fluorene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | ug/L | 0.10 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 193-39-5 | |
| 1-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 91-57-6 | |
| Naphthalene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 91-20-3 | |
| Phenanthrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 85-01-8 | |
| Pyrene | ND | ug/L | 1.0 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 54 | % | 15-87 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 51 | % | 10-116 | 1 | 07/26/17 23:40 | 07/27/17 17:54 | 1718-51-0 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-05 W | Lab ID: 50176301038 | Collected: 07/25/17 10:10 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|---------------------|-----------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 07/29/17 05:24 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 07/29/17 05:24 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 07/29/17 05:24 | 107-13-1 | L2 |
| Benzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 07/29/17 05:24 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 104-51-8 | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 07/29/17 05:24 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 67-66-3 | |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 07/29/17 05:24 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-34-3 | L2 |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 156-60-5 | L2 |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 07/29/17 05:24 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 07/29/17 05:24 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 07/29/17 05:24 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 98-82-8 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-05 W | | Lab ID: 50176301038 | Collected: 07/25/17 10:10 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|-----------------------------|---------|-----------------------------|---------------------------|--------------------------|---------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-09-2 | L2 |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 07/29/17 05:24 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 07/29/17 05:24 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 07/29/17 05:24 | 108-67-8 | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 07/29/17 05:24 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 07/29/17 05:24 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 07/29/17 05:24 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 101 | %. | 86-116 | 1 | | 07/29/17 05:24 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 95 | %. | 84-113 | 1 | | 07/29/17 05:24 | 460-00-4 | |
| Toluene-d8 (S) | 96 | %. | 86-111 | 1 | | 07/29/17 05:24 | 2037-26-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-03-F W | | Lab ID: 50176301039 | Collected: 07/25/17 11:45 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|--------------------------------|-------------|--|---------------------------|--------------------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | |
| Arsenic, Dissolved | 28.4 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7440-38-2 | |
| Barium, Dissolved | 59.0 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7440-39-3 | |
| Cadmium, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7440-43-9 | |
| Chromium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7440-47-3 | |
| Lead, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7439-92-1 | |
| Selenium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7782-49-2 | |
| Silver, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:12 | 7440-22-4 | |
| 7470 Mercury, Dissolved | | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | |
| Mercury, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 19:53 | 07/31/17 11:25 | 7439-97-6 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: 04-SB-05-F W | | Lab ID: 50176301040 | Collected: 07/25/17 10:10 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|--------------------------------|-------------|--|---------------------------|--------------------------|----------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 6010 MET ICP, Dissolved | | Analytical Method: EPA 6010 Preparation Method: EPA 3010 | | | | | | |
| Arsenic, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7440-38-2 | |
| Barium, Dissolved | 39.8 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7440-39-3 | |
| Cadmium, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7440-43-9 | |
| Chromium, Dissolved | 15.0 | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7440-47-3 | |
| Lead, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7439-92-1 | |
| Selenium, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7782-49-2 | |
| Silver, Dissolved | ND | ug/L | 10.0 | 1 | 07/28/17 11:26 | 07/31/17 12:34 | 7440-22-4 | |
| 7470 Mercury, Dissolved | | Analytical Method: EPA 7470 Preparation Method: EPA 7470 | | | | | | |
| Mercury, Dissolved | ND | ug/L | 2.0 | 1 | 07/28/17 19:53 | 07/31/17 11:28 | 7439-97-6 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: Trip Blank | Lab ID: 50176301041 | Collected: 07/25/17 08:00 | Received: 07/26/17 15:20 | Matrix: Water | | | | |
|-----------------------------|-----------------------------|---------------------------|--------------------------|---------------|----------|----------------|------------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | Analytical Method: EPA 8260 | | | | | | | |
| Acetone | ND | ug/L | 100 | 1 | | 08/01/17 17:23 | 67-64-1 | |
| Acrolein | ND | ug/L | 50.0 | 1 | | 08/01/17 17:23 | 107-02-8 | |
| Acrylonitrile | ND | ug/L | 100 | 1 | | 08/01/17 17:23 | 107-13-1 | |
| Benzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 71-43-2 | |
| Bromobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 108-86-1 | |
| Bromochloromethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 74-97-5 | |
| Bromodichloromethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-27-4 | |
| Bromoform | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-25-2 | |
| Bromomethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 74-83-9 | |
| 2-Butanone (MEK) | ND | ug/L | 25.0 | 1 | | 08/01/17 17:23 | 78-93-3 | |
| n-Butylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 104-51-8 | |
| sec-Butylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 135-98-8 | |
| tert-Butylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 98-06-6 | |
| Carbon disulfide | ND | ug/L | 10.0 | 1 | | 08/01/17 17:23 | 75-15-0 | |
| Carbon tetrachloride | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 56-23-5 | |
| Chlorobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 108-90-7 | |
| Chloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-00-3 | |
| Chloroform | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 67-66-3 | L2 |
| Chloromethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 74-87-3 | |
| 2-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 95-49-8 | |
| 4-Chlorotoluene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 106-43-4 | |
| Dibromochloromethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 106-93-4 | |
| Dibromomethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | ug/L | 100 | 1 | | 08/01/17 17:23 | 110-57-6 | |
| Dichlorodifluoromethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-71-8 | |
| 1,1-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-34-3 | |
| 1,2-Dichloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 107-06-2 | |
| 1,1-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 156-60-5 | |
| 1,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 78-87-5 | |
| 1,3-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 142-28-9 | |
| 2,2-Dichloropropane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 594-20-7 | |
| 1,1-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 10061-02-6 | |
| Ethylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 100-41-4 | |
| Ethyl methacrylate | ND | ug/L | 100 | 1 | | 08/01/17 17:23 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 87-68-3 | |
| n-Hexane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 110-54-3 | |
| 2-Hexanone | ND | ug/L | 25.0 | 1 | | 08/01/17 17:23 | 591-78-6 | |
| Iodomethane | ND | ug/L | 10.0 | 1 | | 08/01/17 17:23 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 98-82-8 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Sample: Trip Blank | | Lab ID: 50176301041 | Collected: 07/25/17 08:00 | Received: 07/26/17 15:20 | Matrix: Water | | | |
|-----------------------------|---------|-----------------------------|---------------------------|--------------------------|---------------|----------------|-----------|------|
| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
| 8260 MSV | | Analytical Method: EPA 8260 | | | | | | |
| p-Isopropyltoluene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 99-87-6 | |
| Methylene Chloride | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | ug/L | 25.0 | 1 | | 08/01/17 17:23 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | ug/L | 4.0 | 1 | | 08/01/17 17:23 | 1634-04-4 | |
| Naphthalene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 91-20-3 | |
| n-Propylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 103-65-1 | |
| Styrene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 79-34-5 | |
| Tetrachloroethene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 127-18-4 | |
| Toluene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 79-00-5 | |
| Trichloroethene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 79-01-6 | |
| Trichlorofluoromethane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | ug/L | 5.0 | 1 | | 08/01/17 17:23 | 108-67-8 | |
| Vinyl acetate | ND | ug/L | 50.0 | 1 | | 08/01/17 17:23 | 108-05-4 | |
| Vinyl chloride | ND | ug/L | 2.0 | 1 | | 08/01/17 17:23 | 75-01-4 | |
| Xylene (Total) | ND | ug/L | 10.0 | 1 | | 08/01/17 17:23 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 102 | %. | 86-116 | 1 | | 08/01/17 17:23 | 1868-53-7 | |
| 4-Bromofluorobenzene (S) | 98 | %. | 84-113 | 1 | | 08/01/17 17:23 | 460-00-4 | |
| Toluene-d8 (S) | 94 | %. | 86-111 | 1 | | 08/01/17 17:23 | 2037-26-5 | |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398689 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

METHOD BLANK: 1836263 Matrix: Water
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury | ug/L | ND | 2.0 | 07/29/17 10:06 | |

LABORATORY CONTROL SAMPLE: 1836264

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury | ug/L | 5 | 5.0 | 100 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836265 1836266

| Parameter | Units | 50176055004 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Mercury | ug/L | ND | 5 | 5 | 5.3 | 5.2 | 103 | 100 | 75-125 | 2 | 20 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836267 1836268

| Parameter | Units | 50176057014 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Mercury | ug/L | ND | 5 | 5 | 5.1 | 4.9 | 102 | 97 | 75-125 | 4 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398956 Analysis Method: EPA 7470
 QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury Dissolved
 Associated Lab Samples: 50176301023, 50176301024, 50176301025, 50176301027, 50176301039, 50176301040

METHOD BLANK: 1837420 Matrix: Water
 Associated Lab Samples: 50176301023, 50176301024, 50176301025, 50176301027, 50176301039, 50176301040

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|--------------------|-------|--------------|-----------------|----------------|------------|
| Mercury, Dissolved | ug/L | ND | 2.0 | 07/31/17 10:46 | |

LABORATORY CONTROL SAMPLE: 1837421

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|--------------------|-------|-------------|------------|-----------|--------------|------------|
| Mercury, Dissolved | ug/L | 5 | 4.9 | 98 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1837422 1837423

| Parameter | Units | 50176301023 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|--------------------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Mercury, Dissolved | ug/L | ND | 5 | 5 | 5.1 | 5.0 | 102 | 101 | 75-125 | 1 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 399566 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012, 50176301013, 50176301014, 50176301015, 50176301016, 50176301017, 50176301018, 50176301019, 50176301028

METHOD BLANK: 1839932 Matrix: Solid
Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012, 50176301013, 50176301014, 50176301015, 50176301016, 50176301017, 50176301018, 50176301019, 50176301028

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury | mg/kg | ND | 0.20 | 08/03/17 17:19 | |

LABORATORY CONTROL SAMPLE: 1839933

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury | mg/kg | .49 | 0.50 | 102 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1839934 1839935

| Parameter | Units | 50176301001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| Mercury | mg/kg | 0.24 | .55 | .52 | 0.93 | 0.76 | 125 | 101 | 75-125 | 20 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 399567 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

METHOD BLANK: 1839936 Matrix: Solid
Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury | mg/kg | ND | 0.19 | 08/03/17 18:21 | |

LABORATORY CONTROL SAMPLE: 1839937

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury | mg/kg | .49 | 0.50 | 101 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1839938 1839939

| Parameter | Units | 50176301029 | | 1839938 | | 1839939 | | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|-------------|----------------|-----------------|-----------|------------|----------|--------------|--------|---------|------|
| | | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | | | | |
| Mercury | mg/kg | 0.27 | .6 | .55 | 0.94 | 0.79 | 112 | 93 | 75-125 | 18 | 20 |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398517 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012, 50176301013, 50176301014, 50176301015, 50176301016

METHOD BLANK: 1835570 Matrix: Solid
Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012, 50176301013, 50176301014, 50176301015, 50176301016

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Arsenic | mg/kg | ND | 1.0 | 07/31/17 12:38 | |
| Barium | mg/kg | ND | 1.0 | 07/31/17 12:38 | |
| Cadmium | mg/kg | ND | 0.50 | 07/31/17 12:38 | |
| Chromium | mg/kg | ND | 1.0 | 07/31/17 12:38 | |
| Lead | mg/kg | ND | 1.0 | 07/31/17 12:38 | |
| Selenium | mg/kg | ND | 1.0 | 07/31/17 12:38 | |
| Silver | mg/kg | ND | 0.50 | 07/31/17 12:38 | |

LABORATORY CONTROL SAMPLE: 1835571

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Arsenic | mg/kg | 50 | 50.6 | 101 | 80-120 | |
| Barium | mg/kg | 50 | 48.6 | 97 | 80-120 | |
| Cadmium | mg/kg | 50 | 48.9 | 98 | 80-120 | |
| Chromium | mg/kg | 50 | 48.4 | 97 | 80-120 | |
| Lead | mg/kg | 50 | 47.9 | 96 | 80-120 | |
| Selenium | mg/kg | 50 | 50.0 | 100 | 80-120 | |
| Silver | mg/kg | 25 | 23.6 | 94 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835572 1835573

| Parameter | Units | 50176301005 | | MSD | | MS | | MSD | | % Rec Limits | Max RPD | Qual |
|-----------|-------|-------------|----------------|-------------|--------|------------|-------|-------|--------|--------------|---------|-------|
| | | Result | MS Spike Conc. | Spike Conc. | Result | MSD Result | % Rec | % Rec | | | | |
| Arsenic | mg/kg | 8.8 | 56 | 60.2 | 59.3 | 69.2 | 90 | 100 | 75-125 | 15 | 20 | |
| Barium | mg/kg | 233 | 56 | 60.2 | 293 | 263 | 108 | 49 | 75-125 | 11 | 20 | M0 |
| Cadmium | mg/kg | 2.7 | 56 | 60.2 | 50.7 | 59.3 | 86 | 94 | 75-125 | 16 | 20 | |
| Chromium | mg/kg | 35.7 | 56 | 60.2 | 101 | 423 | 116 | 643 | 75-125 | 123 | 20 | 1d,M0 |
| Lead | mg/kg | 218 | 56 | 60.2 | 418 | 384 | 357 | 275 | 75-125 | 9 | 20 | M3 |
| Selenium | mg/kg | 1.5 | 56 | 60.2 | 47.1 | 57.8 | 81 | 93 | 75-125 | 20 | 20 | |
| Silver | mg/kg | 0.88 | 28.1 | 30.2 | 25.1 | 30.3 | 86 | 98 | 75-125 | 19 | 20 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398518 Analysis Method: EPA 6010
 QC Batch Method: EPA 3050 Analysis Description: 6010 MET
 Associated Lab Samples: 50176301017, 50176301018, 50176301019, 50176301028, 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

METHOD BLANK: 1835575 Matrix: Solid
 Associated Lab Samples: 50176301017, 50176301018, 50176301019, 50176301028, 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Arsenic | mg/kg | ND | 1.0 | 07/29/17 03:05 | |
| Barium | mg/kg | ND | 1.0 | 07/29/17 03:05 | |
| Cadmium | mg/kg | ND | 0.50 | 07/29/17 03:05 | |
| Chromium | mg/kg | ND | 1.0 | 07/29/17 03:05 | |
| Lead | mg/kg | ND | 1.0 | 07/29/17 03:05 | |
| Selenium | mg/kg | ND | 1.0 | 07/29/17 03:05 | |
| Silver | mg/kg | ND | 0.50 | 07/29/17 03:05 | |

LABORATORY CONTROL SAMPLE: 1835576

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Arsenic | mg/kg | 50 | 48.4 | 97 | 80-120 | |
| Barium | mg/kg | 50 | 47.6 | 95 | 80-120 | |
| Cadmium | mg/kg | 50 | 47.0 | 94 | 80-120 | |
| Chromium | mg/kg | 50 | 47.6 | 95 | 80-120 | |
| Lead | mg/kg | 50 | 46.6 | 93 | 80-120 | |
| Selenium | mg/kg | 50 | 47.9 | 96 | 80-120 | |
| Silver | mg/kg | 25 | 23.8 | 95 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835577 1835578

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|-------------|-------------|-------------|--------|----------|-----------|--------------|--------|---------|------|
| | | 50176301034 | Spike Conc. | Spike Conc. | Result | | | | | | |
| Arsenic | mg/kg | 3.8 | 51 | 53.9 | 53.1 | 54.7 | 96 | 94 | 75-125 | 3 | 20 |
| Barium | mg/kg | 5.6 | 51 | 53.9 | 53.3 | 55.2 | 93 | 92 | 75-125 | 4 | 20 |
| Cadmium | mg/kg | ND | 51 | 53.9 | 48.2 | 50.2 | 94 | 93 | 75-125 | 4 | 20 |
| Chromium | mg/kg | 3.8 | 51 | 53.9 | 49.7 | 51.8 | 90 | 89 | 75-125 | 4 | 20 |
| Lead | mg/kg | 4.4 | 51 | 53.9 | 45.4 | 47.7 | 80 | 80 | 75-125 | 5 | 20 |
| Selenium | mg/kg | ND | 51 | 53.9 | 47.6 | 49.7 | 93 | 92 | 75-125 | 4 | 20 |
| Silver | mg/kg | ND | 25.5 | 26.9 | 25.1 | 26.1 | 98 | 97 | 75-125 | 4 | 20 |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398548 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

METHOD BLANK: 1835689 Matrix: Water
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Arsenic | ug/L | ND | 10.0 | 07/28/17 23:01 | |
| Barium | ug/L | ND | 10.0 | 07/28/17 23:01 | |
| Cadmium | ug/L | ND | 2.0 | 07/28/17 23:01 | |
| Chromium | ug/L | ND | 10.0 | 07/28/17 23:01 | |
| Lead | ug/L | ND | 10.0 | 07/28/17 23:01 | |
| Selenium | ug/L | ND | 10.0 | 07/28/17 23:01 | |
| Silver | ug/L | ND | 10.0 | 07/28/17 23:01 | |

LABORATORY CONTROL SAMPLE: 1835690

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Arsenic | ug/L | 1000 | 986 | 99 | 80-120 | |
| Barium | ug/L | 1000 | 958 | 96 | 80-120 | |
| Cadmium | ug/L | 1000 | 960 | 96 | 80-120 | |
| Chromium | ug/L | 1000 | 966 | 97 | 80-120 | |
| Lead | ug/L | 1000 | 928 | 93 | 80-120 | |
| Selenium | ug/L | 1000 | 982 | 98 | 80-120 | |
| Silver | ug/L | 500 | 464 | 93 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835691 1835692

| Parameter | Units | 50176076002 | | 1835692 | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|-------------|-----------------|-----------|-----------------|----------|-----------|--------------|-----|---------|------|
| | | MS Result | MSD Spike Conc. | MS Result | MSD Spike Conc. | | | | | | |
| Arsenic | ug/L | ND | 1000 | 1020 | 1020 | 101 | 102 | 75-125 | 0 | 20 | |
| Barium | ug/L | 97.9 | 1000 | 1030 | 1040 | 94 | 94 | 75-125 | 1 | 20 | |
| Cadmium | ug/L | ND | 1000 | 970 | 971 | 97 | 97 | 75-125 | 0 | 20 | |
| Chromium | ug/L | ND | 1000 | 959 | 960 | 95 | 95 | 75-125 | 0 | 20 | |
| Lead | ug/L | ND | 1000 | 889 | 895 | 89 | 89 | 75-125 | 1 | 20 | |
| Selenium | ug/L | ND | 1000 | 1000 | 999 | 100 | 100 | 75-125 | 0 | 20 | |
| Silver | ug/L | ND | 500 | 471 | 466 | 94 | 93 | 75-125 | 1 | 20 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835693 1835694

| Parameter | Units | 50176052001 | | 1835694 | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|-------------|-----------------|-----------|-----------------|----------|-----------|--------------|-----|---------|------|
| | | MS Result | MSD Spike Conc. | MS Result | MSD Spike Conc. | | | | | | |
| Arsenic | ug/L | 22.3 | 1000 | 1010 | 1030 | 98 | 101 | 75-125 | 2 | 20 | |
| Barium | ug/L | 217 | 1000 | 1150 | 1190 | 93 | 97 | 75-125 | 3 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Parameter | Units | MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835693 | | 1835694 | | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | Max RPD | RPD | Qual |
|-----------|-------|--|----------------------|-----------------------|-----|--------------|---------------|-------------|--------------|-----------------|------------|-----|------|
| | | 50176052001 Result | MS Spike Conc. | MSD Spike Conc. | | | | | | | | | |
| Cadmium | ug/L | ND | 1000 | 1000 | 945 | 968 | 94 | 97 | 75-125 | 2 | 20 | | |
| Chromium | ug/L | 31.9 | 1000 | 1000 | 970 | 994 | 94 | 96 | 75-125 | 2 | 20 | | |
| Lead | ug/L | 78.3 | 1000 | 1000 | 952 | 974 | 87 | 90 | 75-125 | 2 | 20 | | |
| Selenium | ug/L | ND | 1000 | 1000 | 973 | 993 | 97 | 99 | 75-125 | 2 | 20 | | |
| Silver | ug/L | ND | 500 | 500 | 452 | 461 | 90 | 92 | 75-125 | 2 | 20 | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398633 Analysis Method: EPA 6010
 QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
 Associated Lab Samples: 50176301023, 50176301024, 50176301025, 50176301027, 50176301039, 50176301040

METHOD BLANK: 1835967 Matrix: Water
 Associated Lab Samples: 50176301023, 50176301024, 50176301025, 50176301027, 50176301039, 50176301040

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|---------------------|-------|--------------|-----------------|----------------|------------|
| Arsenic, Dissolved | ug/L | ND | 10.0 | 07/31/17 13:39 | |
| Barium, Dissolved | ug/L | ND | 10.0 | 07/31/17 13:39 | |
| Cadmium, Dissolved | ug/L | ND | 2.0 | 07/31/17 13:39 | |
| Chromium, Dissolved | ug/L | ND | 10.0 | 07/31/17 13:39 | |
| Lead, Dissolved | ug/L | ND | 10.0 | 07/31/17 13:39 | |
| Selenium, Dissolved | ug/L | ND | 10.0 | 07/31/17 13:39 | |
| Silver, Dissolved | ug/L | ND | 10.0 | 07/31/17 13:39 | |

LABORATORY CONTROL SAMPLE: 1835968

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------|-------|-------------|------------|-----------|--------------|------------|
| Arsenic, Dissolved | ug/L | 1000 | 1010 | 101 | 80-120 | |
| Barium, Dissolved | ug/L | 1000 | 971 | 97 | 80-120 | |
| Cadmium, Dissolved | ug/L | 1000 | 982 | 98 | 80-120 | |
| Chromium, Dissolved | ug/L | 1000 | 967 | 97 | 80-120 | |
| Lead, Dissolved | ug/L | 1000 | 953 | 95 | 80-120 | |
| Selenium, Dissolved | ug/L | 1000 | 1000 | 100 | 80-120 | |
| Silver, Dissolved | ug/L | 500 | 469 | 94 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835969 1835970

| Parameter | Units | 50175972001 | | 1835970 | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|---------------------|-------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| | | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | | | | | | |
| Arsenic, Dissolved | ug/L | ND | 1000 | 1000 | 1000 | 100 | 102 | 75-125 | 2 | 20 | |
| Barium, Dissolved | ug/L | 23.7 | 1000 | 1000 | 984 | 96 | 97 | 75-125 | 1 | 20 | |
| Cadmium, Dissolved | ug/L | ND | 1000 | 1000 | 963 | 96 | 98 | 75-125 | 1 | 20 | |
| Chromium, Dissolved | ug/L | ND | 1000 | 1000 | 949 | 95 | 95 | 75-125 | 0 | 20 | |
| Lead, Dissolved | ug/L | ND | 1000 | 1000 | 924 | 92 | 93 | 75-125 | 1 | 20 | |
| Selenium, Dissolved | ug/L | ND | 1000 | 1000 | 994 | 99 | 101 | 75-125 | 2 | 20 | |
| Silver, Dissolved | ug/L | ND | 500 | 500 | 472 | 94 | 94 | 75-125 | 0 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398766 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

METHOD BLANK: 1836600 Matrix: Water
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,1-Dichloropropene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,3,5-Trimethylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,3-Dichlorobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,3-Dichloropropane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 2,2-Dichloropropane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 2-Butanone (MEK) | ug/L | ND | 25.0 | 07/29/17 00:23 | |
| 2-Chlorotoluene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 2-Hexanone | ug/L | ND | 25.0 | 07/29/17 00:23 | |
| 4-Chlorotoluene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 25.0 | 07/29/17 00:23 | |
| Acetone | ug/L | ND | 100 | 07/29/17 00:23 | |
| Acrolein | ug/L | ND | 50.0 | 07/29/17 00:23 | |
| Acrylonitrile | ug/L | ND | 100 | 07/29/17 00:23 | |
| Benzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Bromobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Bromochloromethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Bromoform | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Bromomethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Carbon disulfide | ug/L | ND | 10.0 | 07/29/17 00:23 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Chlorobenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Chloroethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Chloroform | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Chloromethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 07/29/17 00:23 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

METHOD BLANK: 1836600

Matrix: Water

Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Dibromomethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Dichlorodifluoromethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Ethyl methacrylate | ug/L | ND | 100 | 07/29/17 00:23 | |
| Ethylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Hexachloro-1,3-butadiene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Iodomethane | ug/L | ND | 10.0 | 07/29/17 00:23 | |
| Isopropylbenzene (Cumene) | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Methyl-tert-butyl ether | ug/L | ND | 4.0 | 07/29/17 00:23 | |
| Methylene Chloride | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| n-Butylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| n-Hexane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| n-Propylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Naphthalene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| p-Isopropyltoluene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| sec-Butylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Styrene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| tert-Butylbenzene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Toluene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 100 | 07/29/17 00:23 | |
| Trichloroethene | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Trichlorofluoromethane | ug/L | ND | 5.0 | 07/29/17 00:23 | |
| Vinyl acetate | ug/L | ND | 50.0 | 07/29/17 00:23 | |
| Vinyl chloride | ug/L | ND | 2.0 | 07/29/17 00:23 | |
| Xylene (Total) | ug/L | ND | 10.0 | 07/29/17 00:23 | |
| 4-Bromofluorobenzene (S) | % | 99 | 84-113 | 07/29/17 00:23 | |
| Dibromofluoromethane (S) | % | 101 | 86-116 | 07/29/17 00:23 | |
| Toluene-d8 (S) | % | 99 | 86-111 | 07/29/17 00:23 | |

LABORATORY CONTROL SAMPLE: 1836601

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | 50 | 44.8 | 90 | 80-123 | |
| 1,1,1-Trichloroethane | ug/L | 50 | 43.7 | 87 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 46.1 | 92 | 74-124 | |
| 1,1,2-Trichloroethane | ug/L | 50 | 43.5 | 87 | 79-121 | |
| 1,1-Dichloroethane | ug/L | 50 | 35.6 | 71 | 77-122 | L2 |
| 1,1-Dichloroethene | ug/L | 50 | 37.1 | 74 | 70-131 | |
| 1,1-Dichloropropene | ug/L | 50 | 46.3 | 93 | 79-124 | |
| 1,2,3-Trichlorobenzene | ug/L | 50 | 44.8 | 90 | 70-129 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1836601

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,2,3-Trichloropropane | ug/L | 50 | 47.4 | 95 | 79-128 | |
| 1,2,4-Trichlorobenzene | ug/L | 50 | 42.6 | 85 | 69-129 | |
| 1,2,4-Trimethylbenzene | ug/L | 50 | 46.0 | 92 | 76-125 | |
| 1,2-Dibromoethane (EDB) | ug/L | 50 | 46.5 | 93 | 81-123 | |
| 1,2-Dichlorobenzene | ug/L | 50 | 44.2 | 88 | 77-118 | |
| 1,2-Dichloroethane | ug/L | 50 | 45.2 | 90 | 72-119 | |
| 1,2-Dichloropropane | ug/L | 50 | 45.0 | 90 | 78-125 | |
| 1,3,5-Trimethylbenzene | ug/L | 50 | 45.6 | 91 | 79-123 | |
| 1,3-Dichlorobenzene | ug/L | 50 | 43.2 | 86 | 74-120 | |
| 1,3-Dichloropropane | ug/L | 50 | 47.1 | 94 | 80-127 | |
| 1,4-Dichlorobenzene | ug/L | 50 | 42.1 | 84 | 72-118 | |
| 2,2-Dichloropropane | ug/L | 50 | 42.8 | 86 | 41-145 | |
| 2-Butanone (MEK) | ug/L | 250 | 232 | 93 | 61-150 | |
| 2-Chlorotoluene | ug/L | 50 | 43.3 | 87 | 77-119 | |
| 2-Hexanone | ug/L | 250 | 242 | 97 | 67-141 | |
| 4-Chlorotoluene | ug/L | 50 | 44.2 | 88 | 75-123 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | 250 | 238 | 95 | 71-131 | |
| Acetone | ug/L | 250 | 224 | 89 | 39-166 | |
| Acrolein | ug/L | 1000 | 1360 | 136 | 22-200 | |
| Acrylonitrile | ug/L | 200 | 117 | 58 | 62-130 | L2 |
| Benzene | ug/L | 50 | 43.9 | 88 | 79-120 | |
| Bromobenzene | ug/L | 50 | 44.2 | 88 | 76-121 | |
| Bromochloromethane | ug/L | 50 | 44.5 | 89 | 69-136 | |
| Bromodichloromethane | ug/L | 50 | 45.1 | 90 | 76-125 | |
| Bromoform | ug/L | 50 | 44.4 | 89 | 69-119 | |
| Bromomethane | ug/L | 50 | 51.4 | 103 | 27-161 | |
| Carbon disulfide | ug/L | 50 | 42.8 | 86 | 60-130 | |
| Carbon tetrachloride | ug/L | 50 | 48.2 | 96 | 74-132 | |
| Chlorobenzene | ug/L | 50 | 42.8 | 86 | 77-116 | |
| Chloroethane | ug/L | 50 | 57.6 | 115 | 51-132 | |
| Chloroform | ug/L | 50 | 41.3 | 83 | 76-118 | |
| Chloromethane | ug/L | 50 | 42.1 | 84 | 46-126 | |
| cis-1,2-Dichloroethene | ug/L | 50 | 42.7 | 85 | 74-126 | |
| cis-1,3-Dichloropropene | ug/L | 50 | 46.8 | 94 | 78-125 | |
| Dibromochloromethane | ug/L | 50 | 44.7 | 89 | 80-123 | |
| Dibromomethane | ug/L | 50 | 45.8 | 92 | 75-124 | |
| Dichlorodifluoromethane | ug/L | 50 | 49.8 | 100 | 42-152 | |
| Ethyl methacrylate | ug/L | 200 | 212 | 106 | 75-136 | |
| Ethylbenzene | ug/L | 50 | 45.2 | 90 | 80-123 | |
| Hexachloro-1,3-butadiene | ug/L | 50 | 44.2 | 88 | 74-127 | |
| Iodomethane | ug/L | 100 | 97.2 | 97 | 43-156 | |
| Isopropylbenzene (Cumene) | ug/L | 50 | 45.8 | 92 | 80-122 | |
| Methyl-tert-butyl ether | ug/L | 50 | 32.9 | 66 | 63-131 | |
| Methylene Chloride | ug/L | 50 | 30.2 | 60 | 62-126 | L2 |
| n-Butylbenzene | ug/L | 50 | 43.7 | 87 | 75-123 | |
| n-Hexane | ug/L | 50 | 35.8 | 72 | 66-129 | |
| n-Propylbenzene | ug/L | 50 | 46.4 | 93 | 79-128 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1836601

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| Naphthalene | ug/L | 50 | 47.0 | 94 | 66-130 | |
| p-Isopropyltoluene | ug/L | 50 | 45.5 | 91 | 79-124 | |
| sec-Butylbenzene | ug/L | 50 | 47.5 | 95 | 80-126 | |
| Styrene | ug/L | 50 | 45.9 | 92 | 81-125 | |
| tert-Butylbenzene | ug/L | 50 | 36.1 | 72 | 62-106 | |
| Tetrachloroethene | ug/L | 50 | 42.2 | 84 | 74-119 | |
| Toluene | ug/L | 50 | 43.1 | 86 | 77-117 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 32.3 | 65 | 74-128 L2 | |
| trans-1,3-Dichloropropene | ug/L | 50 | 48.3 | 97 | 75-132 | |
| trans-1,4-Dichloro-2-butene | ug/L | 200 | 180 | 90 | 42-134 | |
| Trichloroethene | ug/L | 50 | 42.8 | 86 | 75-119 | |
| Trichlorofluoromethane | ug/L | 50 | 54.0 | 108 | 57-152 | |
| Vinyl acetate | ug/L | 200 | 177 | 88 | 71-148 | |
| Vinyl chloride | ug/L | 50 | 49.1 | 98 | 62-137 | |
| Xylene (Total) | ug/L | 150 | 137 | 92 | 79-121 | |
| 4-Bromofluorobenzene (S) | % | | | 101 | 84-113 | |
| Dibromofluoromethane (S) | % | | | 97 | 86-116 | |
| Toluene-d8 (S) | % | | | 100 | 86-111 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836602 1836603

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual | |
|---------------------------|-------|--------------------|-------------|-------------|-----------|----------|-----------|--------------|--------|---------|------|------------|
| | | 50176301038 Result | Spike Conc. | Spike Conc. | MS Result | | | | | | | MSD Result |
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 46.6 | 52.6 | 93 | 105 | 48-143 | 12 | 20 | |
| 1,1,1-Trichloroethane | ug/L | ND | 50 | 50 | 42.2 | 47.6 | 84 | 95 | 52-142 | 12 | 20 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 50 | 50 | 50.4 | 54.5 | 101 | 109 | 48-143 | 8 | 20 | |
| 1,1,2-Trichloroethane | ug/L | ND | 50 | 50 | 46.2 | 50.8 | 92 | 102 | 51-139 | 9 | 20 | |
| 1,1-Dichloroethane | ug/L | ND | 50 | 50 | 42.8 | 44.4 | 86 | 89 | 53-139 | 4 | 20 | |
| 1,1-Dichloroethene | ug/L | ND | 50 | 50 | 39.7 | 39.6 | 79 | 79 | 50-149 | 0 | 20 | |
| 1,1-Dichloropropene | ug/L | ND | 50 | 50 | 43.8 | 49.6 | 88 | 99 | 52-145 | 12 | 20 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 50 | 50 | 42.5 | 43.7 | 85 | 87 | 30-144 | 3 | 20 | |
| 1,2,3-Trichloropropane | ug/L | ND | 50 | 50 | 51.5 | 56.1 | 103 | 112 | 49-149 | 8 | 20 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 50 | 50 | 38.5 | 38.4 | 77 | 77 | 24-146 | 0 | 20 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 50 | 50 | 43.6 | 46.3 | 87 | 93 | 33-150 | 6 | 20 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 50 | 50 | 50.4 | 55.8 | 101 | 112 | 54-141 | 10 | 20 | |
| 1,2-Dichlorobenzene | ug/L | ND | 50 | 50 | 44.3 | 46.1 | 89 | 92 | 33-142 | 4 | 20 | |
| 1,2-Dichloroethane | ug/L | ND | 50 | 50 | 47.6 | 51.6 | 95 | 103 | 47-138 | 8 | 20 | |
| 1,2-Dichloropropane | ug/L | ND | 50 | 50 | 46.1 | 50.8 | 92 | 102 | 55-142 | 10 | 20 | |
| 1,3,5-Trimethylbenzene | ug/L | ND | 50 | 50 | 42.5 | 45.9 | 85 | 92 | 31-150 | 8 | 20 | |
| 1,3-Dichlorobenzene | ug/L | ND | 50 | 50 | 40.5 | 42.7 | 81 | 85 | 27-145 | 5 | 20 | |
| 1,3-Dichloropropane | ug/L | ND | 50 | 50 | 50.6 | 55.6 | 101 | 111 | 55-145 | 9 | 20 | |
| 1,4-Dichlorobenzene | ug/L | ND | 50 | 50 | 40.4 | 41.9 | 81 | 84 | 27-140 | 3 | 20 | |
| 2,2-Dichloropropane | ug/L | ND | 50 | 50 | 36.5 | 41.1 | 73 | 82 | 23-144 | 12 | 20 | |
| 2-Butanone (MEK) | ug/L | ND | 250 | 250 | 248 | 281 | 99 | 112 | 39-159 | 12 | 20 | |
| 2-Chlorotoluene | ug/L | ND | 50 | 50 | 41.2 | 43.8 | 82 | 88 | 31-148 | 6 | 20 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Parameter | Units | MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836602 | | 1836603 | | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | Max RPD | RPD | Qual |
|-----------------------------|-------|--|----------------------|-----------------------|--------------|--------------|---------------|-------------|--------------|-----------------|------------|-----|------|
| | | 50176301038 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | | | | | | | | |
| 2-Hexanone | ug/L | ND | 250 | 250 | 255 | 296 | 102 | 118 | 47-151 | 15 | 20 | | |
| 4-Chlorotoluene | ug/L | ND | 50 | 50 | 42.4 | 44.2 | 85 | 88 | 30-148 | 4 | 20 | | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 250 | 250 | 253 | 294 | 101 | 118 | 48-146 | 15 | 20 | | |
| Acetone | ug/L | ND | 250 | 250 | 290 | 264 | 116 | 106 | 31-152 | 9 | 20 | | |
| Acrolein | ug/L | ND | 1000 | 1000 | 892 | 758 | 89 | 76 | 23-200 | 16 | 20 | | |
| Acrylonitrile | ug/L | ND | 200 | 200 | 183 | 174 | 91 | 87 | 42-143 | 5 | 20 | | |
| Benzene | ug/L | ND | 50 | 50 | 43.5 | 48.3 | 87 | 97 | 57-136 | 10 | 20 | | |
| Bromobenzene | ug/L | ND | 50 | 50 | 44.9 | 48.6 | 90 | 97 | 45-138 | 8 | 20 | | |
| Bromochloromethane | ug/L | ND | 50 | 50 | 46.9 | 51.2 | 94 | 102 | 50-145 | 9 | 20 | | |
| Bromodichloromethane | ug/L | ND | 50 | 50 | 47.1 | 51.5 | 94 | 103 | 49-142 | 9 | 20 | | |
| Bromoform | ug/L | ND | 50 | 50 | 47.8 | 51.3 | 96 | 103 | 39-131 | 7 | 20 | | |
| Bromomethane | ug/L | ND | 50 | 50 | 49.5 | 48.5 | 99 | 97 | 10-162 | 2 | 20 | | |
| Carbon disulfide | ug/L | ND | 50 | 50 | 41.2 | 38.3 | 82 | 77 | 34-142 | 7 | 20 | | |
| Carbon tetrachloride | ug/L | ND | 50 | 50 | 48.0 | 53.7 | 96 | 107 | 47-150 | 11 | 20 | | |
| Chlorobenzene | ug/L | ND | 50 | 50 | 41.9 | 47.3 | 84 | 95 | 42-138 | 12 | 20 | | |
| Chloroethane | ug/L | ND | 50 | 50 | 58.2 | 50.7 | 116 | 101 | 34-148 | 14 | 20 | | |
| Chloroform | ug/L | ND | 50 | 50 | 41.6 | 46.2 | 83 | 92 | 54-136 | 11 | 20 | | |
| Chloromethane | ug/L | ND | 50 | 50 | 41.3 | 45.7 | 83 | 91 | 27-138 | 10 | 20 | | |
| cis-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 42.3 | 46.7 | 85 | 93 | 48-147 | 10 | 20 | | |
| cis-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 44.0 | 48.5 | 88 | 97 | 40-142 | 10 | 20 | | |
| Dibromochloromethane | ug/L | ND | 50 | 50 | 49.5 | 53.4 | 99 | 107 | 46-143 | 8 | 20 | | |
| Dibromomethane | ug/L | ND | 50 | 50 | 49.1 | 53.2 | 98 | 106 | 53-140 | 8 | 20 | | |
| Dichlorodifluoromethane | ug/L | ND | 50 | 50 | 41.8 | 48.9 | 84 | 98 | 23-169 | 16 | 20 | | |
| Ethyl methacrylate | ug/L | ND | 200 | 200 | 228 | 259 | 114 | 130 | 54-149 | 13 | 20 | | |
| Ethylbenzene | ug/L | ND | 50 | 50 | 43.4 | 48.3 | 86 | 96 | 40-147 | 11 | 20 | | |
| Hexachloro-1,3-butadiene | ug/L | ND | 50 | 50 | 38.3 | 40.6 | 77 | 81 | 19-156 | 6 | 20 | | |
| Iodomethane | ug/L | ND | 100 | 100 | 93.0 | 97.3 | 93 | 97 | 13-136 | 4 | 20 | | |
| Isopropylbenzene (Cumene) | ug/L | ND | 50 | 50 | 43.5 | 49.0 | 87 | 98 | 37-151 | 12 | 20 | | |
| Methyl-tert-butyl ether | ug/L | ND | 50 | 50 | 49.4 | 47.8 | 99 | 96 | 46-147 | 3 | 20 | | |
| Methylene Chloride | ug/L | ND | 50 | 50 | 45.7 | 41.0 | 91 | 82 | 40-138 | 11 | 20 | | |
| n-Butylbenzene | ug/L | ND | 50 | 50 | 38.6 | 40.2 | 77 | 80 | 21-155 | 4 | 20 | | |
| n-Hexane | ug/L | ND | 50 | 50 | 42.8 | 43.1 | 86 | 86 | 50-137 | 1 | 20 | | |
| n-Propylbenzene | ug/L | ND | 50 | 50 | 42.8 | 46.3 | 86 | 93 | 29-158 | 8 | 20 | | |
| Naphthalene | ug/L | ND | 50 | 50 | 47.5 | 52.0 | 95 | 104 | 43-139 | 9 | 20 | | |
| p-Isopropyltoluene | ug/L | ND | 50 | 50 | 40.5 | 44.2 | 81 | 88 | 25-156 | 9 | 20 | | |
| sec-Butylbenzene | ug/L | ND | 50 | 50 | 44.1 | 46.3 | 88 | 93 | 27-159 | 5 | 20 | | |
| Styrene | ug/L | ND | 50 | 50 | 45.8 | 49.8 | 92 | 100 | 34-149 | 8 | 20 | | |
| tert-Butylbenzene | ug/L | ND | 50 | 50 | 34.0 | 37.2 | 68 | 74 | 25-128 | 9 | 20 | | |
| Tetrachloroethene | ug/L | ND | 50 | 50 | 39.6 | 44.8 | 79 | 90 | 37-144 | 12 | 20 | | |
| Toluene | ug/L | ND | 50 | 50 | 41.8 | 47.3 | 84 | 95 | 46-137 | 12 | 20 | | |
| trans-1,2-Dichloroethene | ug/L | ND | 50 | 50 | 47.1 | 45.0 | 94 | 90 | 51-145 | 5 | 20 | | |
| trans-1,3-Dichloropropene | ug/L | ND | 50 | 50 | 46.0 | 50.5 | 92 | 101 | 41-143 | 9 | 20 | | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 200 | 200 | 150 | 167 | 75 | 83 | 10-145 | 10 | 20 | | |
| Trichloroethene | ug/L | ND | 50 | 50 | 41.3 | 45.2 | 83 | 90 | 45-139 | 9 | 20 | | |
| Trichlorofluoromethane | ug/L | ND | 50 | 50 | 51.0 | 52.0 | 102 | 104 | 42-164 | 2 | 20 | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Parameter | Units | MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836602 | | 1836603 | | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | Max RPD | RPD | Qual |
|--------------------------|-------|--|----------------------|-----------------------|------|--------------|---------------|-------------|--------------|-----------------|------------|-----|------|
| | | 50176301038 Result | MS Spike Conc. | MSD Spike Conc. | | | | | | | | | |
| Vinyl acetate | ug/L | ND | 200 | 200 | 120 | 120 | 60 | 60 | 10-149 | 0 | 20 | | |
| Vinyl chloride | ug/L | ND | 50 | 50 | 45.4 | 49.4 | 91 | 99 | 43-154 | 8 | 20 | | |
| Xylene (Total) | ug/L | ND | 150 | 150 | 134 | 149 | 89 | 99 | 37-146 | 10 | 20 | | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 102 | 101 | 84-113 | | | | |
| Dibromofluoromethane (S) | %. | | | | | | 99 | 98 | 86-116 | | | | |
| Toluene-d8 (S) | %. | | | | | | 99 | 100 | 86-111 | | | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 399161 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 50176301041

METHOD BLANK: 1838161 Matrix: Water
Associated Lab Samples: 50176301041

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,1,1-Trichloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,1,2,2-Tetrachloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,1,2-Trichloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,1-Dichloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,1-Dichloroethene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,1-Dichloropropene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2,3-Trichlorobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2,3-Trichloropropane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2,4-Trichlorobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2,4-Trimethylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2-Dibromoethane (EDB) | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2-Dichlorobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2-Dichloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,2-Dichloropropane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,3,5-Trimethylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,3-Dichlorobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,3-Dichloropropane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 1,4-Dichlorobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 2,2-Dichloropropane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 2-Butanone (MEK) | ug/L | ND | 25.0 | 08/01/17 15:50 | |
| 2-Chlorotoluene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 2-Hexanone | ug/L | ND | 25.0 | 08/01/17 15:50 | |
| 4-Chlorotoluene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| 4-Methyl-2-pentanone (MIBK) | ug/L | ND | 25.0 | 08/01/17 15:50 | |
| Acetone | ug/L | ND | 100 | 08/01/17 15:50 | |
| Acrolein | ug/L | ND | 50.0 | 08/01/17 15:50 | |
| Acrylonitrile | ug/L | ND | 100 | 08/01/17 15:50 | |
| Benzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Bromobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Bromochloromethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Bromodichloromethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Bromoform | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Bromomethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Carbon disulfide | ug/L | ND | 10.0 | 08/01/17 15:50 | |
| Carbon tetrachloride | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Chlorobenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Chloroethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Chloroform | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Chloromethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| cis-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/01/17 15:50 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

METHOD BLANK: 1838161 Matrix: Water
Associated Lab Samples: 50176301041

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Dibromochloromethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Dibromomethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Dichlorodifluoromethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Ethyl methacrylate | ug/L | ND | 100 | 08/01/17 15:50 | |
| Ethylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Hexachloro-1,3-butadiene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Iodomethane | ug/L | ND | 10.0 | 08/01/17 15:50 | |
| Isopropylbenzene (Cumene) | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Methyl-tert-butyl ether | ug/L | ND | 4.0 | 08/01/17 15:50 | |
| Methylene Chloride | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| n-Butylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| n-Hexane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| n-Propylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Naphthalene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| p-Isopropyltoluene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| sec-Butylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Styrene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| tert-Butylbenzene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Tetrachloroethene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Toluene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| trans-1,2-Dichloroethene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| trans-1,3-Dichloropropene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| trans-1,4-Dichloro-2-butene | ug/L | ND | 100 | 08/01/17 15:50 | |
| Trichloroethene | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Trichlorofluoromethane | ug/L | ND | 5.0 | 08/01/17 15:50 | |
| Vinyl acetate | ug/L | ND | 50.0 | 08/01/17 15:50 | |
| Vinyl chloride | ug/L | ND | 2.0 | 08/01/17 15:50 | |
| Xylene (Total) | ug/L | ND | 10.0 | 08/01/17 15:50 | |
| 4-Bromofluorobenzene (S) | % | 100 | 84-113 | 08/01/17 15:50 | |
| Dibromofluoromethane (S) | % | 103 | 86-116 | 08/01/17 15:50 | |
| Toluene-d8 (S) | % | 95 | 86-111 | 08/01/17 15:50 | |

LABORATORY CONTROL SAMPLE: 1838162

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1-Trichloroethane | ug/L | 50 | 43.8 | 88 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | ug/L | 50 | 47.5 | 95 | 74-124 | |
| 1,1-Dichloroethene | ug/L | 50 | 39.8 | 80 | 70-131 | |
| 1,2,4-Trimethylbenzene | ug/L | 50 | 48.2 | 96 | 76-125 | |
| 1,2-Dichloropropane | ug/L | 50 | 47.6 | 95 | 78-125 | |
| Benzene | ug/L | 50 | 45.3 | 91 | 79-120 | |
| Chlorobenzene | ug/L | 50 | 44.7 | 89 | 77-116 | |
| Chloroform | ug/L | 50 | 35.7 | 71 | 76-118 L2 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1838162

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| cis-1,2-Dichloroethene | ug/L | 50 | 37.7 | 75 | 74-126 | |
| Ethylbenzene | ug/L | 50 | 47.2 | 94 | 80-123 | |
| Isopropylbenzene (Cumene) | ug/L | 50 | 47.0 | 94 | 80-122 | |
| Methyl-tert-butyl ether | ug/L | 50 | 40.6 | 81 | 63-131 | |
| Naphthalene | ug/L | 50 | 51.6 | 103 | 66-130 | |
| Tetrachloroethene | ug/L | 50 | 45.9 | 92 | 74-119 | |
| Toluene | ug/L | 50 | 44.2 | 88 | 77-117 | |
| trans-1,2-Dichloroethene | ug/L | 50 | 39.9 | 80 | 74-128 | |
| Trichloroethene | ug/L | 50 | 45.4 | 91 | 75-119 | |
| Vinyl chloride | ug/L | 50 | 48.7 | 97 | 62-137 | |
| Xylene (Total) | ug/L | 150 | 141 | 94 | 79-121 | |
| 4-Bromofluorobenzene (S) | % | | | 99 | 84-113 | |
| Dibromofluoromethane (S) | % | | | 95 | 86-116 | |
| Toluene-d8 (S) | % | | | 99 | 86-111 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398938 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50176301015

METHOD BLANK: 1837383 Matrix: Solid
Associated Lab Samples: 50176301015

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 07/28/17 17:01 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 07/28/17 17:01 | |
| Acetone | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Acrolein | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Benzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Bromoform | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Bromomethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 07/28/17 17:01 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Chloroethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Chloroform | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Chloromethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

METHOD BLANK: 1837383 Matrix: Solid
Associated Lab Samples: 50176301015

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Iodomethane | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Methylene Chloride | mg/kg | ND | 0.020 | 07/28/17 17:01 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| n-Hexane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Naphthalene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Styrene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Toluene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 07/28/17 17:01 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 07/28/17 17:01 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 07/28/17 17:01 | |
| 4-Bromofluorobenzene (S) | % | 103 | 51-142 | 07/28/17 17:01 | |
| Dibromofluoromethane (S) | % | 106 | 69-136 | 07/28/17 17:01 | |
| Toluene-d8 (S) | % | 98 | 64-150 | 07/28/17 17:01 | |

LABORATORY CONTROL SAMPLE: 1837384

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | .05 | 0.057 | 113 | 76-126 | |
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.057 | 114 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.053 | 105 | 68-125 | |
| 1,1,2-Trichloroethane | mg/kg | .05 | 0.059 | 117 | 72-124 | |
| 1,1-Dichloroethane | mg/kg | .05 | 0.055 | 110 | 78-117 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.058 | 116 | 70-132 | |
| 1,1-Dichloropropene | mg/kg | .05 | 0.058 | 116 | 79-121 | |
| 1,2,3-Trichlorobenzene | mg/kg | .05 | 0.051 | 101 | 65-117 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1837384

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,2,3-Trichloropropane | mg/kg | .05 | 0.055 | 110 | 78-128 | |
| 1,2,4-Trichlorobenzene | mg/kg | .05 | 0.050 | 100 | 58-121 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.051 | 102 | 70-118 | |
| 1,2-Dibromoethane (EDB) | mg/kg | .05 | 0.057 | 114 | 76-127 | |
| 1,2-Dichlorobenzene | mg/kg | .05 | 0.051 | 102 | 72-114 | |
| 1,2-Dichloroethane | mg/kg | .05 | 0.056 | 112 | 70-119 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.057 | 114 | 76-122 | |
| 1,3,5-Trimethylbenzene | mg/kg | .05 | 0.052 | 105 | 71-122 | |
| 1,3-Dichlorobenzene | mg/kg | .05 | 0.050 | 101 | 70-115 | |
| 1,3-Dichloropropane | mg/kg | .05 | 0.057 | 114 | 76-130 | |
| 1,4-Dichlorobenzene | mg/kg | .05 | 0.051 | 102 | 68-113 | |
| 2,2-Dichloropropane | mg/kg | .05 | 0.058 | 115 | 66-125 | |
| 2-Butanone (MEK) | mg/kg | .25 | 0.39 | 156 | 56-161 | |
| 2-Chlorotoluene | mg/kg | .05 | 0.051 | 103 | 69-122 | |
| 2-Hexanone | mg/kg | .25 | 0.31 | 125 | 67-141 | |
| 4-Chlorotoluene | mg/kg | .05 | 0.050 | 101 | 70-118 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | .25 | 0.32 | 128 | 72-125 | L3 |
| Acetone | mg/kg | .25 | 0.44 | 175 | 24-194 | |
| Acrolein | mg/kg | 1 | 1.5 | 149 | 23-200 | |
| Acrylonitrile | mg/kg | .2 | 0.22 | 110 | 70-122 | |
| Benzene | mg/kg | .05 | 0.053 | 105 | 75-119 | |
| Bromobenzene | mg/kg | .05 | 0.052 | 105 | 73-119 | |
| Bromochloromethane | mg/kg | .05 | 0.057 | 113 | 73-117 | |
| Bromodichloromethane | mg/kg | .05 | 0.055 | 111 | 73-120 | |
| Bromoform | mg/kg | .05 | 0.051 | 103 | 65-121 | |
| Bromomethane | mg/kg | .05 | 0.065 | 131 | 28-161 | |
| Carbon disulfide | mg/kg | .05 | 0.056 | 113 | 64-115 | |
| Carbon tetrachloride | mg/kg | .05 | 0.059 | 118 | 74-130 | |
| Chlorobenzene | mg/kg | .05 | 0.050 | 100 | 75-114 | |
| Chloroethane | mg/kg | .05 | 0.068 | 135 | 46-129 | L3 |
| Chloroform | mg/kg | .05 | 0.054 | 108 | 71-114 | |
| Chloromethane | mg/kg | .05 | 0.054 | 108 | 39-121 | |
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.056 | 112 | 79-121 | |
| cis-1,3-Dichloropropene | mg/kg | .05 | 0.055 | 111 | 73-132 | |
| Dibromochloromethane | mg/kg | .05 | 0.055 | 109 | 73-123 | |
| Dibromomethane | mg/kg | .05 | 0.057 | 114 | 79-119 | |
| Dichlorodifluoromethane | mg/kg | .05 | 0.062 | 124 | 44-155 | |
| Ethyl methacrylate | mg/kg | .2 | 0.21 | 107 | 74-136 | |
| Ethylbenzene | mg/kg | .05 | 0.055 | 109 | 73-121 | |
| Hexachloro-1,3-butadiene | mg/kg | .05 | 0.050 | 100 | 65-131 | |
| Iodomethane | mg/kg | .1 | 0.12 | 123 | 44-168 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.052 | 103 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.055 | 110 | 74-121 | |
| Methylene Chloride | mg/kg | .05 | 0.060 | 120 | 61-140 | |
| n-Butylbenzene | mg/kg | .05 | 0.052 | 104 | 64-125 | |
| n-Hexane | mg/kg | .05 | 0.058 | 116 | 69-116 | |
| n-Propylbenzene | mg/kg | .05 | 0.050 | 101 | 70-127 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1837384

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| Naphthalene | mg/kg | .05 | 0.051 | 102 | 65-122 | |
| p-Isopropyltoluene | mg/kg | .05 | 0.049 | 99 | 71-123 | |
| sec-Butylbenzene | mg/kg | .05 | 0.052 | 105 | 72-129 | |
| Styrene | mg/kg | .05 | 0.049 | 99 | 72-127 | |
| tert-Butylbenzene | mg/kg | .05 | 0.048 | 97 | 57-108 | |
| Tetrachloroethene | mg/kg | .05 | 0.053 | 106 | 68-120 | |
| Toluene | mg/kg | .05 | 0.052 | 103 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.054 | 107 | 76-125 | |
| trans-1,3-Dichloropropene | mg/kg | .05 | 0.054 | 108 | 69-133 | |
| trans-1,4-Dichloro-2-butene | mg/kg | .2 | 0.23 | 114 | 58-132 | |
| Trichloroethene | mg/kg | .05 | 0.057 | 114 | 77-115 | |
| Trichlorofluoromethane | mg/kg | .05 | 0.065 | 130 | 61-142 | |
| Vinyl acetate | mg/kg | .2 | 0.25 | 124 | 64-139 | |
| Vinyl chloride | mg/kg | .05 | 0.066 | 131 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.15 | 100 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 98 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 101 | 69-136 | |
| Toluene-d8 (S) | % | | | 100 | 64-150 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398946 Analysis Method: EPA 8260
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
 Associated Lab Samples: 50176301001, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010

METHOD BLANK: 1837408 Matrix: Solid
 Associated Lab Samples: 50176301001, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 07/29/17 04:43 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 07/29/17 04:43 | |
| Acetone | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Acrolein | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Benzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Bromoform | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Bromomethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 07/29/17 04:43 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Chloroethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Chloroform | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Chloromethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

METHOD BLANK: 1837408

Matrix: Solid

Associated Lab Samples: 50176301001, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Iodomethane | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Methylene Chloride | mg/kg | ND | 0.020 | 07/29/17 04:43 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| n-Hexane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Naphthalene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Styrene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Toluene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 07/29/17 04:43 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 07/29/17 04:43 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 07/29/17 04:43 | |
| 4-Bromofluorobenzene (S) | % | 102 | 51-142 | 07/29/17 04:43 | |
| Dibromofluoromethane (S) | % | 111 | 69-136 | 07/29/17 04:43 | |
| Toluene-d8 (S) | % | 97 | 64-150 | 07/29/17 04:43 | |

LABORATORY CONTROL SAMPLE: 1837409

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.054 | 107 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.050 | 100 | 68-125 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.050 | 99 | 70-132 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.048 | 96 | 70-118 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.052 | 103 | 76-122 | |
| Benzene | mg/kg | .05 | 0.052 | 103 | 75-119 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1837409

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| Chlorobenzene | mg/kg | .05 | 0.047 | 94 | 75-114 | |
| Chloroform | mg/kg | .05 | 0.051 | 103 | 71-114 | |
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.052 | 103 | 79-121 | |
| Ethylbenzene | mg/kg | .05 | 0.050 | 99 | 73-121 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.047 | 93 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.056 | 111 | 74-121 | |
| Naphthalene | mg/kg | .05 | 0.048 | 96 | 65-122 | |
| Tetrachloroethene | mg/kg | .05 | 0.047 | 94 | 68-120 | |
| Toluene | mg/kg | .05 | 0.048 | 95 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.051 | 101 | 76-125 | |
| Trichloroethene | mg/kg | .05 | 0.051 | 101 | 77-115 | |
| Vinyl chloride | mg/kg | .05 | 0.058 | 117 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.14 | 92 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 100 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 103 | 69-136 | |
| Toluene-d8 (S) | % | | | 98 | 64-150 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 399123 Analysis Method: EPA 8260
 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
 Associated Lab Samples: 50176301002, 50176301011, 50176301012, 50176301013, 50176301016, 50176301017, 50176301018,
 50176301019, 50176301028

METHOD BLANK: 1838034 Matrix: Solid
 Associated Lab Samples: 50176301002, 50176301011, 50176301012, 50176301013, 50176301016, 50176301017, 50176301018,
 50176301019, 50176301028

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 07/31/17 12:20 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 07/31/17 12:20 | |
| Acetone | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Acrolein | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Benzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Bromoform | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Bromomethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 07/31/17 12:20 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Chloroethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Chloroform | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Chloromethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

METHOD BLANK: 1838034

Matrix: Solid

Associated Lab Samples: 50176301002, 50176301011, 50176301012, 50176301013, 50176301016, 50176301017, 50176301018, 50176301019, 50176301028

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Iodomethane | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Methylene Chloride | mg/kg | ND | 0.020 | 07/31/17 12:20 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| n-Hexane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Naphthalene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Styrene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Toluene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 07/31/17 12:20 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 07/31/17 12:20 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 07/31/17 12:20 | |
| 4-Bromofluorobenzene (S) | % | 102 | 51-142 | 07/31/17 12:20 | |
| Dibromofluoromethane (S) | % | 108 | 69-136 | 07/31/17 12:20 | |
| Toluene-d8 (S) | % | 94 | 64-150 | 07/31/17 12:20 | |

LABORATORY CONTROL SAMPLE: 1838035

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.059 | 117 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.054 | 107 | 68-125 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.058 | 116 | 70-132 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.054 | 107 | 70-118 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.056 | 113 | 76-122 | |
| Benzene | mg/kg | .05 | 0.055 | 110 | 75-119 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1838035

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| Chlorobenzene | mg/kg | .05 | 0.050 | 100 | 75-114 | |
| Chloroform | mg/kg | .05 | 0.054 | 109 | 71-114 | |
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.054 | 108 | 79-121 | |
| Ethylbenzene | mg/kg | .05 | 0.052 | 104 | 73-121 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.051 | 102 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.053 | 106 | 74-121 | |
| Naphthalene | mg/kg | .05 | 0.051 | 102 | 65-122 | |
| Tetrachloroethene | mg/kg | .05 | 0.053 | 105 | 68-120 | |
| Toluene | mg/kg | .05 | 0.052 | 104 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.053 | 107 | 76-125 | |
| Trichloroethene | mg/kg | .05 | 0.055 | 111 | 77-115 | |
| Vinyl chloride | mg/kg | .05 | 0.067 | 135 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.15 | 102 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 98 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 100 | 69-136 | |
| Toluene-d8 (S) | % | | | 94 | 64-150 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 399128 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

METHOD BLANK: 1838048 Matrix: Solid
Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 07/31/17 23:11 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 07/31/17 23:11 | |
| Acetone | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Acrolein | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Benzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Bromoform | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Bromomethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 07/31/17 23:11 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Chloroethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Chloroform | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Chloromethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

METHOD BLANK: 1838048

Matrix: Solid

Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Iodomethane | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Methylene Chloride | mg/kg | ND | 0.020 | 07/31/17 23:11 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| n-Hexane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Naphthalene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Styrene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Toluene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 07/31/17 23:11 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 07/31/17 23:11 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 07/31/17 23:11 | |
| 4-Bromofluorobenzene (S) | % | 106 | 51-142 | 07/31/17 23:11 | |
| Dibromofluoromethane (S) | % | 105 | 69-136 | 07/31/17 23:11 | |
| Toluene-d8 (S) | % | 101 | 64-150 | 07/31/17 23:11 | |

LABORATORY CONTROL SAMPLE: 1838049

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.053 | 105 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.048 | 95 | 68-125 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.048 | 96 | 70-132 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.045 | 90 | 70-118 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.051 | 101 | 76-122 | |
| Benzene | mg/kg | .05 | 0.048 | 97 | 75-119 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1838049

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| Chlorobenzene | mg/kg | .05 | 0.046 | 91 | 75-114 | |
| Chloroform | mg/kg | .05 | 0.048 | 96 | 71-114 | |
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.050 | 99 | 79-121 | |
| Ethylbenzene | mg/kg | .05 | 0.048 | 96 | 73-121 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.048 | 97 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.051 | 102 | 74-121 | |
| Naphthalene | mg/kg | .05 | 0.045 | 90 | 65-122 | |
| Tetrachloroethene | mg/kg | .05 | 0.047 | 94 | 68-120 | |
| Toluene | mg/kg | .05 | 0.048 | 95 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.047 | 95 | 76-125 | |
| Trichloroethene | mg/kg | .05 | 0.049 | 99 | 77-115 | |
| Vinyl chloride | mg/kg | .05 | 0.064 | 127 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.14 | 92 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 103 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 103 | 69-136 | |
| Toluene-d8 (S) | % | | | 98 | 64-150 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 399320 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50176301014

METHOD BLANK: 1838904 Matrix: Solid
Associated Lab Samples: 50176301014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 08/02/17 00:59 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 08/02/17 00:59 | |
| Acetone | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Acrolein | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Benzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Bromoform | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Bromomethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 08/02/17 00:59 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Chloroethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Chloroform | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Chloromethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

METHOD BLANK: 1838904 Matrix: Solid
Associated Lab Samples: 50176301014

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Iodomethane | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Methylene Chloride | mg/kg | ND | 0.020 | 08/02/17 00:59 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| n-Hexane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Naphthalene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Styrene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Toluene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 08/02/17 00:59 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 08/02/17 00:59 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 08/02/17 00:59 | |
| 4-Bromofluorobenzene (S) | % | 103 | 51-142 | 08/02/17 00:59 | |
| Dibromofluoromethane (S) | % | 104 | 69-136 | 08/02/17 00:59 | |
| Toluene-d8 (S) | % | 98 | 64-150 | 08/02/17 00:59 | |

LABORATORY CONTROL SAMPLE: 1838905

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | .05 | 0.050 | 99 | 76-126 | |
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.050 | 99 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.046 | 93 | 68-125 | |
| 1,1,2-Trichloroethane | mg/kg | .05 | 0.049 | 97 | 72-124 | |
| 1,1-Dichloroethane | mg/kg | .05 | 0.050 | 101 | 78-117 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.047 | 94 | 70-132 | |
| 1,1-Dichloropropene | mg/kg | .05 | 0.050 | 100 | 79-121 | |
| 1,2,3-Trichlorobenzene | mg/kg | .05 | 0.044 | 89 | 65-117 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1838905

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,2,3-Trichloropropane | mg/kg | .05 | 0.051 | 102 | 78-128 | |
| 1,2,4-Trichlorobenzene | mg/kg | .05 | 0.042 | 84 | 58-121 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.044 | 89 | 70-118 | |
| 1,2-Dibromoethane (EDB) | mg/kg | .05 | 0.049 | 99 | 76-127 | |
| 1,2-Dichlorobenzene | mg/kg | .05 | 0.045 | 90 | 72-114 | |
| 1,2-Dichloroethane | mg/kg | .05 | 0.050 | 99 | 70-119 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.051 | 101 | 76-122 | |
| 1,3,5-Trimethylbenzene | mg/kg | .05 | 0.044 | 88 | 71-122 | |
| 1,3-Dichlorobenzene | mg/kg | .05 | 0.043 | 86 | 70-115 | |
| 1,3-Dichloropropane | mg/kg | .05 | 0.049 | 97 | 76-130 | |
| 1,4-Dichlorobenzene | mg/kg | .05 | 0.043 | 86 | 68-113 | |
| 2,2-Dichloropropane | mg/kg | .05 | 0.046 | 91 | 66-125 | |
| 2-Butanone (MEK) | mg/kg | .25 | 0.37 | 148 | 56-161 | |
| 2-Chlorotoluene | mg/kg | .05 | 0.044 | 88 | 69-122 | |
| 2-Hexanone | mg/kg | .25 | 0.29 | 115 | 67-141 | |
| 4-Chlorotoluene | mg/kg | .05 | 0.043 | 87 | 70-118 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | .25 | 0.29 | 115 | 72-125 | |
| Acetone | mg/kg | .25 | 0.31 | 122 | 24-194 | |
| Acrolein | mg/kg | 1 | 1.5 | 146 | 23-200 | |
| Acrylonitrile | mg/kg | .2 | 0.21 | 104 | 70-122 | |
| Benzene | mg/kg | .05 | 0.047 | 95 | 75-119 | |
| Bromobenzene | mg/kg | .05 | 0.044 | 87 | 73-119 | |
| Bromochloromethane | mg/kg | .05 | 0.050 | 99 | 73-117 | |
| Bromodichloromethane | mg/kg | .05 | 0.048 | 96 | 73-120 | |
| Bromoform | mg/kg | .05 | 0.047 | 93 | 65-121 | |
| Bromomethane | mg/kg | .05 | 0.054 | 108 | 28-161 | |
| Carbon disulfide | mg/kg | .05 | 0.046 | 93 | 64-115 | |
| Carbon tetrachloride | mg/kg | .05 | 0.049 | 98 | 74-130 | |
| Chlorobenzene | mg/kg | .05 | 0.044 | 88 | 75-114 | |
| Chloroethane | mg/kg | .05 | 0.058 | 117 | 46-129 | |
| Chloroform | mg/kg | .05 | 0.047 | 94 | 71-114 | |
| Chloromethane | mg/kg | .05 | 0.049 | 98 | 39-121 | |
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.048 | 96 | 79-121 | |
| cis-1,3-Dichloropropene | mg/kg | .05 | 0.048 | 97 | 73-132 | |
| Dibromochloromethane | mg/kg | .05 | 0.050 | 100 | 73-123 | |
| Dibromomethane | mg/kg | .05 | 0.049 | 99 | 79-119 | |
| Dichlorodifluoromethane | mg/kg | .05 | 0.062 | 124 | 44-155 | |
| Ethyl methacrylate | mg/kg | .2 | 0.20 | 100 | 74-136 | |
| Ethylbenzene | mg/kg | .05 | 0.045 | 89 | 73-121 | |
| Hexachloro-1,3-butadiene | mg/kg | .05 | 0.043 | 87 | 65-131 | |
| Iodomethane | mg/kg | .1 | 0.11 | 113 | 44-168 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.045 | 91 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.051 | 102 | 74-121 | |
| Methylene Chloride | mg/kg | .05 | 0.044 | 89 | 61-140 | |
| n-Butylbenzene | mg/kg | .05 | 0.045 | 89 | 64-125 | |
| n-Hexane | mg/kg | .05 | 0.049 | 98 | 69-116 | |
| n-Propylbenzene | mg/kg | .05 | 0.045 | 90 | 70-127 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1838905

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------------|-------|-------------|------------|-----------|--------------|------------|
| Naphthalene | mg/kg | .05 | 0.045 | 90 | 65-122 | |
| p-Isopropyltoluene | mg/kg | .05 | 0.042 | 84 | 71-123 | |
| sec-Butylbenzene | mg/kg | .05 | 0.046 | 92 | 72-129 | |
| Styrene | mg/kg | .05 | 0.043 | 87 | 72-127 | |
| tert-Butylbenzene | mg/kg | .05 | 0.043 | 85 | 57-108 | |
| Tetrachloroethene | mg/kg | .05 | 0.044 | 87 | 68-120 | |
| Toluene | mg/kg | .05 | 0.046 | 91 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.046 | 92 | 76-125 | |
| trans-1,3-Dichloropropene | mg/kg | .05 | 0.049 | 98 | 69-133 | |
| trans-1,4-Dichloro-2-butene | mg/kg | .2 | 0.19 | 97 | 58-132 | |
| Trichloroethene | mg/kg | .05 | 0.048 | 95 | 77-115 | |
| Trichlorofluoromethane | mg/kg | .05 | 0.062 | 125 | 61-142 | |
| Vinyl acetate | mg/kg | .2 | 0.23 | 116 | 64-139 | |
| Vinyl chloride | mg/kg | .05 | 0.059 | 117 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.13 | 88 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 101 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 99 | 69-136 | |
| Toluene-d8 (S) | % | | | 98 | 64-150 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1838906 1838907

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual | |
|---------------------------|-------|--------------------|-------------|-------------|-----------|----------|-----------|--------------|--------|---------|------|------------|
| | | 50176491008 Result | Spike Conc. | Spike Conc. | MS Result | | | | | | | MSD Result |
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | .039 | .037 | 0.043 | 0.043 | 111 | 115 | 27-152 | 1 | 20 | |
| 1,1,1-Trichloroethane | mg/kg | ND | .039 | .037 | 0.044 | 0.043 | 115 | 115 | 31-146 | 4 | 20 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | .039 | .037 | 0.045 | 0.040 | 115 | 109 | 22-171 | 10 | 20 | |
| 1,1,2-Trichloroethane | mg/kg | ND | .039 | .037 | 0.034 | 0.036 | 89 | 95 | 33-156 | 3 | 20 | |
| 1,1-Dichloroethane | mg/kg | ND | .039 | .037 | 0.041 | 0.041 | 105 | 110 | 54-142 | 2 | 20 | |
| 1,1-Dichloroethene | mg/kg | ND | .039 | .037 | 0.045 | 0.042 | 117 | 114 | 53-154 | 6 | 20 | |
| 1,1-Dichloropropene | mg/kg | ND | .039 | .037 | 0.039 | 0.037 | 100 | 100 | 40-146 | 4 | 20 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | .039 | .037 | 0.012 | 0.012 | 30 | 32 | 10-124 | 0 | 20 | |
| 1,2,3-Trichloropropane | mg/kg | ND | .039 | .037 | 0.047 | 0.044 | 123 | 119 | 39-177 | 7 | 20 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | .039 | .037 | 0.011 | 0.012 | 30 | 32 | 10-126 | 4 | 20 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | .039 | .037 | 0.050 | 0.044 | 130 | 119 | 10-162 | 12 | 20 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | .039 | .037 | 0.027 | 0.027 | 70 | 72 | 28-155 | 1 | 20 | |
| 1,2-Dichlorobenzene | mg/kg | ND | .039 | .037 | 0.025 | 0.024 | 65 | 65 | 10-142 | 3 | 20 | |
| 1,2-Dichloroethane | mg/kg | ND | .039 | .037 | 0.033 | 0.031 | 85 | 83 | 45-133 | 7 | 20 | |
| 1,2-Dichloropropane | mg/kg | ND | .039 | .037 | 0.033 | 0.032 | 86 | 87 | 49-140 | 3 | 20 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | .039 | .037 | 0.060 | 0.053 | 156 | 143 | 10-151 | 13 | 20 | M1 |
| 1,3-Dichlorobenzene | mg/kg | ND | .039 | .037 | 0.028 | 0.027 | 71 | 73 | 10-138 | 2 | 20 | |
| 1,3-Dichloropropane | mg/kg | ND | .039 | .037 | 0.032 | 0.033 | 83 | 88 | 37-158 | 3 | 20 | |
| 1,4-Dichlorobenzene | mg/kg | ND | .039 | .037 | 0.024 | 0.023 | 62 | 62 | 10-137 | 5 | 20 | |
| 2,2-Dichloropropane | mg/kg | ND | .039 | .037 | 0.044 | 0.044 | 113 | 118 | 43-146 | 1 | 20 | |
| 2-Butanone (MEK) | mg/kg | ND | .19 | .19 | 0.30 | 0.32 | 154 | 170 | 25-197 | 6 | 20 | |
| 2-Chlorotoluene | mg/kg | ND | .039 | .037 | 0.049 | 0.043 | 126 | 116 | 10-171 | 11 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1838906 | | | | | | | | | | | | 1838907 | | | | | | | | | | | |
|--|-------|-------------|-------|-------------|-------------|--------|--------|-------|-------|--------|-----|---------|----|------|--|--|--|--|--|--|--|--|--|
| Parameter | Units | 50176491008 | | MS | MSD | MS | | MSD | | % Rec | | Max | | Qual | | | | | | | | | |
| | | Result | Conc. | Spike Conc. | Spike Conc. | Result | Result | % Rec | % Rec | Limits | RPD | RPD | | | | | | | | | | | |
| 2-Hexanone | mg/kg | ND | .19 | .19 | .19 | 0.22 | 0.23 | 112 | 122 | 21-184 | 4 | 20 | | | | | | | | | | | |
| 4-Chlorotoluene | mg/kg | ND | .039 | .037 | .037 | 0.037 | 0.036 | 96 | 96 | 10-152 | 4 | 20 | | | | | | | | | | | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | .19 | .19 | .19 | 0.29 | 0.29 | 148 | 153 | 31-169 | 0 | 20 | | | | | | | | | | | |
| Acetone | mg/kg | ND | .19 | .19 | .19 | 0.36 | 0.33 | 167 | 160 | 22-200 | 7 | 20 | | | | | | | | | | | |
| Acrolein | mg/kg | ND | .77 | .74 | .74 | 1.1 | 1.1 | 138 | 146 | 10-200 | 2 | 20 | | | | | | | | | | | |
| Acrylonitrile | mg/kg | ND | .15 | .15 | .15 | 0.19 | 0.18 | 123 | 123 | 20-165 | 4 | 20 | | | | | | | | | | | |
| Benzene | mg/kg | ND | .039 | .037 | .037 | 0.036 | 0.034 | 93 | 91 | 43-141 | 7 | 20 | | | | | | | | | | | |
| Bromobenzene | mg/kg | ND | .039 | .037 | .037 | 0.027 | 0.020 | 69 | 53 | 10-143 | 29 | 20 | R1 | | | | | | | | | | |
| Bromochloromethane | mg/kg | ND | .039 | .037 | .037 | 0.038 | 0.038 | 98 | 102 | 52-135 | 1 | 20 | | | | | | | | | | | |
| Bromodichloromethane | mg/kg | ND | .039 | .037 | .037 | 0.027 | 0.025 | 70 | 68 | 27-145 | 7 | 20 | | | | | | | | | | | |
| Bromoform | mg/kg | ND | .039 | .037 | .037 | 0.034 | 0.030 | 89 | 81 | 19-154 | 13 | 20 | | | | | | | | | | | |
| Bromomethane | mg/kg | ND | .039 | .037 | .037 | 0.050 | 0.049 | 129 | 132 | 14-170 | 2 | 20 | | | | | | | | | | | |
| Carbon disulfide | mg/kg | ND | .039 | .037 | .037 | 0.043 | 0.042 | 111 | 113 | 28-137 | 2 | 20 | | | | | | | | | | | |
| Carbon tetrachloride | mg/kg | ND | .039 | .037 | .037 | 0.040 | 0.039 | 103 | 103 | 41-150 | 4 | 20 | | | | | | | | | | | |
| Chlorobenzene | mg/kg | ND | .039 | .037 | .037 | 0.029 | 0.029 | 75 | 79 | 20-141 | 1 | 20 | | | | | | | | | | | |
| Chloroethane | mg/kg | ND | .039 | .037 | .037 | 0.062 | 0.063 | 160 | 169 | 34-147 | 1 | 20 | M1 | | | | | | | | | | |
| Chloroform | mg/kg | ND | .039 | .037 | .037 | 0.036 | 0.036 | 93 | 97 | 49-134 | 0 | 20 | | | | | | | | | | | |
| Chloromethane | mg/kg | ND | .039 | .037 | .037 | 0.053 | 0.057 | 136 | 152 | 27-136 | 7 | 20 | M1 | | | | | | | | | | |
| cis-1,2-Dichloroethene | mg/kg | ND | .039 | .037 | .037 | 0.036 | 0.037 | 94 | 100 | 50-144 | 2 | 20 | | | | | | | | | | | |
| cis-1,3-Dichloropropene | mg/kg | ND | .039 | .037 | .037 | 0.034 | 0.033 | 88 | 88 | 22-161 | 4 | 20 | | | | | | | | | | | |
| Dibromochloromethane | mg/kg | ND | .039 | .037 | .037 | 0.029 | 0.029 | 76 | 79 | 25-146 | 0 | 20 | | | | | | | | | | | |
| Dibromomethane | mg/kg | ND | .039 | .037 | .037 | 0.029 | 0.028 | 76 | 75 | 39-142 | 4 | 20 | | | | | | | | | | | |
| Dichlorodifluoromethane | mg/kg | ND | .039 | .037 | .037 | 0.064 | 0.062 | 166 | 167 | 20-186 | 3 | 20 | | | | | | | | | | | |
| Ethyl methacrylate | mg/kg | ND | .15 | .15 | .15 | 0.14 | 0.15 | 94 | 98 | 10-170 | 1 | 20 | | | | | | | | | | | |
| Ethylbenzene | mg/kg | ND | .039 | .037 | .037 | 0.039 | 0.038 | 101 | 102 | 21-149 | 2 | 20 | | | | | | | | | | | |
| Hexachloro-1,3-butadiene | mg/kg | ND | .039 | .037 | .037 | 0.051 | 0.040 | 133 | 107 | 10-152 | 25 | 20 | R1 | | | | | | | | | | |
| Iodomethane | mg/kg | ND | .077 | .074 | .074 | 0.084 | 0.080 | 109 | 107 | 10-189 | 5 | 20 | | | | | | | | | | | |
| Isopropylbenzene (Cumene) | mg/kg | ND | .039 | .037 | .037 | 0.045 | 0.042 | 116 | 112 | 15-152 | 7 | 20 | | | | | | | | | | | |
| Methyl-tert-butyl ether | mg/kg | ND | .039 | .037 | .037 | 0.046 | 0.048 | 120 | 130 | 60-141 | 4 | 20 | | | | | | | | | | | |
| Methylene Chloride | mg/kg | ND | .039 | .037 | .037 | 0.042 | 0.044 | 109 | 119 | 41-145 | 5 | 20 | | | | | | | | | | | |
| n-Butylbenzene | mg/kg | ND | .039 | .037 | .037 | 0.047 | 0.038 | 121 | 103 | 10-154 | 20 | 20 | | | | | | | | | | | |
| n-Hexane | mg/kg | ND | .039 | .037 | .037 | 0.041 | 0.035 | 105 | 95 | 23-146 | 14 | 20 | | | | | | | | | | | |
| n-Propylbenzene | mg/kg | ND | .039 | .037 | .037 | 0.060 | 0.054 | 156 | 145 | 10-183 | 11 | 20 | | | | | | | | | | | |
| Naphthalene | mg/kg | ND | .039 | .037 | .037 | 0.013 | 0.012 | 34 | 33 | 10-134 | 7 | 20 | | | | | | | | | | | |
| p-Isopropyltoluene | mg/kg | ND | .039 | .037 | .037 | 0.056 | 0.049 | 145 | 131 | 10-183 | 14 | 20 | | | | | | | | | | | |
| sec-Butylbenzene | mg/kg | ND | .039 | .037 | .037 | 0.070 | 0.058 | 180 | 157 | 10-184 | 18 | 20 | | | | | | | | | | | |
| Styrene | mg/kg | ND | .039 | .037 | .037 | 0.025 | 0.026 | 65 | 69 | 10-154 | 1 | 20 | | | | | | | | | | | |
| tert-Butylbenzene | mg/kg | ND | .039 | .037 | .037 | 0.071 | 0.066 | 182 | 178 | 10-173 | 6 | 20 | M1 | | | | | | | | | | |
| Tetrachloroethene | mg/kg | ND | .039 | .037 | .037 | 0.044 | 0.044 | 115 | 117 | 21-155 | 2 | 20 | | | | | | | | | | | |
| Toluene | mg/kg | ND | .039 | .037 | .037 | 0.041 | 0.042 | 106 | 113 | 30-146 | 2 | 20 | | | | | | | | | | | |
| trans-1,2-Dichloroethene | mg/kg | ND | .039 | .037 | .037 | 0.040 | 0.040 | 103 | 107 | 50-146 | 1 | 20 | | | | | | | | | | | |
| trans-1,3-Dichloropropene | mg/kg | ND | .039 | .037 | .037 | 0.027 | 0.026 | 70 | 71 | 15-157 | 2 | 20 | | | | | | | | | | | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | .15 | .15 | .15 | .059J | .057J | 38 | 38 | 10-155 | | 20 | | | | | | | | | | | |
| Trichloroethene | mg/kg | ND | .039 | .037 | .037 | 0.034 | 0.033 | 87 | 87 | 25-162 | 3 | 20 | | | | | | | | | | | |
| Trichlorofluoromethane | mg/kg | ND | .039 | .037 | .037 | 0.060 | 0.060 | 154 | 161 | 42-164 | 1 | 20 | | | | | | | | | | | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Parameter | Units | MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1838906 | | 1838907 | | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | Max RPD | RPD | Qual |
|--------------------------|-------|--|----------------------|-----------------------|-------|--------------|---------------|-------------|--------------|-----------------|------------|-----|------|
| | | 50176491008 Result | MS Spike Conc. | MSD Spike Conc. | | | | | | | | | |
| Vinyl acetate | mg/kg | ND | .15 | .15 | 0.17 | 0.16 | 108 | 108 | 10-173 | 4 | 20 | | |
| Vinyl chloride | mg/kg | ND | .039 | .037 | 0.062 | 0.064 | 161 | 172 | 51-160 | 2 | 20 | M1 | |
| Xylene (Total) | mg/kg | ND | .12 | .11 | 0.11 | 0.11 | 96 | 99 | 15-151 | 1 | 20 | | |
| 4-Bromofluorobenzene (S) | %. | | | | | | 85 | 83 | 51-142 | | | | |
| Dibromofluoromethane (S) | %. | | | | | | 104 | 102 | 69-136 | | | | |
| Toluene-d8 (S) | %. | | | | | | 126 | 120 | 64-150 | | | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398601 Analysis Method: EPA 8082
 QC Batch Method: EPA 3546 Analysis Description: 8082 GCS PCB
 Associated Lab Samples: 50176301018, 50176301019, 50176301028, 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034

METHOD BLANK: 1835861 Matrix: Solid
 Associated Lab Samples: 50176301018, 50176301019, 50176301028, 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|--------------------------|-------|--------------|-----------------|----------------|------------|
| PCB-1016 (Aroclor 1016) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| PCB-1221 (Aroclor 1221) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| PCB-1232 (Aroclor 1232) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| PCB-1242 (Aroclor 1242) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| PCB-1248 (Aroclor 1248) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| PCB-1254 (Aroclor 1254) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| PCB-1260 (Aroclor 1260) | mg/kg | ND | 0.099 | 07/28/17 10:21 | |
| Tetrachloro-m-xylene (S) | % | 91 | 28-111 | 07/28/17 10:21 | |

LABORATORY CONTROL SAMPLE: 1835862

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|--------------------------|-------|-------------|------------|-----------|--------------|------------|
| PCB-1016 (Aroclor 1016) | mg/kg | .16 | 0.15 | 92 | 37-112 | |
| PCB-1260 (Aroclor 1260) | mg/kg | .16 | 0.14 | 88 | 35-119 | |
| Tetrachloro-m-xylene (S) | % | | | 91 | 28-111 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835863 1835864

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|--------------------------|-------|--------------------|-------------|-------------|--------|----------|-----------|--------------|--------|---------|------|
| | | 50176311001 Result | Spike Conc. | Spike Conc. | Result | | | | | | |
| PCB-1016 (Aroclor 1016) | mg/kg | ND | .17 | .16 | .098J | .09J | 59 | 55 | 10-132 | 20 | |
| PCB-1260 (Aroclor 1260) | mg/kg | ND | .17 | .16 | 0.11 | .097J | 53 | 48 | 10-146 | 20 | |
| Tetrachloro-m-xylene (S) | % | | | | | | 80 | 72 | 28-111 | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398616 Analysis Method: EPA 8082
QC Batch Method: EPA 3510 Analysis Description: 8082 GCS PCB
Associated Lab Samples: 50176301026, 50176301037, 50176301038

METHOD BLANK: 1835914 Matrix: Water
Associated Lab Samples: 50176301026, 50176301037, 50176301038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|--------------------------|-------|--------------|-----------------|----------------|------------|
| PCB-1016 (Aroclor 1016) | ug/L | ND | 0.10 | 07/28/17 13:19 | |
| PCB-1221 (Aroclor 1221) | ug/L | ND | 0.20 | 07/28/17 13:19 | |
| PCB-1232 (Aroclor 1232) | ug/L | ND | 0.10 | 07/28/17 13:19 | |
| PCB-1242 (Aroclor 1242) | ug/L | ND | 0.10 | 07/28/17 13:19 | |
| PCB-1248 (Aroclor 1248) | ug/L | ND | 0.10 | 07/28/17 13:19 | |
| PCB-1254 (Aroclor 1254) | ug/L | ND | 0.10 | 07/28/17 13:19 | |
| PCB-1260 (Aroclor 1260) | ug/L | ND | 0.10 | 07/28/17 13:19 | |
| Tetrachloro-m-xylene (S) | % | 58 | 10-108 | 07/28/17 13:19 | |

LABORATORY CONTROL SAMPLE: 1835915

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|--------------------------|-------|-------------|------------|-----------|--------------|------------|
| PCB-1016 (Aroclor 1016) | ug/L | 1 | 1.1 | 106 | 50-147 | |
| PCB-1260 (Aroclor 1260) | ug/L | 1 | 1.1 | 114 | 50-125 | |
| Tetrachloro-m-xylene (S) | % | | | 64 | 10-108 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835916 1835917

| Parameter | Units | MS | | MSD | | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|--------------------------|-------|--------------------|-------------|-------------|-------|-----------|------------|----------|-----------|--------------|-----|---------|------|
| | | 50176292006 Result | Spike Conc. | Spike Conc. | Conc. | | | | | | | | |
| PCB-1016 (Aroclor 1016) | ug/L | ND | 2 | 2 | 1.9 | 1.9 | 96 | 96 | 26-148 | 1 | 20 | | |
| PCB-1260 (Aroclor 1260) | ug/L | ND | 2 | 2 | 2.3 | 2.3 | 113 | 113 | 10-132 | 0 | 20 | | |
| Tetrachloro-m-xylene (S) | % | | | | | | | 37 | 35 | 10-108 | | | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398571 Analysis Method: EPA 8270 by SIM LVE
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH LV by SIM MSSV
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

METHOD BLANK: 1835789 Matrix: Water
Associated Lab Samples: 50176301020, 50176301021, 50176301022, 50176301026, 50176301037, 50176301038

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| 1-Methylnaphthalene | ug/L | ND | 1.0 | 07/27/17 14:39 | N2 |
| 2-Methylnaphthalene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Acenaphthene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Acenaphthylene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Anthracene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Benzo(a)anthracene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Benzo(a)pyrene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Benzo(b)fluoranthene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Benzo(g,h,i)perylene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Benzo(k)fluoranthene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Chrysene | ug/L | ND | 0.50 | 07/27/17 14:39 | |
| Dibenz(a,h)anthracene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Fluoranthene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Fluorene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Indeno(1,2,3-cd)pyrene | ug/L | ND | 0.10 | 07/27/17 14:39 | |
| Naphthalene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Phenanthrene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| Pyrene | ug/L | ND | 1.0 | 07/27/17 14:39 | |
| 2-Fluorobiphenyl (S) | % | 53 | 15-87 | 07/27/17 14:39 | |
| p-Terphenyl-d14 (S) | % | 86 | 10-116 | 07/27/17 14:39 | |

LABORATORY CONTROL SAMPLE: 1835790

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1-Methylnaphthalene | ug/L | 10 | 6.4 | 64 | 26-112 | N2 |
| 2-Methylnaphthalene | ug/L | 10 | 6.0 | 60 | 24-106 | |
| Acenaphthene | ug/L | 10 | 6.9 | 69 | 34-119 | |
| Acenaphthylene | ug/L | 10 | 7.3 | 73 | 37-122 | |
| Anthracene | ug/L | 10 | 9.0 | 90 | 44-134 | |
| Benzo(a)anthracene | ug/L | 10 | 9.0 | 90 | 43-141 | |
| Benzo(a)pyrene | ug/L | 10 | 10.3 | 103 | 38-153 | |
| Benzo(b)fluoranthene | ug/L | 10 | 10 | 100 | 38-160 | |
| Benzo(g,h,i)perylene | ug/L | 10 | 7.8 | 78 | 29-149 | |
| Benzo(k)fluoranthene | ug/L | 10 | 10.8 | 108 | 35-153 | |
| Chrysene | ug/L | 10 | 9.7 | 97 | 42-141 | |
| Dibenz(a,h)anthracene | ug/L | 10 | 7.9 | 79 | 24-156 | |
| Fluoranthene | ug/L | 10 | 9.0 | 90 | 45-144 | |
| Fluorene | ug/L | 10 | 7.7 | 77 | 41-134 | |
| Indeno(1,2,3-cd)pyrene | ug/L | 10 | 8.3 | 83 | 28-153 | |
| Naphthalene | ug/L | 10 | 6.6 | 66 | 25-101 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1835790

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------|-------|-------------|------------|-----------|--------------|------------|
| Phenanthrene | ug/L | 10 | 8.5 | 85 | 43-132 | |
| Pyrene | ug/L | 10 | 10.6 | 106 | 43-136 | |
| 2-Fluorobiphenyl (S) | %. | | | 52 | 15-87 | |
| p-Terphenyl-d14 (S) | %. | | | 72 | 10-116 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398603 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM
Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012, 50176301013, 50176301014, 50176301015, 50176301016, 50176301017, 50176301018, 50176301019, 50176301028

METHOD BLANK: 1835870 Matrix: Solid
Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012, 50176301013, 50176301014, 50176301015, 50176301016, 50176301017, 50176301018, 50176301019, 50176301028

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| 1-Methylnaphthalene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | N2 |
| 2-Methylnaphthalene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Acenaphthene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Acenaphthylene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Anthracene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Benzo(a)anthracene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Benzo(a)pyrene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Benzo(b)fluoranthene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Benzo(g,h,i)perylene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Benzo(k)fluoranthene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Chrysene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Dibenz(a,h)anthracene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Fluoranthene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Fluorene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Naphthalene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Phenanthrene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| Pyrene | mg/kg | ND | 0.0050 | 07/28/17 01:40 | |
| 2-Fluorobiphenyl (S) | % | 57 | 30-94 | 07/28/17 01:40 | |
| p-Terphenyl-d14 (S) | % | 66 | 27-102 | 07/28/17 01:40 | |

LABORATORY CONTROL SAMPLE: 1835871

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------|-------|-------------|------------|-----------|--------------|------------|
| 1-Methylnaphthalene | mg/kg | .33 | 0.23 | 70 | 38-105 | N2 |
| 2-Methylnaphthalene | mg/kg | .33 | 0.23 | 70 | 38-104 | |
| Acenaphthene | mg/kg | .33 | 0.22 | 68 | 39-108 | |
| Acenaphthylene | mg/kg | .33 | 0.23 | 70 | 39-108 | |
| Anthracene | mg/kg | .33 | 0.24 | 72 | 41-119 | |
| Benzo(a)anthracene | mg/kg | .33 | 0.27 | 82 | 42-125 | |
| Benzo(a)pyrene | mg/kg | .33 | 0.25 | 76 | 33-143 | |
| Benzo(b)fluoranthene | mg/kg | .33 | 0.25 | 76 | 31-143 | |
| Benzo(g,h,i)perylene | mg/kg | .33 | 0.25 | 76 | 34-138 | |
| Benzo(k)fluoranthene | mg/kg | .33 | 0.24 | 72 | 32-140 | |
| Chrysene | mg/kg | .33 | 0.25 | 76 | 44-121 | |
| Dibenz(a,h)anthracene | mg/kg | .33 | 0.26 | 78 | 32-144 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1835871

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Fluoranthene | mg/kg | .33 | 0.26 | 79 | 42-122 | |
| Fluorene | mg/kg | .33 | 0.24 | 73 | 40-114 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | .33 | 0.26 | 77 | 33-142 | |
| Naphthalene | mg/kg | .33 | 0.23 | 68 | 37-101 | |
| Phenanthrene | mg/kg | .33 | 0.25 | 77 | 40-116 | |
| Pyrene | mg/kg | .33 | 0.26 | 77 | 43-121 | |
| 2-Fluorobiphenyl (S) | % | | | 62 | 30-94 | |
| p-Terphenyl-d14 (S) | % | | | 71 | 27-102 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835872 1835873

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | Max RPD | RPD | Qual |
|------------------------|-------|--------------------|-------------|-------------|-----------|----------|-----------|--------------|---------|-----|-------|
| | | 50176301028 Result | Spike Conc. | Spike Conc. | MS Result | | | | | | |
| 1-Methylnaphthalene | mg/kg | 0.25 | .4 | .4 | 0.39 | 0.39 | 35 | 35 | 14-124 | 0 | 20 N2 |
| 2-Methylnaphthalene | mg/kg | 0.42 | .4 | .4 | 0.57 | 0.54 | 37 | 31 | 13-123 | 5 | 20 |
| Acenaphthene | mg/kg | 0.28 | .4 | .4 | 0.36 | 0.42 | 19 | 34 | 20-120 | 15 | 20 M1 |
| Acenaphthylene | mg/kg | ND | .4 | .4 | 0.15 | 0.17 | 32 | 36 | 22-116 | 10 | 20 |
| Anthracene | mg/kg | 0.24 | .4 | .4 | 0.36 | 0.40 | 31 | 41 | 19-128 | 11 | 20 |
| Benzo(a)anthracene | mg/kg | 0.22 | .4 | .4 | 0.36 | 0.40 | 35 | 45 | 16-134 | 11 | 20 |
| Benzo(a)pyrene | mg/kg | 0.31 | .4 | .4 | 0.48 | 0.49 | 43 | 46 | 10-148 | 3 | 20 |
| Benzo(b)fluoranthene | mg/kg | 0.31 | .4 | .4 | 0.49 | 0.52 | 45 | 53 | 10-148 | 6 | 20 |
| Benzo(g,h,i)perylene | mg/kg | 0.62 | .4 | .4 | 0.86 | 0.83 | 59 | 52 | 10-141 | 3 | 20 |
| Benzo(k)fluoranthene | mg/kg | 0.22 | .4 | .4 | 0.29 | 0.31 | 16 | 22 | 10-146 | 7 | 20 |
| Chrysene | mg/kg | 0.35 | .4 | .4 | 0.51 | 0.53 | 39 | 44 | 15-133 | 4 | 20 |
| Dibenz(a,h)anthracene | mg/kg | 0.11 | .4 | .4 | 0.28 | 0.28 | 43 | 44 | 10-142 | 1 | 20 |
| Fluoranthene | mg/kg | 0.62 | .4 | .4 | 0.67 | 0.74 | 10 | 30 | 13-135 | 11 | 20 M1 |
| Fluorene | mg/kg | 0.19 | .4 | .4 | 0.30 | 0.34 | 29 | 38 | 21-125 | 10 | 20 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.28 | .4 | .4 | 0.42 | 0.43 | 36 | 40 | 10-143 | 3 | 20 |
| Naphthalene | mg/kg | 0.31 | .4 | .4 | 0.42 | 0.44 | 26 | 33 | 12-123 | 6 | 20 ED |
| Phenanthrene | mg/kg | 0.97 | .4 | .4 | 0.97 | 1.1 | -1 | 26 | 13-133 | 10 | 20 M1 |
| Pyrene | mg/kg | 0.66 | .4 | .4 | 0.77 | 0.83 | 30 | 43 | 11-137 | 7 | 20 |
| 2-Fluorobiphenyl (S) | % | | | | | | 33 | 37 | 30-94 | | |
| p-Terphenyl-d14 (S) | % | | | | | | 32 | 37 | 27-102 | | |

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50176301

QC Batch: 398604 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM
Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

METHOD BLANK: 1835874 Matrix: Solid
Associated Lab Samples: 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034, 50176301035, 50176301036

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| 1-Methylnaphthalene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | N2 |
| 2-Methylnaphthalene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Acenaphthene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Acenaphthylene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Anthracene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Benzo(a)anthracene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Benzo(a)pyrene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Benzo(b)fluoranthene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Benzo(g,h,i)perylene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Benzo(k)fluoranthene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Chrysene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Dibenz(a,h)anthracene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Fluoranthene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Fluorene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Naphthalene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Phenanthrene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| Pyrene | mg/kg | ND | 0.0050 | 07/27/17 14:34 | |
| 2-Fluorobiphenyl (S) | % | 45 | 30-94 | 07/27/17 14:34 | |
| p-Terphenyl-d14 (S) | % | 56 | 27-102 | 07/27/17 14:34 | |

LABORATORY CONTROL SAMPLE: 1835875

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------|-------|-------------|------------|-----------|--------------|------------|
| 1-Methylnaphthalene | mg/kg | .33 | 0.28 | 85 | 38-105 | N2 |
| 2-Methylnaphthalene | mg/kg | .33 | 0.28 | 84 | 38-104 | |
| Acenaphthene | mg/kg | .33 | 0.28 | 85 | 39-108 | |
| Acenaphthylene | mg/kg | .33 | 0.29 | 88 | 39-108 | |
| Anthracene | mg/kg | .33 | 0.28 | 84 | 41-119 | |
| Benzo(a)anthracene | mg/kg | .33 | 0.33 | 100 | 42-125 | |
| Benzo(a)pyrene | mg/kg | .33 | 0.32 | 95 | 33-143 | |
| Benzo(b)fluoranthene | mg/kg | .33 | 0.35 | 106 | 31-143 | |
| Benzo(g,h,i)perylene | mg/kg | .33 | 0.31 | 94 | 34-138 | |
| Benzo(k)fluoranthene | mg/kg | .33 | 0.27 | 82 | 32-140 | |
| Chrysene | mg/kg | .33 | 0.31 | 95 | 44-121 | |
| Dibenz(a,h)anthracene | mg/kg | .33 | 0.32 | 95 | 32-144 | |
| Fluoranthene | mg/kg | .33 | 0.32 | 97 | 42-122 | |
| Fluorene | mg/kg | .33 | 0.30 | 92 | 40-114 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

LABORATORY CONTROL SAMPLE: 1835875

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Indeno(1,2,3-cd)pyrene | mg/kg | .33 | 0.32 | 95 | 33-142 | |
| Naphthalene | mg/kg | .33 | 0.27 | 83 | 37-101 | |
| Phenanthrene | mg/kg | .33 | 0.31 | 94 | 40-116 | |
| Pyrene | mg/kg | .33 | 0.32 | 97 | 43-121 | |
| 2-Fluorobiphenyl (S) | % | | | 77 | 30-94 | |
| p-Terphenyl-d14 (S) | % | | | 87 | 27-102 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1835876 1835877

| Parameter | Units | 50176301029 | | 1835876 | | 1835877 | | % Rec Limits | RPD | Max RPD | Qual | |
|------------------------|-------|-------------|----------------|-----------------|-----------|------------|----------|--------------|--------|---------|------|-----------|
| | | MS Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | | | | | MSD % Rec |
| 1-Methylnaphthalene | mg/kg | 0.36 | .39 | .39 | 0.17 | 0.43 | -51 | 18 | 14-124 | 89 | 20 | M1,N2,R1 |
| 2-Methylnaphthalene | mg/kg | 0.43 | .39 | .39 | 0.17 | 0.56 | -66 | 33 | 13-123 | 106 | 20 | M1,R1 |
| Acenaphthene | mg/kg | 0.039 | .39 | .39 | 0.12 | 0.28 | 21 | 63 | 20-120 | 82 | 20 | R1 |
| Acenaphthylene | mg/kg | 0.29 | .39 | .39 | 0.23 | 1.1 | -16 | 199 | 22-116 | 129 | 20 | M1,R1 |
| Anthracene | mg/kg | 0.26 | .39 | .39 | 0.22 | 0.78 | -11 | 132 | 19-128 | 113 | 20 | M1,R1 |
| Benzo(a)anthracene | mg/kg | 0.39 | .39 | .39 | 0.32 | 2.0 | -20 | 417 | 16-134 | 146 | 20 | M1,R1 |
| Benzo(a)pyrene | mg/kg | 0.33 | .39 | .39 | 0.28 | 1.8 | -11 | 383 | 10-148 | 146 | 20 | M1,R1 |
| Benzo(b)fluoranthene | mg/kg | 0.36 | .39 | .39 | 0.30 | 1.9 | -15 | 401 | 10-148 | 146 | 20 | M1,R1 |
| Benzo(g,h,i)perylene | mg/kg | 0.33 | .39 | .39 | 0.24 | 1.3 | -22 | 241 | 10-141 | 136 | 20 | M1,R1 |
| Benzo(k)fluoranthene | mg/kg | 0.28 | .39 | .39 | 0.30 | 1.3 | 4 | 268 | 10-146 | 127 | 20 | M1,R1 |
| Chrysene | mg/kg | 0.58 | .39 | .39 | 0.35 | 2.2 | -59 | 403 | 15-133 | 144 | 20 | M1,R1 |
| Dibenz(a,h)anthracene | mg/kg | 0.091 | .39 | .39 | 0.18 | 0.72 | 22 | 159 | 10-142 | 121 | 20 | M1,R1 |
| Fluoranthene | mg/kg | 0.58 | .39 | .39 | 0.39 | 2.3 | -50 | 429 | 13-135 | 142 | 20 | M1,R1 |
| Fluorene | mg/kg | 0.042 | .39 | .39 | 0.15 | 0.36 | 28 | 81 | 21-125 | 81 | 20 | R1 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.23 | .39 | .39 | 0.22 | 1.1 | -1 | 228 | 10-143 | 134 | 20 | M1,R1 |
| Naphthalene | mg/kg | 0.38 | .39 | .39 | 0.14 | 0.58 | -62 | 52 | 12-123 | 124 | 20 | ED, M1,R1 |
| Phenanthrene | mg/kg | 1.0 | .39 | .39 | 0.35 | 1.0 | -172 | 5 | 13-133 | 99 | 20 | M1,R1 |
| Pyrene | mg/kg | 0.80 | .39 | .39 | 0.44 | 3.1 | -93 | 595 | 11-137 | 151 | 20 | M1,R1 |
| 2-Fluorobiphenyl (S) | % | | | | | | 26 | 55 | 30-94 | | | S0 |
| p-Terphenyl-d14 (S) | % | | | | | | 33 | 62 | 27-102 | | | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836397 1836398

| Parameter | Units | 50176233003 | | 1836397 | | 1836398 | | % Rec Limits | RPD | Max RPD | Qual | |
|---------------------|-------|-------------|----------------|-----------------|-----------|------------|----------|--------------|--------|---------|------|-----------|
| | | MS Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | | | | | MSD % Rec |
| 1-Methylnaphthalene | mg/kg | 105 ug/kg | .43 | .43 | 0.34 | 0.27 | 53 | 38 | 14-124 | 22 | 20 | N2,R1 |
| 2-Methylnaphthalene | mg/kg | 14.6 ug/kg | .43 | .43 | 0.25 | 0.21 | 55 | 46 | 13-123 | 18 | 20 | |
| Acenaphthene | mg/kg | 8.9 ug/kg | .43 | .43 | 0.24 | 0.19 | 53 | 41 | 20-120 | 24 | 20 | R1 |
| Acenaphthylene | mg/kg | <0.63 ug/kg | .43 | .43 | 0.24 | 0.18 | 55 | 43 | 22-116 | 25 | 20 | R1 |
| Anthracene | mg/kg | 12.3 ug/kg | .43 | .43 | 0.23 | 0.16 | 50 | 34 | 19-128 | 36 | 20 | R1 |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Parameter | Units | MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1836397 | | 1836398 | | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | Max | | Qual |
|------------------------|-------|--|----------------------|-----------------------|------|--------------|---------------|-------------|--------------|-----------------|-----|----|------|
| | | 50176233003 Result | MS Spike Conc. | MSD Spike Conc. | RPD | | | | | | RPD | | |
| Benzo(a)anthracene | mg/kg | 8.1 ug/kg | .43 | .43 | 0.24 | 0.15 | 54 | 32 | 16-134 | 49 | 20 | R1 | |
| Benzo(a)pyrene | mg/kg | 5.8J ug/kg | .43 | .43 | 0.22 | 0.13 | 49 | 29 | 10-148 | 50 | 20 | R1 | |
| Benzo(b)fluoranthene | mg/kg | 4.7J ug/kg | .43 | .43 | 0.22 | 0.12 | 49 | 27 | 10-148 | 57 | 20 | R1 | |
| Benzo(g,h,i)perylene | mg/kg | 4.3J ug/kg | .43 | .43 | 0.22 | 0.13 | 49 | 29 | 10-141 | 52 | 20 | R1 | |
| Benzo(k)fluoranthene | mg/kg | 4.3J ug/kg | .43 | .43 | 0.21 | 0.13 | 48 | 30 | 10-146 | 47 | 20 | R1 | |
| Chrysene | mg/kg | 7.8 ug/kg | .43 | .43 | 0.23 | 0.14 | 51 | 32 | 15-133 | 45 | 20 | R1 | |
| Dibenz(a,h)anthracene | mg/kg | 3.3J ug/kg | .43 | .43 | 0.23 | 0.14 | 51 | 32 | 10-142 | 46 | 20 | R1 | |
| Fluoranthene | mg/kg | 35.1 ug/kg | .43 | .43 | 0.25 | 0.16 | 49 | 30 | 13-135 | 42 | 20 | R1 | |
| Fluorene | mg/kg | 14.3 ug/kg | .43 | .43 | 0.26 | 0.19 | 56 | 41 | 21-125 | 30 | 20 | R1 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | 4.4J ug/kg | .43 | .43 | 0.23 | 0.13 | 51 | 30 | 10-143 | 52 | 20 | R1 | |
| Naphthalene | mg/kg | 5.1J ug/kg | .43 | .43 | 0.25 | 0.22 | 57 | 49 | 12-123 | 15 | 20 | | |
| Phenanthrene | mg/kg | 22.2 ug/kg | .43 | .43 | 0.26 | 0.18 | 54 | 37 | 13-133 | 36 | 20 | R1 | |
| Pyrene | mg/kg | 30.3 ug/kg | .43 | .43 | 0.24 | 0.16 | 49 | 29 | 11-137 | 43 | 20 | R1 | |
| 2-Fluorobiphenyl (S) | %. | | | | | | 52 | 43 | 30-94 | | | | |
| p-Terphenyl-d14 (S) | %. | | | | | | 51 | 32 | 27-102 | | | | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398676

Analysis Method: SM 2540G

QC Batch Method: SM 2540G

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 50176301001, 50176301002, 50176301003, 50176301004, 50176301005, 50176301006, 50176301007, 50176301008, 50176301009, 50176301010, 50176301011, 50176301012

SAMPLE DUPLICATE: 1836221

| Parameter | Units | 50176282001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | % | 5.8 | 4.9 | 19 | 5 | R1 |

SAMPLE DUPLICATE: 1836222

| Parameter | Units | 50176090001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | % | 9.3 | 9.2 | 2 | 5 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

QC Batch: 398678

Analysis Method: SM 2540G

QC Batch Method: SM 2540G

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 50176301013, 50176301014, 50176301015, 50176301016, 50176301017, 50176301018, 50176301019,
50176301028, 50176301029, 50176301030, 50176301031, 50176301032, 50176301033, 50176301034,
50176301035, 50176301036

SAMPLE DUPLICATE: 1836230

| Parameter | Units | 50176090002 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | % | 9.3 | 9.1 | 2 | 5 | |

SAMPLE DUPLICATE: 1836231

| Parameter | Units | 50176100001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | % | 14.8 | 16.2 | 9 | 5 | R1 |

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 398571

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1d RPD is outside control limit due to sample non-homogeneity. MJC 08-01-17

2d Sample was analyzed at a dilution due to lack of remaining terracore vials. TMW 08-02-17

3d Suspected vial contamination. TMW 07-31-17

4d Suspected vial contamination. TMW 08-01-17

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

ED Due to the extract's physical characteristics, the analysis was performed at dilution.

J Analyte detected below reporting limit, therefore result is an estimate.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

M3 Matrix spike recovery was outside laboratory control limits due to matrix interferences.

N2 The lab does not hold NELAC/TNI accreditation for this parameter.

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

ANALYTE QUALIFIERS

- S0 Surrogate recovery outside laboratory control limits.
- S2 Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-analysis).
- S4 Surrogate recovery not evaluated against control limits due to sample dilution.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|------------------|-----------------|----------|-------------------|------------------|
| 50176301018 | 04-SB-01 (0-1) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301019 | 04-SB-01 (6-8) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301028 | 04-SB-02 (0-1) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301029 | 04-SB-03 (0-1) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301030 | 04-SB-03 (4-6) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301031 | 04-SB-04 (0-1) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301032 | 04-SB-04 (6-8) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301033 | 04-SB-05 (0-1) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301034 | 04-SB-05 (6-8) | EPA 3546 | 398601 | EPA 8082 | 398773 |
| 50176301026 | 04-SB-01 W | EPA 3510 | 398616 | EPA 8082 | 398772 |
| 50176301037 | 04-SB-03 W | EPA 3510 | 398616 | EPA 8082 | 398772 |
| 50176301038 | 04-SB-05 W | EPA 3510 | 398616 | EPA 8082 | 398772 |
| 50176301001 | 03-SB-01 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301002 | 03-SB-01 (6-8) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301003 | 03-SB-02 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301004 | 03-SB-02 (6-8) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301005 | 03-SB-03 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301006 | 03-SB-03 (6-8) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301007 | 03-SB-04 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301008 | 03-SB-04 (4-6) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301009 | 03-SB-05 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301010 | 03-SB-05 (8-10) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301011 | 03-SB-06 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301012 | 03-SB-06 (6-8) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301013 | 03-SB-07 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301014 | 03-SB-08 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301015 | 03-SB-08 (10-12) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301016 | 03-SB-09 (0-1) | EPA 3050 | 398517 | EPA 6010 | 399035 |
| 50176301017 | 03-SB-09 (6-8) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301018 | 04-SB-01 (0-1) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301019 | 04-SB-01 (6-8) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301028 | 04-SB-02 (0-1) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301029 | 04-SB-03 (0-1) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301030 | 04-SB-03 (4-6) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301031 | 04-SB-04 (0-1) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301032 | 04-SB-04 (6-8) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301033 | 04-SB-05 (0-1) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301034 | 04-SB-05 (6-8) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301035 | 02-SB-07 (0-1) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301036 | 02-SB-07 (6-8) | EPA 3050 | 398518 | EPA 6010 | 398993 |
| 50176301020 | 03-SB-02 W | EPA 3010 | 398548 | EPA 6010 | 398986 |
| 50176301021 | 03-SB-05 W | EPA 3010 | 398548 | EPA 6010 | 398986 |
| 50176301022 | 03-SB-08 W | EPA 3010 | 398548 | EPA 6010 | 398986 |
| 50176301026 | 04-SB-01 W | EPA 3010 | 398548 | EPA 6010 | 398986 |
| 50176301037 | 04-SB-03 W | EPA 3010 | 398548 | EPA 6010 | 398986 |
| 50176301038 | 04-SB-05 W | EPA 3010 | 398548 | EPA 6010 | 398986 |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|------------------|-----------------|----------|-------------------|------------------|
| 50176301023 | 03-SB-02-FW | EPA 3010 | 398633 | EPA 6010 | 399070 |
| 50176301024 | 03-SB-05-FW | EPA 3010 | 398633 | EPA 6010 | 399070 |
| 50176301025 | 03-SB-08-FW | EPA 3010 | 398633 | EPA 6010 | 399070 |
| 50176301027 | 04-SB-01-F W | EPA 3010 | 398633 | EPA 6010 | 399070 |
| 50176301039 | 04-SB-03-F W | EPA 3010 | 398633 | EPA 6010 | 399070 |
| 50176301040 | 04-SB-05-F W | EPA 3010 | 398633 | EPA 6010 | 399070 |
| 50176301020 | 03-SB-02 W | EPA 7470 | 398689 | EPA 7470 | 399008 |
| 50176301021 | 03-SB-05 W | EPA 7470 | 398689 | EPA 7470 | 399008 |
| 50176301022 | 03-SB-08 W | EPA 7470 | 398689 | EPA 7470 | 399008 |
| 50176301026 | 04-SB-01 W | EPA 7470 | 398689 | EPA 7470 | 399008 |
| 50176301037 | 04-SB-03 W | EPA 7470 | 398689 | EPA 7470 | 399008 |
| 50176301038 | 04-SB-05 W | EPA 7470 | 398689 | EPA 7470 | 399008 |
| 50176301023 | 03-SB-02-FW | EPA 7470 | 398956 | EPA 7470 | 399067 |
| 50176301024 | 03-SB-05-FW | EPA 7470 | 398956 | EPA 7470 | 399067 |
| 50176301025 | 03-SB-08-FW | EPA 7470 | 398956 | EPA 7470 | 399067 |
| 50176301027 | 04-SB-01-F W | EPA 7470 | 398956 | EPA 7470 | 399067 |
| 50176301039 | 04-SB-03-F W | EPA 7470 | 398956 | EPA 7470 | 399067 |
| 50176301040 | 04-SB-05-F W | EPA 7470 | 398956 | EPA 7470 | 399067 |
| 50176301001 | 03-SB-01 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301002 | 03-SB-01 (6-8) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301003 | 03-SB-02 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301004 | 03-SB-02 (6-8) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301005 | 03-SB-03 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301006 | 03-SB-03 (6-8) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301007 | 03-SB-04 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301008 | 03-SB-04 (4-6) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301009 | 03-SB-05 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301010 | 03-SB-05 (8-10) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301011 | 03-SB-06 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301012 | 03-SB-06 (6-8) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301013 | 03-SB-07 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301014 | 03-SB-08 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301015 | 03-SB-08 (10-12) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301016 | 03-SB-09 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301017 | 03-SB-09 (6-8) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301018 | 04-SB-01 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301019 | 04-SB-01 (6-8) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301028 | 04-SB-02 (0-1) | EPA 7471 | 399566 | EPA 7471 | 399758 |
| 50176301029 | 04-SB-03 (0-1) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301030 | 04-SB-03 (4-6) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301031 | 04-SB-04 (0-1) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301032 | 04-SB-04 (6-8) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301033 | 04-SB-05 (0-1) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301034 | 04-SB-05 (6-8) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301035 | 02-SB-07 (0-1) | EPA 7471 | 399567 | EPA 7471 | 399759 |
| 50176301036 | 02-SB-07 (6-8) | EPA 7471 | 399567 | EPA 7471 | 399759 |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|------------------|-----------------|----------|---------------------|------------------|
| 50176301020 | 03-SB-02 W | EPA 3510 | 398571 | EPA 8270 by SIM LVE | 398712 |
| 50176301021 | 03-SB-05 W | EPA 3510 | 398571 | EPA 8270 by SIM LVE | 398712 |
| 50176301022 | 03-SB-08 W | EPA 3510 | 398571 | EPA 8270 by SIM LVE | 398712 |
| 50176301026 | 04-SB-01 W | EPA 3510 | 398571 | EPA 8270 by SIM LVE | 398712 |
| 50176301037 | 04-SB-03 W | EPA 3510 | 398571 | EPA 8270 by SIM LVE | 398712 |
| 50176301038 | 04-SB-05 W | EPA 3510 | 398571 | EPA 8270 by SIM LVE | 398712 |
| 50176301001 | 03-SB-01 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301002 | 03-SB-01 (6-8) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301003 | 03-SB-02 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301004 | 03-SB-02 (6-8) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301005 | 03-SB-03 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301006 | 03-SB-03 (6-8) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301007 | 03-SB-04 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301008 | 03-SB-04 (4-6) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301009 | 03-SB-05 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301010 | 03-SB-05 (8-10) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301011 | 03-SB-06 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301012 | 03-SB-06 (6-8) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301013 | 03-SB-07 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301014 | 03-SB-08 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301015 | 03-SB-08 (10-12) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301016 | 03-SB-09 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301017 | 03-SB-09 (6-8) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301018 | 04-SB-01 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301019 | 04-SB-01 (6-8) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301028 | 04-SB-02 (0-1) | EPA 3546 | 398603 | EPA 8270 by SIM | 398792 |
| 50176301029 | 04-SB-03 (0-1) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301030 | 04-SB-03 (4-6) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301031 | 04-SB-04 (0-1) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301032 | 04-SB-04 (6-8) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301033 | 04-SB-05 (0-1) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301034 | 04-SB-05 (6-8) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301035 | 02-SB-07 (0-1) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301036 | 02-SB-07 (6-8) | EPA 3546 | 398604 | EPA 8270 by SIM | 398718 |
| 50176301020 | 03-SB-02 W | EPA 8260 | 398766 | | |
| 50176301021 | 03-SB-05 W | EPA 8260 | 398766 | | |
| 50176301022 | 03-SB-08 W | EPA 8260 | 398766 | | |
| 50176301026 | 04-SB-01 W | EPA 8260 | 398766 | | |
| 50176301037 | 04-SB-03 W | EPA 8260 | 398766 | | |
| 50176301038 | 04-SB-05 W | EPA 8260 | 398766 | | |
| 50176301041 | Trip Blank | EPA 8260 | 399161 | | |
| 50176301001 | 03-SB-01 (0-1) | EPA 8260 | 398946 | | |
| 50176301002 | 03-SB-01 (6-8) | EPA 8260 | 399123 | | |
| 50176301003 | 03-SB-02 (0-1) | EPA 8260 | 398946 | | |
| 50176301004 | 03-SB-02 (6-8) | EPA 8260 | 398946 | | |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|------------------|-----------------|----------|-------------------|------------------|
| 50176301005 | 03-SB-03 (0-1) | EPA 8260 | 398946 | | |
| 50176301006 | 03-SB-03 (6-8) | EPA 8260 | 398946 | | |
| 50176301007 | 03-SB-04 (0-1) | EPA 8260 | 398946 | | |
| 50176301008 | 03-SB-04 (4-6) | EPA 8260 | 398946 | | |
| 50176301009 | 03-SB-05 (0-1) | EPA 8260 | 398946 | | |
| 50176301010 | 03-SB-05 (8-10) | EPA 8260 | 398946 | | |
| 50176301011 | 03-SB-06 (0-1) | EPA 8260 | 399123 | | |
| 50176301012 | 03-SB-06 (6-8) | EPA 8260 | 399123 | | |
| 50176301013 | 03-SB-07 (0-1) | EPA 8260 | 399123 | | |
| 50176301014 | 03-SB-08 (0-1) | EPA 8260 | 399320 | | |
| 50176301015 | 03-SB-08 (10-12) | EPA 8260 | 398938 | | |
| 50176301016 | 03-SB-09 (0-1) | EPA 8260 | 399123 | | |
| 50176301017 | 03-SB-09 (6-8) | EPA 8260 | 399123 | | |
| 50176301018 | 04-SB-01 (0-1) | EPA 8260 | 399123 | | |
| 50176301019 | 04-SB-01 (6-8) | EPA 8260 | 399123 | | |
| 50176301028 | 04-SB-02 (0-1) | EPA 8260 | 399123 | | |
| 50176301029 | 04-SB-03 (0-1) | EPA 8260 | 399128 | | |
| 50176301030 | 04-SB-03 (4-6) | EPA 8260 | 399128 | | |
| 50176301031 | 04-SB-04 (0-1) | EPA 8260 | 399128 | | |
| 50176301032 | 04-SB-04 (6-8) | EPA 8260 | 399128 | | |
| 50176301033 | 04-SB-05 (0-1) | EPA 8260 | 399128 | | |
| 50176301034 | 04-SB-05 (6-8) | EPA 8260 | 399128 | | |
| 50176301035 | 02-SB-07 (0-1) | EPA 8260 | 399128 | | |
| 50176301036 | 02-SB-07 (6-8) | EPA 8260 | 399128 | | |
| 50176301001 | 03-SB-01 (0-1) | SM 2540G | 398676 | | |
| 50176301002 | 03-SB-01 (6-8) | SM 2540G | 398676 | | |
| 50176301003 | 03-SB-02 (0-1) | SM 2540G | 398676 | | |
| 50176301004 | 03-SB-02 (6-8) | SM 2540G | 398676 | | |
| 50176301005 | 03-SB-03 (0-1) | SM 2540G | 398676 | | |
| 50176301006 | 03-SB-03 (6-8) | SM 2540G | 398676 | | |
| 50176301007 | 03-SB-04 (0-1) | SM 2540G | 398676 | | |
| 50176301008 | 03-SB-04 (4-6) | SM 2540G | 398676 | | |
| 50176301009 | 03-SB-05 (0-1) | SM 2540G | 398676 | | |
| 50176301010 | 03-SB-05 (8-10) | SM 2540G | 398676 | | |
| 50176301011 | 03-SB-06 (0-1) | SM 2540G | 398676 | | |
| 50176301012 | 03-SB-06 (6-8) | SM 2540G | 398676 | | |
| 50176301013 | 03-SB-07 (0-1) | SM 2540G | 398678 | | |
| 50176301014 | 03-SB-08 (0-1) | SM 2540G | 398678 | | |
| 50176301015 | 03-SB-08 (10-12) | SM 2540G | 398678 | | |
| 50176301016 | 03-SB-09 (0-1) | SM 2540G | 398678 | | |
| 50176301017 | 03-SB-09 (6-8) | SM 2540G | 398678 | | |
| 50176301018 | 04-SB-01 (0-1) | SM 2540G | 398678 | | |
| 50176301019 | 04-SB-01 (6-8) | SM 2540G | 398678 | | |
| 50176301028 | 04-SB-02 (0-1) | SM 2540G | 398678 | | |
| 50176301029 | 04-SB-03 (0-1) | SM 2540G | 398678 | | |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor

Pace Project No.: 50176301

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|----------------|-----------------|----------|-------------------|------------------|
| 50176301030 | 04-SB-03 (4-6) | SM 2540G | 398678 | | |
| 50176301031 | 04-SB-04 (0-1) | SM 2540G | 398678 | | |
| 50176301032 | 04-SB-04 (6-8) | SM 2540G | 398678 | | |
| 50176301033 | 04-SB-05 (0-1) | SM 2540G | 398678 | | |
| 50176301034 | 04-SB-05 (6-8) | SM 2540G | 398678 | | |
| 50176301035 | 02-SB-07 (0-1) | SM 2540G | 398678 | | |
| 50176301036 | 02-SB-07 (6-8) | SM 2540G | 398678 | | |

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt



Project # 90176301

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer 1 2 3 4 5 6 ABCDEF Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 2.6/2.6 2.3/2.3 Ice Visible in Sample Containers: yes no
 (Initial/Corrected) Temp should be above freezing to 6°C 4.1/4.1

Date/Time and Initials of person examining contents: 7/26/17 1600 HP

Comments

| | | | |
|---|--|---------------|---|
| Are samples from West Virginia? Document any containers out of temp. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 1. | |
| Chain of Custody Present: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 2. | |
| Chain of Custody Filled Out: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 3. | |
| Short Hold Time Analysis (<72hr): | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 4. | TC Date/Time 5035A T/C placed in Freezer: <u>7/26/17 1715</u> Short Holds Taken to Lab: _____ |
| Rush Turn Around Time Requested: | <input type="checkbox"/> Yes <input type="checkbox"/> No | 5. | |
| Containers Intact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 6. | some kits were frozen to the foam |
| Sample Labels match COC: -Includes date/time/ID/Analysis | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 7. | 02-SB-07 (6-1) and 02-SB-07 (6-8) read and not on COC 7/27/17 TMS |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, O&G | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 8. | (Circle) <u>HNO3</u> H2SO4 NaOH NaOH/ZnAc |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | | |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | 9. | Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | 10. | Present Absent |
| Headspace in VOA Vials (>6mm): | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 11. | 04-SB-01 3/3 |
| Headspace Wisconsin Sulfide | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 12. | |
| Trip Blank Present: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Custody Seals | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| | | 13. | |

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

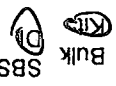
Comments/ Resolution: _____

Sample Container Count

CLIENT: Metric

COC PAGE 4 of 5

COC ID# _____



Project # 50176301

Sample Line
Item

| | | | | | | | | | | | | | | | | | | |
|----|------|-------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|---|--------------------|
| 1 | AG1U | WG FU | AG0U | R | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3B | BP1U | SP5T | AG2U | Matrix S1M/WNA (Soil/Water/Non- Aqueous Liquid) | pH <2 pH >9 pH >12 |
| 2 | | | | | | | | | | | | | | | | | SL | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |

Container Codes

| | | | | | | | | | | | |
|-------|---------------------|-------------|------|------------------------|-------------|------|----------------------|------------|------|------------------|----------------|
| DG9H | 40mL HCL | amber vial | AG0U | 100mL unpreserved | amber glass | BP1N | 1 liter HNO3 | plastic | DG9P | 40mL TSP | amber vial |
| AG1U | 1 liter unpreserved | amber glass | AG1H | 1 liter HCL | amber glass | BP1S | 1 liter H2SO4 | plastic | DG9S | 40mL H2SO4 | amber vial |
| WG FU | 4oz clear soil jar | | AG1S | 1 liter H2SO4 | amber glass | BP1U | 1 liter unpreserved | plastic | DG9T | 40mL Na Thio | amber vial |
| R | terra core kit | | AG1T | 1 liter Na Thiosulfate | amber glass | BP1Z | 1 liter NaOH, Zn, Ac | | DG9U | 40mL unpreserved | amber vial |
| BP2N | 500mL HNO3 | plastic | AG2N | 500mL HNO3 | amber glass | BP2A | 500mL NaOH, Asc Acid | plastic | SP5T | 120mL Coliform | Na Thiosulfate |
| BP2U | 500mL unpreserved | plastic | AG2S | 500mL H2SO4 | amber glass | BP2O | 500mL NaOH | plastic | JGFU | 4oz unpreserved | amber wide |
| BP2S | 500mL H2SO4 | plastic | AG2U | 500mL unpreserved | amber glass | BP2Z | 500mL NaOH, Zn Ac | | U | Summa Can | |
| BP3N | 250mL HNO3 | plastic | AG3U | 250mL unpreserved | amber glass | AF | Air Filter | | VG9H | 40mL HCL | clear vial |
| BP3U | 250mL unpreserved | plastic | BG1H | 1 liter HCL | clear glass | BP3B | 250mL NaOH | plastic | VG9T | 40mL Na Thio. | clear vial |
| BP3S | 250mL H2SO4 | plastic | BG1S | 1 liter H2SO4 | clear glass | BP3Z | 250mL NaOH, Zn Ac | plastic | VG9U | 40mL unpreserved | clear vial |
| AG3S | 250mL H2SO4 | glass amber | BG1T | 1 liter Na Thiosulfate | clear glass | C | Air Cassettes | | VSG | Headspace septa | vial & HCL |
| AG1S | 1 liter H2SO4 | amber glass | BG1U | 1 liter unpreserved | glass | DG9B | 40mL Na Bisulfate | amber vial | WGFX | 4oz wide jar | w/hexane wipe |
| BP1U | 1 liter unpreserved | plastic | BP1A | 1 liter NaOH, Asc Acid | plastic | DG9M | 40mL MeOH | clear vial | ZPLC | Ziploc Bag | |

Sample Container Count

CLIENT: Metric

COC PAGE 5 of 5
COC ID# _____

Project # 50170301

Matrix SIMW/NA
(Soil/Water/Non-
Aqueous Liquid)

Sample Line Item

| Sample Line Item | AG1U | WG1U | AG0U | R | BP2N | BP2U | BP2S | BP3N | BP3U | BP3S | AG3S | AG1H | BP3B | BP1U | SP5T | AG2U | Matrix SIMW/NA (Soil/Water/Non-Aqueous Liquid) | pH <2 | pH >9 | pH >12 |
|------------------|------|------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|--|-------|-------|--------|
| 1 | 3 | 2 | 2 | | | | | | | | | | | | | | WT | ✓ | | |
| 2 | 3 | 2 | 2 | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | |
| 5 | 3 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | |

| Container Codes | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P | 40mL TSP amber vial |
|-----------------|---------------------------------|-------------------------------|------------------------------------|----------------------|------------------------------|---------------------|
| DG9H | 40mL HCL amber vial | AG0U | 100mL unpreserved amber glass | BP1N | 1 liter HNO3 plastic | DG9P |
| AG1U | 1 liter unpreserved amber glass | AG1H | 1 liter HCL amber glass | BP1S | 1 liter H2SO4 plastic | DG9S |
| WG1U | 4oz clear soil jar | AG1S | 1 liter H2SO4 amber glass | BP1U | 1 liter unpreserved plastic | DG9T |
| R | terra core kit | AG1T | 1 liter Na Thiosulfate amber glass | BP1Z | 1 liter NaOH, Zn, Ac | DG9U |
| BP2N | 500mL HNO3 plastic | AG2N | 500mL HNO3 amber glass | BP2A | 500mL NaOH, Asc Acid plastic | SP5T |
| BP2U | 500mL unpreserved plastic | AG2S | 500mL H2SO4 amber glass | BP2O | 500mL NaOH plastic | JGFU |
| BP2S | 500mL H2SO4 plastic | AG2U | 500mL unpreserved amber glass | BP2Z | 500mL NaOH, Zn Ac | U |
| BP3N | 250mL HNO3 plastic | AG3U | 250mL unpreserved amber glass | AF | Air Filter | VG9H |
| BP3U | 250mL unpreserved plastic | BG1H | 1 liter HCL clear glass | BP3B | 250mL NaOH plastic | VG9T |
| BP3S | 250mL H2SO4 plastic | BG1S | 1 liter H2SO4 clear glass | BP3Z | 250mL NaOH, Zn Ac plastic | VG9U |
| AG3S | 250mL H2SO4 glass amber | BG1T | 1 liter Na Thiosulfate clear glass | C | Air Cassettes | VSG |
| AG1S | 1 liter H2SO4 amber glass | BG1U | 1 liter unpreserved glass | DG9B | 40mL Na Bisulfate amber vial | WGFX |
| BP1U | 1 liter unpreserved plastic | BP1A | 1 liter NaOH, Asc Acid plastic | DG9M | 40mL MeOH clear vial | ZPLC |

August 15, 2017

Samir Raman
Metric
6971 Hillside Court
Indianapolis, IN 46250

RE: Project: NICTD Westlake Corridor
Pace Project No.: 50177019

Dear Samir Raman:

Enclosed are the analytical results for sample(s) received by the laboratory on August 04, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Tina Sayer
tina.sayer@pacelabs.com
(317)228-3100
Project Manager

Enclosures

cc: Ms. Kennita Jones, Metric



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Indiana Certification IDs

7726 Moller Road, Indianapolis, IN 46268

Illinois Certification #: 003971

Indiana Certification #: C-49-06

Kansas/NELAP Certification #:E-10177

Kentucky UST Certification #: 80226

Kentucky WW Certification #:98019

Ohio VAP Certification #: CL-0065

Oklahoma Certification #: 2016-075

Texas Certification #: T104704355-16-10

West Virginia Certification #: 330

Wisconsin Certification #: 999788130

USDA Soil Permit #: P330-16-00257

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab ID | Sample ID | Matrix | Date Collected | Date Received |
|-------------|-------------------|--------|----------------|----------------|
| 50177019001 | 02-SB-01 (0-2') | Solid | 08/03/17 15:50 | 08/04/17 14:08 |
| 50177019002 | 02-SB-01 (18-20') | Solid | 08/03/17 16:00 | 08/04/17 14:08 |
| 50177019003 | 02-SB-02 (0-2') | Solid | 08/03/17 15:10 | 08/04/17 14:08 |
| 50177019004 | 02-SB-02 (16-18') | Solid | 08/03/17 15:20 | 08/04/17 14:08 |
| 50177019005 | 02-SB-03 (0-2') | Solid | 08/03/17 14:00 | 08/04/17 14:08 |
| 50177019006 | 02-SB-03 (10-12') | Solid | 08/03/17 14:05 | 08/04/17 14:08 |
| 50177019007 | 02-SB-04 (0-2') | Solid | 08/03/17 13:15 | 08/04/17 14:08 |
| 50177019008 | 02-SB-04 (10-12') | Solid | 08/03/17 13:25 | 08/04/17 14:08 |
| 50177019009 | 02-SB-05 (0-2') | Solid | 08/03/17 12:00 | 08/04/17 14:08 |
| 50177019010 | 02-SB-05 (6-8') | Solid | 08/03/17 12:10 | 08/04/17 14:08 |
| 50177019011 | 02-SB-06 (0-2') | Solid | 08/03/17 11:15 | 08/04/17 14:08 |
| 50177019012 | 02-SB-06 (12-14') | Solid | 08/03/17 11:25 | 08/04/17 14:08 |
| 50177022001 | 02-DUP-01 | Solid | 08/03/17 08:00 | 08/04/17 14:00 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|-------------------|-----------------|----------|-------------------|
| 50177019001 | 02-SB-01 (0-2') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019002 | 02-SB-01 (18-20') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019003 | 02-SB-02 (0-2') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019004 | 02-SB-02 (16-18') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019005 | 02-SB-03 (0-2') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019006 | 02-SB-03 (10-12') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019007 | 02-SB-04 (0-2') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| | | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| 50177019008 | 02-SB-04 (10-12') | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab ID | Sample ID | Method | Analysts | Analytes Reported |
|-------------|-------------------|-----------------|----------|-------------------|
| 50177019009 | 02-SB-05 (0-2') | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | JGJ | 1 |
| 50177019010 | 02-SB-05 (6-8') | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| 50177019011 | 02-SB-06 (0-2') | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| 50177019012 | 02-SB-06 (12-14') | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| | | EPA 6010 | JPK | 7 |
| | | EPA 7471 | ILP | 1 |
| 50177022001 | 02-DUP-01 | EPA 8270 by SIM | JCM | 20 |
| | | EPA 8260 | GRM | 73 |
| | | SM 2540G | SCM | 1 |
| | | EPA 6010 | FRW | 7 |
| | | EPA 7471 | JGJ | 1 |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|--------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50177019001 | 02-SB-01 (0-2') | | | | | |
| EPA 6010 | Arsenic | 7.8 | mg/kg | 1.1 | 08/10/17 03:49 | |
| EPA 6010 | Barium | 112 | mg/kg | 1.1 | 08/10/17 03:49 | |
| EPA 6010 | Cadmium | 0.89 | mg/kg | 0.56 | 08/10/17 03:49 | |
| EPA 6010 | Chromium | 60.2 | mg/kg | 1.1 | 08/10/17 03:49 | |
| EPA 6010 | Lead | 142 | mg/kg | 1.1 | 08/10/17 03:49 | |
| EPA 7471 | Mercury | 7.4 | mg/kg | 1.2 | 08/10/17 12:12 | |
| EPA 8270 by SIM | Acenaphthene | 1.1 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Acenaphthylene | 4.8 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Anthracene | 5.1 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 12.8 | mg/kg | 0.29 | 08/08/17 13:07 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 7.4 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 4.8 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 4.8 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 7.8 | mg/kg | 0.29 | 08/08/17 13:07 | |
| EPA 8270 by SIM | Chrysene | 11.8 | mg/kg | 0.29 | 08/08/17 13:07 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 1.4 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Fluoranthene | 16.3 | mg/kg | 0.29 | 08/08/17 13:07 | |
| EPA 8270 by SIM | Fluorene | 0.31 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 3.8 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.75 | mg/kg | 0.029 | 08/08/17 00:23 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.65 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Naphthalene | 1.1 | mg/kg | 0.029 | 08/08/17 00:23 | ED |
| EPA 8270 by SIM | Phenanthrene | 5.2 | mg/kg | 0.029 | 08/08/17 00:23 | |
| EPA 8270 by SIM | Pyrene | 24.7 | mg/kg | 0.29 | 08/08/17 13:07 | |
| SM 2540G | Percent Moisture | 15.3 | % | 0.10 | 08/09/17 10:06 | |
| 50177019002 | 02-SB-01 (18-20') | | | | | |
| EPA 6010 | Arsenic | 7.2 | mg/kg | 1.1 | 08/10/17 03:52 | |
| EPA 6010 | Barium | 42.1 | mg/kg | 1.1 | 08/10/17 03:52 | |
| EPA 6010 | Chromium | 17.5 | mg/kg | 1.1 | 08/10/17 03:52 | |
| EPA 6010 | Lead | 6.9 | mg/kg | 1.1 | 08/10/17 03:52 | |
| EPA 8270 by SIM | Acenaphthene | 14.3 | mg/kg | 0.30 | 08/08/17 13:25 | |
| EPA 8270 by SIM | Acenaphthylene | 0.96 | mg/kg | 0.030 | 08/08/17 01:15 | ED |
| EPA 8270 by SIM | Anthracene | 3.6 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 2.9 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 1.9 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.86 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.86 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 1.2 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Chrysene | 2.5 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.23 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Fluoranthene | 4.9 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Fluorene | 6.0 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.70 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 10.1 | mg/kg | 0.030 | 08/08/17 01:15 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 20.3 | mg/kg | 0.30 | 08/08/17 13:25 | |
| EPA 8270 by SIM | Naphthalene | 53.4 | mg/kg | 0.30 | 08/08/17 13:25 | |
| EPA 8270 by SIM | Phenanthrene | 18.5 | mg/kg | 0.30 | 08/08/17 13:25 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|---------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50177019002 | 02-SB-01 (18-20') | | | | | |
| EPA 8270 by SIM | Pyrene | 6.8 | mg/kg | 0.030 | 08/08/17 01:15 | |
| EPA 8260 | Benzene | 3.3 | mg/kg | 0.38 | 08/07/17 18:15 | |
| EPA 8260 | Ethylbenzene | 16.7 | mg/kg | 0.38 | 08/07/17 18:15 | |
| EPA 8260 | Isopropylbenzene (Cumene) | 0.71 | mg/kg | 0.38 | 08/07/17 18:15 | |
| EPA 8260 | Naphthalene | 139 | mg/kg | 7.7 | 08/08/17 19:41 | |
| EPA 8260 | Toluene | 0.83 | mg/kg | 0.38 | 08/07/17 18:15 | |
| EPA 8260 | 1,2,4-Trimethylbenzene | 3.3 | mg/kg | 0.38 | 08/07/17 18:15 | |
| EPA 8260 | 1,3,5-Trimethylbenzene | 0.48 | mg/kg | 0.38 | 08/07/17 18:15 | |
| EPA 8260 | Xylene (Total) | 9.6 | mg/kg | 0.77 | 08/07/17 18:15 | |
| SM 2540G | Percent Moisture | 18.4 | % | 0.10 | 08/09/17 10:07 | |
| 50177019003 | 02-SB-02 (0-2') | | | | | |
| EPA 6010 | Arsenic | 3.6 | mg/kg | 0.89 | 08/10/17 03:54 | |
| EPA 6010 | Barium | 4.8 | mg/kg | 0.89 | 08/10/17 03:54 | |
| EPA 6010 | Chromium | 3.0 | mg/kg | 0.89 | 08/10/17 03:54 | |
| EPA 6010 | Lead | 3.4 | mg/kg | 0.89 | 08/10/17 03:54 | |
| EPA 8270 by SIM | Acenaphthene | 0.012 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Acenaphthylene | 0.024 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Anthracene | 0.021 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.027 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.033 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.018 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.027 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.024 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Chrysene | 0.032 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.0064 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Fluoranthene | 0.031 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.019 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.014 | mg/kg | 0.0051 | 08/08/17 01:32 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.019 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Naphthalene | 0.059 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Phenanthrene | 0.031 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| EPA 8270 by SIM | Pyrene | 0.047 | mg/kg | 0.0051 | 08/08/17 01:32 | |
| SM 2540G | Percent Moisture | 3.6 | % | 0.10 | 08/09/17 10:07 | |
| 50177019004 | 02-SB-02 (16-18') | | | | | |
| EPA 6010 | Arsenic | 3.4 | mg/kg | 1.5 | 08/10/17 03:56 | |
| EPA 6010 | Barium | 24.8 | mg/kg | 1.5 | 08/10/17 03:56 | |
| EPA 6010 | Chromium | 8.3 | mg/kg | 1.5 | 08/10/17 03:56 | |
| EPA 6010 | Lead | 5.3 | mg/kg | 1.5 | 08/10/17 03:56 | |
| EPA 8270 by SIM | Acenaphthene | 240 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Acenaphthylene | 8.1 | mg/kg | 0.040 | 08/08/17 01:50 | ED |
| EPA 8270 by SIM | Anthracene | 86.7 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 76.5 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 57.6 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 26.2 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 12.5 | mg/kg | 0.040 | 08/08/17 01:50 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 33.8 | mg/kg | 2.0 | 08/08/17 13:42 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|---------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50177019004 | 02-SB-02 (16-18') | | | | | |
| EPA 8270 by SIM | Chrysene | 58.6 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 3.3 | mg/kg | 0.040 | 08/08/17 01:50 | |
| EPA 8270 by SIM | Fluoranthene | 125 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Fluorene | 123 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 9.8 | mg/kg | 0.040 | 08/08/17 01:50 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 170 | mg/kg | 2.0 | 08/08/17 13:42 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 253 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Naphthalene | 600 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Phenanthrene | 328 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8270 by SIM | Pyrene | 170 | mg/kg | 2.0 | 08/08/17 13:42 | |
| EPA 8260 | Benzene | 20.2 | mg/kg | 1.7 | 08/07/17 19:22 | |
| EPA 8260 | Ethylbenzene | 80.6 | mg/kg | 1.7 | 08/07/17 19:22 | |
| EPA 8260 | Isopropylbenzene (Cumene) | 4.7 | mg/kg | 1.7 | 08/07/17 19:22 | |
| EPA 8260 | Naphthalene | 874 | mg/kg | 42.7 | 08/08/17 20:15 | |
| EPA 8260 | 1,2,4-Trimethylbenzene | 20.9 | mg/kg | 1.7 | 08/07/17 19:22 | |
| EPA 8260 | 1,3,5-Trimethylbenzene | 6.3 | mg/kg | 1.7 | 08/07/17 19:22 | |
| EPA 8260 | Xylene (Total) | 49.5 | mg/kg | 3.4 | 08/07/17 19:22 | |
| SM 2540G | Percent Moisture | 37.7 | % | 0.10 | 08/09/17 10:07 | |
| 50177019005 | 02-SB-03 (0-2') | | | | | |
| EPA 6010 | Arsenic | 6.7 | mg/kg | 1.1 | 08/10/17 03:58 | |
| EPA 6010 | Barium | 115 | mg/kg | 1.1 | 08/10/17 03:58 | |
| EPA 6010 | Cadmium | 0.68 | mg/kg | 0.55 | 08/10/17 03:58 | |
| EPA 6010 | Chromium | 24.8 | mg/kg | 1.1 | 08/10/17 03:58 | |
| EPA 6010 | Lead | 94.5 | mg/kg | 1.1 | 08/10/17 03:58 | |
| EPA 7471 | Mercury | 7.7 | mg/kg | 1.2 | 08/10/17 12:19 | |
| EPA 8270 by SIM | Acenaphthene | 0.68 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Acenaphthylene | 1.2 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Anthracene | 1.7 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 3.3 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 2.4 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 1.9 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 1.7 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 1.8 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Chrysene | 3.5 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.54 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Fluoranthene | 4.5 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Fluorene | 0.51 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 1.4 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.52 | mg/kg | 0.029 | 08/08/17 02:07 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.50 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Naphthalene | 0.98 | mg/kg | 0.029 | 08/08/17 02:07 | ED |
| EPA 8270 by SIM | Phenanthrene | 5.0 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8270 by SIM | Pyrene | 5.8 | mg/kg | 0.029 | 08/08/17 02:07 | |
| EPA 8260 | Benzene | 0.0058 | mg/kg | 0.0055 | 08/07/17 19:56 | |
| SM 2540G | Percent Moisture | 13.9 | % | 0.10 | 08/09/17 10:07 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID | Client Sample ID | Result | Units | Report Limit | Analyzed | Qualifiers |
|--------------------|--------------------------|--------|-------|--------------|----------------|------------|
| Method | Parameters | | | | | |
| 50177019006 | 02-SB-03 (10-12') | | | | | |
| EPA 6010 | Arsenic | 4.6 | mg/kg | 1.5 | 08/10/17 04:04 | |
| EPA 6010 | Barium | 39.1 | mg/kg | 1.5 | 08/10/17 04:04 | |
| EPA 6010 | Chromium | 8.9 | mg/kg | 1.5 | 08/10/17 04:04 | |
| EPA 6010 | Lead | 5.5 | mg/kg | 1.5 | 08/10/17 04:04 | |
| EPA 8270 by SIM | Acenaphthene | 0.091 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Acenaphthylene | 0.016 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Anthracene | 0.040 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.034 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.025 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.012 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.010 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.016 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Chrysene | 0.027 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Fluoranthene | 0.060 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Fluorene | 0.045 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.0096 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.058 | mg/kg | 0.0076 | 08/08/17 02:25 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.083 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Naphthalene | 0.14 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Phenanthrene | 0.16 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8270 by SIM | Pyrene | 0.079 | mg/kg | 0.0076 | 08/08/17 02:25 | |
| EPA 8260 | Acetone | 0.27 | mg/kg | 0.16 | 08/07/17 20:29 | 2d |
| EPA 8260 | Naphthalene | 0.010 | mg/kg | 0.0081 | 08/07/17 20:29 | C8,P2 |
| SM 2540G | Percent Moisture | 34.8 | % | 0.10 | 08/09/17 10:07 | |
| 50177019007 | 02-SB-04 (0-2') | | | | | |
| EPA 6010 | Arsenic | 5.7 | mg/kg | 0.99 | 08/10/17 04:06 | |
| EPA 6010 | Barium | 87.4 | mg/kg | 0.99 | 08/10/17 04:06 | |
| EPA 6010 | Chromium | 16.0 | mg/kg | 0.99 | 08/10/17 04:06 | |
| EPA 6010 | Lead | 68.2 | mg/kg | 0.99 | 08/10/17 04:06 | |
| EPA 7471 | Mercury | 6.8 | mg/kg | 1.2 | 08/10/17 12:29 | |
| EPA 8270 by SIM | Acenaphthene | 0.041 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Acenaphthylene | 0.37 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Anthracene | 0.18 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.57 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.43 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.39 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.37 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.38 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Chrysene | 0.70 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.13 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Fluoranthene | 0.62 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.31 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.080 | mg/kg | 0.0056 | 08/08/17 02:42 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.077 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Naphthalene | 0.16 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Phenanthrene | 0.55 | mg/kg | 0.0056 | 08/08/17 02:42 | |
| EPA 8270 by SIM | Pyrene | 0.91 | mg/kg | 0.0056 | 08/08/17 02:42 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50177019007 | 02-SB-04 (0-2') | | | | | |
| SM 2540G | Percent Moisture | 12.1 | % | 0.10 | 08/09/17 10:07 | |
| 50177019008 | 02-SB-04 (10-12') | | | | | |
| EPA 6010 | Arsenic | 8.6 | mg/kg | 1.4 | 08/10/17 04:09 | |
| EPA 6010 | Barium | 13.5 | mg/kg | 1.4 | 08/10/17 04:09 | |
| EPA 6010 | Chromium | 5.9 | mg/kg | 1.4 | 08/10/17 04:09 | |
| EPA 6010 | Lead | 5.0 | mg/kg | 1.4 | 08/10/17 04:09 | |
| EPA 8270 by SIM | Fluoranthene | 0.0075 | mg/kg | 0.0069 | 08/09/17 11:49 | |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.0090 | mg/kg | 0.0069 | 08/09/17 11:49 | |
| EPA 8270 by SIM | Naphthalene | 0.029 | mg/kg | 0.0069 | 08/09/17 11:49 | |
| EPA 8270 by SIM | Phenanthrene | 0.012 | mg/kg | 0.0069 | 08/09/17 11:49 | |
| EPA 8260 | Acetone | 0.13 | mg/kg | 0.11 | 08/07/17 21:36 | 2d |
| SM 2540G | Percent Moisture | 27.9 | % | 0.10 | 08/09/17 10:07 | |
| 50177019009 | 02-SB-05 (0-2') | | | | | |
| EPA 6010 | Arsenic | 10.1 | mg/kg | 1.1 | 08/10/17 04:11 | |
| EPA 6010 | Barium | 143 | mg/kg | 1.1 | 08/10/17 04:11 | |
| EPA 6010 | Cadmium | 0.57 | mg/kg | 0.53 | 08/10/17 04:11 | |
| EPA 6010 | Chromium | 23.5 | mg/kg | 1.1 | 08/10/17 04:11 | |
| EPA 6010 | Lead | 60.4 | mg/kg | 1.1 | 08/10/17 04:11 | |
| EPA 7471 | Mercury | 18.7 | mg/kg | 4.6 | 08/14/17 23:49 | |
| EPA 8270 by SIM | Acenaphthene | 0.21 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Acenaphthylene | 5.2 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Anthracene | 1.3 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 1.8 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 1.1 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 1.8 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 1.9 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 2.0 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Chrysene | 3.0 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.90 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Fluoranthene | 1.7 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Fluorene | 0.86 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 1.6 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.90 | mg/kg | 0.057 | 08/08/17 03:17 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 1.0 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Naphthalene | 1.4 | mg/kg | 0.057 | 08/08/17 03:17 | ED |
| EPA 8270 by SIM | Phenanthrene | 1.4 | mg/kg | 0.057 | 08/08/17 03:17 | |
| EPA 8270 by SIM | Pyrene | 2.3 | mg/kg | 0.057 | 08/08/17 03:17 | |
| SM 2540G | Percent Moisture | 13.3 | % | 0.10 | 08/09/17 10:07 | |
| 50177019010 | 02-SB-05 (6-8') | | | | | |
| EPA 6010 | Arsenic | 2.4 | mg/kg | 1.1 | 08/10/17 04:13 | |
| EPA 6010 | Barium | 4.7 | mg/kg | 1.1 | 08/10/17 04:13 | |
| EPA 6010 | Chromium | 3.8 | mg/kg | 1.1 | 08/10/17 04:13 | |
| EPA 6010 | Lead | 3.9 | mg/kg | 1.1 | 08/10/17 04:13 | |
| EPA 8270 by SIM | Acenaphthene | 0.55 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Acenaphthylene | 0.16 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Anthracene | 1.2 | mg/kg | 0.0062 | 08/08/17 03:34 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50177019010 | 02-SB-05 (6-8') | | | | | |
| EPA 8270 by SIM | Benzo(a)anthracene | 0.69 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 0.25 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 0.14 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 0.12 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 0.093 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Chrysene | 0.91 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.064 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Fluoranthene | 0.74 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Fluorene | 0.82 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 0.076 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 1.8 | mg/kg | 0.0062 | 08/08/17 03:34 | N2 |
| EPA 8270 by SIM | Pyrene | 1.3 | mg/kg | 0.0062 | 08/08/17 03:34 | |
| EPA 8260 | n-Butylbenzene | 0.95 | mg/kg | 0.60 | 08/07/17 22:43 | |
| SM 2540G | Percent Moisture | 19.7 | % | 0.10 | 08/09/17 10:07 | |
| 50177019011 | 02-SB-06 (0-2') | | | | | |
| EPA 6010 | Arsenic | 11.4 | mg/kg | 1.1 | 08/10/17 04:15 | |
| EPA 6010 | Barium | 39.7 | mg/kg | 1.1 | 08/10/17 04:15 | |
| EPA 6010 | Chromium | 14.6 | mg/kg | 1.1 | 08/10/17 04:15 | |
| EPA 6010 | Lead | 90.5 | mg/kg | 1.1 | 08/10/17 04:15 | |
| EPA 7471 | Mercury | 7.0 | mg/kg | 1.1 | 08/10/17 12:37 | |
| EPA 8270 by SIM | Acenaphthylene | 3.2 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Anthracene | 0.96 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Benzo(a)anthracene | 1.8 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Benzo(a)pyrene | 1.0 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Benzo(b)fluoranthene | 1.8 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Benzo(g,h,i)perylene | 1.9 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Benzo(k)fluoranthene | 1.6 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Chrysene | 2.9 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Dibenz(a,h)anthracene | 0.81 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Fluoranthene | 1.4 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Fluorene | 0.46 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Indeno(1,2,3-cd)pyrene | 1.5 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.29 | mg/kg | 0.029 | 08/08/17 03:52 | N2 |
| EPA 8270 by SIM | 2-Methylnaphthalene | 0.35 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Naphthalene | 0.36 | mg/kg | 0.029 | 08/08/17 03:52 | ED |
| EPA 8270 by SIM | Phenanthrene | 1.1 | mg/kg | 0.029 | 08/08/17 03:52 | |
| EPA 8270 by SIM | Pyrene | 2.5 | mg/kg | 0.029 | 08/08/17 03:52 | |
| SM 2540G | Percent Moisture | 13.3 | % | 0.10 | 08/09/17 10:07 | |
| 50177019012 | 02-SB-06 (12-14') | | | | | |
| EPA 6010 | Arsenic | 1.5 | mg/kg | 1.2 | 08/10/17 04:17 | |
| EPA 6010 | Barium | 3.5 | mg/kg | 1.2 | 08/10/17 04:17 | |
| EPA 6010 | Chromium | 2.9 | mg/kg | 1.2 | 08/10/17 04:17 | |
| EPA 6010 | Lead | 2.5 | mg/kg | 1.2 | 08/10/17 04:17 | |
| EPA 8270 by SIM | 1-Methylnaphthalene | 0.018 | mg/kg | 0.0062 | 08/08/17 05:01 | N2 |
| EPA 8270 by SIM | Naphthalene | 0.026 | mg/kg | 0.0062 | 08/08/17 05:01 | |
| SM 2540G | Percent Moisture | 19.8 | % | 0.10 | 08/09/17 10:07 | |

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab Sample ID Method | Client Sample ID Parameters | Result | Units | Report Limit | Analyzed | Qualifiers |
|-------------------------|--------------------------------|--------|-------|--------------|----------------|------------|
| 50177022001 | 02-DUP-01 | | | | | |
| EPA 6010 | Arsenic | 4.2 | mg/kg | 1.2 | 08/14/17 11:33 | |
| EPA 6010 | Barium | 6.9 | mg/kg | 1.2 | 08/14/17 11:33 | |
| EPA 6010 | Chromium | 4.0 | mg/kg | 1.2 | 08/14/17 11:33 | |
| EPA 6010 | Lead | 3.9 | mg/kg | 1.2 | 08/14/17 11:33 | |
| SM 2540G | Percent Moisture | 20.9 | % | 0.10 | 08/08/17 11:19 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-01 (0-2') **Lab ID: 50177019001** Collected: 08/03/17 15:50 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 7.8 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7440-38-2 | |
| Barium | 112 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7440-39-3 | |
| Cadmium | 0.89 | mg/kg | 0.56 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7440-43-9 | |
| Chromium | 60.2 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7440-47-3 | |
| Lead | 142 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.56 | 1 | 08/09/17 06:13 | 08/10/17 03:49 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 7.4 | mg/kg | 1.2 | 5 | 08/09/17 21:46 | 08/10/17 12:12 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 1.1 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 83-32-9 | |
| Acenaphthylene | 4.8 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 208-96-8 | |
| Anthracene | 5.1 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 120-12-7 | |
| Benzo(a)anthracene | 12.8 | mg/kg | 0.29 | 50 | 08/07/17 09:30 | 08/08/17 13:07 | 56-55-3 | |
| Benzo(a)pyrene | 7.4 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 50-32-8 | |
| Benzo(b)fluoranthene | 4.8 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 205-99-2 | |
| Benzo(g,h,i)perylene | 4.8 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 191-24-2 | |
| Benzo(k)fluoranthene | 7.8 | mg/kg | 0.29 | 50 | 08/07/17 09:30 | 08/08/17 13:07 | 207-08-9 | |
| Chrysene | 11.8 | mg/kg | 0.29 | 50 | 08/07/17 09:30 | 08/08/17 13:07 | 218-01-9 | |
| Dibenz(a,h)anthracene | 1.4 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 53-70-3 | |
| Fluoranthene | 16.3 | mg/kg | 0.29 | 50 | 08/07/17 09:30 | 08/08/17 13:07 | 206-44-0 | |
| Fluorene | 0.31 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 3.8 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 193-39-5 | |
| 1-Methylnaphthalene | 0.75 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.65 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 91-57-6 | |
| Naphthalene | 1.1 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 91-20-3 | ED |
| Phenanthrene | 5.2 | mg/kg | 0.029 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 85-01-8 | |
| Pyrene | 24.7 | mg/kg | 0.29 | 50 | 08/07/17 09:30 | 08/08/17 13:07 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 59 | %. | 30-94 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 73 | %. | 27-102 | 5 | 08/07/17 09:30 | 08/08/17 00:23 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 08/07/17 17:42 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-01 (0-2') **Lab ID: 50177019001** Collected: 08/03/17 15:50 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/07/17 17:42 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.022 | 1 | | 08/07/17 17:42 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 08/07/17 17:42 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-01 (0-2') **Lab ID: 50177019001** Collected: 08/03/17 15:50 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/07/17 17:42 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0054 | 1 | | 08/07/17 17:42 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/07/17 17:42 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 112 | % | 69-136 | 1 | | 08/07/17 17:42 | 1868-53-7 | |
| Toluene-d8 (S) | 118 | % | 64-150 | 1 | | 08/07/17 17:42 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 78 | % | 51-142 | 1 | | 08/07/17 17:42 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 15.3 | % | 0.10 | 1 | | 08/09/17 10:06 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-01 (18-20') **Lab ID: 50177019002** Collected: 08/03/17 16:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|-----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 7.2 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7440-38-2 | |
| Barium | 42.1 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.55 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7440-43-9 | |
| Chromium | 17.5 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7440-47-3 | |
| Lead | 6.9 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.55 | 1 | 08/09/17 06:13 | 08/10/17 03:52 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/09/17 21:46 | 08/10/17 11:05 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 14.3 | mg/kg | 0.30 | 50 | 08/07/17 10:15 | 08/08/17 13:25 | 83-32-9 | |
| Acenaphthylene | 0.96 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 208-96-8 | ED |
| Anthracene | 3.6 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 120-12-7 | |
| Benzo(a)anthracene | 2.9 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 56-55-3 | |
| Benzo(a)pyrene | 1.9 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.86 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.86 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 191-24-2 | |
| Benzo(k)fluoranthene | 1.2 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 207-08-9 | |
| Chrysene | 2.5 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.23 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 53-70-3 | |
| Fluoranthene | 4.9 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 206-44-0 | |
| Fluorene | 6.0 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.70 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 193-39-5 | |
| 1-Methylnaphthalene | 10.1 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 20.3 | mg/kg | 0.30 | 50 | 08/07/17 10:15 | 08/08/17 13:25 | 91-57-6 | |
| Naphthalene | 53.4 | mg/kg | 0.30 | 50 | 08/07/17 10:15 | 08/08/17 13:25 | 91-20-3 | |
| Phenanthrene | 18.5 | mg/kg | 0.30 | 50 | 08/07/17 10:15 | 08/08/17 13:25 | 85-01-8 | |
| Pyrene | 6.8 | mg/kg | 0.030 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 47 | % | 30-94 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 46 | % | 27-102 | 5 | 08/07/17 10:15 | 08/08/17 01:15 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 67-64-1 | |
| Acrolein | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 107-13-1 | |
| Benzene | 3.3 | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 1.9 | 100 | | 08/07/17 18:15 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-01 (18-20') Lab ID: 50177019002 Collected: 08/03/17 16:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|------|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.77 | 100 | | 08/07/17 18:15 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 10061-02-6 | |
| Ethylbenzene | 16.7 | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 74-88-4 | |
| Isopropylbenzene (Cumene) | 0.71 | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 1.5 | 100 | | 08/07/17 18:15 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 1.9 | 100 | | 08/07/17 18:15 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 1634-04-4 | 3d |
| Naphthalene | 139 | mg/kg | 7.7 | 2000 | | 08/08/17 19:41 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-01 (18-20') **Lab ID: 50177019002** Collected: 08/03/17 16:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|-----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 127-18-4 | |
| Toluene | 0.83 | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | 3.3 | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | 0.48 | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 7.7 | 100 | | 08/07/17 18:15 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.38 | 100 | | 08/07/17 18:15 | 75-01-4 | |
| Xylene (Total) | 9.6 | mg/kg | 0.77 | 100 | | 08/07/17 18:15 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 107 | % | 69-136 | 100 | | 08/07/17 18:15 | 1868-53-7 | D4 |
| Toluene-d8 (S) | 98 | % | 64-150 | 100 | | 08/07/17 18:15 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 98 | % | 51-142 | 100 | | 08/07/17 18:15 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 18.4 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-02 (0-2') Lab ID: 50177019003 Collected: 08/03/17 15:10 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 3.6 | mg/kg | 0.89 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7440-38-2 | |
| Barium | 4.8 | mg/kg | 0.89 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.44 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7440-43-9 | |
| Chromium | 3.0 | mg/kg | 0.89 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7440-47-3 | |
| Lead | 3.4 | mg/kg | 0.89 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7439-92-1 | |
| Selenium | ND | mg/kg | 0.89 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.44 | 1 | 08/09/17 06:13 | 08/10/17 03:54 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.21 | 1 | 08/09/17 21:46 | 08/10/17 11:07 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.012 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 83-32-9 | |
| Acenaphthylene | 0.024 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 208-96-8 | |
| Anthracene | 0.021 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 120-12-7 | |
| Benzo(a)anthracene | 0.027 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 56-55-3 | |
| Benzo(a)pyrene | 0.033 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.018 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.027 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.024 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 207-08-9 | |
| Chrysene | 0.032 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.0064 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 53-70-3 | |
| Fluoranthene | 0.031 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.019 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 193-39-5 | |
| 1-Methylnaphthalene | 0.014 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.019 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 91-57-6 | |
| Naphthalene | 0.059 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 91-20-3 | |
| Phenanthrene | 0.031 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 85-01-8 | |
| Pyrene | 0.047 | mg/kg | 0.0051 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 63 | % | 30-94 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 71 | % | 27-102 | 1 | 08/07/17 10:15 | 08/08/17 01:32 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.024 | 1 | | 08/07/17 18:49 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-02 (0-2') **Lab ID: 50177019003** Collected: 08/03/17 15:10 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.0096 | 1 | | 08/07/17 18:49 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.019 | 1 | | 08/07/17 18:49 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.024 | 1 | | 08/07/17 18:49 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0044 | 1 | | 08/08/17 18:34 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-02 (0-2') **Lab ID: 50177019003** Collected: 08/03/17 15:10 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.096 | 1 | | 08/07/17 18:49 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0048 | 1 | | 08/07/17 18:49 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.0096 | 1 | | 08/07/17 18:49 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 108 | % | 69-136 | 1 | | 08/07/17 18:49 | 1868-53-7 | |
| Toluene-d8 (S) | 101 | % | 64-150 | 1 | | 08/07/17 18:49 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 99 | % | 51-142 | 1 | | 08/07/17 18:49 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 3.6 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-02 (16-18') Lab ID: 50177019004 Collected: 08/03/17 15:20 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---------|-------|--------------|-----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 3.4 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7440-38-2 | |
| Barium | 24.8 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.77 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7440-43-9 | |
| Chromium | 8.3 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7440-47-3 | |
| Lead | 5.3 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.77 | 1 | 08/09/17 06:13 | 08/10/17 03:56 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.31 | 1 | 08/09/17 21:46 | 08/10/17 11:09 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 240 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 83-32-9 | |
| Acenaphthylene | 8.1 | mg/kg | 0.040 | 5 | 08/07/17 10:15 | 08/08/17 01:50 | 208-96-8 | ED |
| Anthracene | 86.7 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 120-12-7 | |
| Benzo(a)anthracene | 76.5 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 56-55-3 | |
| Benzo(a)pyrene | 57.6 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 50-32-8 | |
| Benzo(b)fluoranthene | 26.2 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 205-99-2 | |
| Benzo(g,h,i)perylene | 12.5 | mg/kg | 0.040 | 5 | 08/07/17 10:15 | 08/08/17 01:50 | 191-24-2 | |
| Benzo(k)fluoranthene | 33.8 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 207-08-9 | |
| Chrysene | 58.6 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 218-01-9 | |
| Dibenz(a,h)anthracene | 3.3 | mg/kg | 0.040 | 5 | 08/07/17 10:15 | 08/08/17 01:50 | 53-70-3 | |
| Fluoranthene | 125 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 206-44-0 | |
| Fluorene | 123 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 9.8 | mg/kg | 0.040 | 5 | 08/07/17 10:15 | 08/08/17 01:50 | 193-39-5 | |
| 1-Methylnaphthalene | 170 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 253 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 91-57-6 | |
| Naphthalene | 600 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 91-20-3 | |
| Phenanthrene | 328 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 85-01-8 | |
| Pyrene | 170 | mg/kg | 2.0 | 250 | 08/07/17 10:15 | 08/08/17 13:42 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 53 | % | 30-94 | 5 | 08/07/17 10:15 | 08/08/17 01:50 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 97 | % | 27-102 | 5 | 08/07/17 10:15 | 08/08/17 01:50 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 67-64-1 | |
| Acrolein | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 107-13-1 | |
| Benzene | 20.2 | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-27-4 | |
| Bromoform | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 8.5 | 200 | | 08/07/17 19:22 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-02 (16-18') **Lab ID: 50177019004** Collected: 08/03/17 15:20 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|-------------|-----------------------------|--------------|------|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 3.4 | 200 | | 08/07/17 19:22 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-00-3 | |
| Chloroform | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 10061-02-6 | |
| Ethylbenzene | 80.6 | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 74-88-4 | |
| Isopropylbenzene (Cumene) | 4.7 | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 6.8 | 200 | | 08/07/17 19:22 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 8.5 | 200 | | 08/07/17 19:22 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 1634-04-4 | 3d |
| Naphthalene | 874 | mg/kg | 42.7 | 5000 | | 08/08/17 20:15 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 103-65-1 | |
| Styrene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-02 (16-18') **Lab ID: 50177019004** Collected: 08/03/17 15:20 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|-----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 127-18-4 | |
| Toluene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | 20.9 | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | 6.3 | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 34.2 | 200 | | 08/07/17 19:22 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 1.7 | 200 | | 08/07/17 19:22 | 75-01-4 | |
| Xylene (Total) | 49.5 | mg/kg | 3.4 | 200 | | 08/07/17 19:22 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 107 | % | 69-136 | 200 | | 08/07/17 19:22 | 1868-53-7 | D4 |
| Toluene-d8 (S) | 100 | % | 64-150 | 200 | | 08/07/17 19:22 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 100 | % | 51-142 | 200 | | 08/07/17 19:22 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 37.7 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-03 (0-2') **Lab ID:** 50177019005 **Collected:** 08/03/17 14:00 **Received:** 08/04/17 14:08 **Matrix:** Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 6.7 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7440-38-2 | |
| Barium | 115 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7440-39-3 | |
| Cadmium | 0.68 | mg/kg | 0.55 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7440-43-9 | |
| Chromium | 24.8 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7440-47-3 | |
| Lead | 94.5 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.55 | 1 | 08/09/17 06:13 | 08/10/17 03:58 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 7.7 | mg/kg | 1.2 | 5 | 08/09/17 21:46 | 08/10/17 12:19 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.68 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 83-32-9 | |
| Acenaphthylene | 1.2 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 208-96-8 | |
| Anthracene | 1.7 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 120-12-7 | |
| Benzo(a)anthracene | 3.3 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 56-55-3 | |
| Benzo(a)pyrene | 2.4 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 50-32-8 | |
| Benzo(b)fluoranthene | 1.9 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 205-99-2 | |
| Benzo(g,h,i)perylene | 1.7 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 191-24-2 | |
| Benzo(k)fluoranthene | 1.8 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 207-08-9 | |
| Chrysene | 3.5 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.54 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 53-70-3 | |
| Fluoranthene | 4.5 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 206-44-0 | |
| Fluorene | 0.51 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 1.4 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 193-39-5 | |
| 1-Methylnaphthalene | 0.52 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.50 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 91-57-6 | |
| Naphthalene | 0.98 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 91-20-3 | ED |
| Phenanthrene | 5.0 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 85-01-8 | |
| Pyrene | 5.8 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 58 | % | 30-94 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 67 | % | 27-102 | 5 | 08/07/17 10:15 | 08/08/17 02:07 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 107-13-1 | |
| Benzene | 0.0058 | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 08/07/17 19:56 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-03 (0-2') **Lab ID: 50177019005** Collected: 08/03/17 14:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/07/17 19:56 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.022 | 1 | | 08/07/17 19:56 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 08/07/17 19:56 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0047 | 1 | | 08/08/17 19:07 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 79-34-5 | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-03 (0-2') **Lab ID: 50177019005** Collected: 08/03/17 14:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/07/17 19:56 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0055 | 1 | | 08/07/17 19:56 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/07/17 19:56 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 112 | % | 69-136 | 1 | | 08/07/17 19:56 | 1868-53-7 | |
| Toluene-d8 (S) | 111 | % | 64-150 | 1 | | 08/07/17 19:56 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 88 | % | 51-142 | 1 | | 08/07/17 19:56 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 13.9 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-03 (10-12') **Lab ID: 50177019006** Collected: 08/03/17 14:05 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 4.6 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7440-38-2 | |
| Barium | 39.1 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.73 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7440-43-9 | |
| Chromium | 8.9 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7440-47-3 | |
| Lead | 5.5 | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.5 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.73 | 1 | 08/09/17 06:13 | 08/10/17 04:04 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.31 | 1 | 08/09/17 21:46 | 08/10/17 11:17 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.091 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 83-32-9 | |
| Acenaphthylene | 0.016 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 208-96-8 | |
| Anthracene | 0.040 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 120-12-7 | |
| Benzo(a)anthracene | 0.034 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 56-55-3 | |
| Benzo(a)pyrene | 0.025 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.012 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.010 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.016 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 207-08-9 | |
| Chrysene | 0.027 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 53-70-3 | |
| Fluoranthene | 0.060 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 206-44-0 | |
| Fluorene | 0.045 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.0096 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 193-39-5 | |
| 1-Methylnaphthalene | 0.058 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.083 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 91-57-6 | |
| Naphthalene | 0.14 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 91-20-3 | |
| Phenanthrene | 0.16 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 85-01-8 | |
| Pyrene | 0.079 | mg/kg | 0.0076 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 34 | % | 30-94 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 26 | % | 27-102 | 1 | 08/07/17 10:15 | 08/08/17 02:25 | 1718-51-0 | S8 |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | 0.27 | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 67-64-1 | 2d |
| Acrolein | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.040 | 1 | | 08/07/17 20:29 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-03 (10-12') Lab ID: 50177019006 Collected: 08/03/17 14:05 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|--------------|-----------------------------|--------------|----|----------|----------------|------------|-------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.016 | 1 | | 08/07/17 20:29 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.032 | 1 | | 08/07/17 20:29 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.040 | 1 | | 08/07/17 20:29 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 1634-04-4 | |
| Naphthalene | 0.010 | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 91-20-3 | C8,P2 |
| n-Propylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-03 (10-12') **Lab ID: 50177019006** Collected: 08/03/17 14:05 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.16 | 1 | | 08/07/17 20:29 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0081 | 1 | | 08/07/17 20:29 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.016 | 1 | | 08/07/17 20:29 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 114 | % | 69-136 | 1 | | 08/07/17 20:29 | 1868-53-7 | |
| Toluene-d8 (S) | 118 | % | 64-150 | 1 | | 08/07/17 20:29 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 79 | % | 51-142 | 1 | | 08/07/17 20:29 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 34.8 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-04 (0-2') **Lab ID: 50177019007** Collected: 08/03/17 13:15 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 5.7 | mg/kg | 0.99 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7440-38-2 | |
| Barium | 87.4 | mg/kg | 0.99 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.50 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7440-43-9 | |
| Chromium | 16.0 | mg/kg | 0.99 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7440-47-3 | |
| Lead | 68.2 | mg/kg | 0.99 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7439-92-1 | |
| Selenium | ND | mg/kg | 0.99 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.50 | 1 | 08/09/17 06:13 | 08/10/17 04:06 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | 6.8 | mg/kg | 1.2 | 5 | 08/09/17 21:46 | 08/10/17 12:29 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | 0.041 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 83-32-9 | |
| Acenaphthylene | 0.37 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 208-96-8 | |
| Anthracene | 0.18 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 120-12-7 | |
| Benzo(a)anthracene | 0.57 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 56-55-3 | |
| Benzo(a)pyrene | 0.43 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.39 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.37 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.38 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 207-08-9 | |
| Chrysene | 0.70 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.13 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 53-70-3 | |
| Fluoranthene | 0.62 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.31 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 193-39-5 | |
| 1-Methylnaphthalene | 0.080 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.077 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 91-57-6 | |
| Naphthalene | 0.16 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 91-20-3 | |
| Phenanthrene | 0.55 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 85-01-8 | |
| Pyrene | 0.91 | mg/kg | 0.0056 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 54 | %. | 30-94 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 63 | %. | 27-102 | 1 | 08/07/17 10:15 | 08/08/17 02:42 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.029 | 1 | | 08/07/17 21:03 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-04 (0-2') **Lab ID: 50177019007** Collected: 08/03/17 13:15 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.012 | 1 | | 08/07/17 21:03 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.023 | 1 | | 08/07/17 21:03 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.029 | 1 | | 08/07/17 21:03 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0076 | 1 | | 08/09/17 16:09 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-04 (0-2') **Lab ID: 50177019007** Collected: 08/03/17 13:15 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.12 | 1 | | 08/07/17 21:03 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0058 | 1 | | 08/07/17 21:03 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.012 | 1 | | 08/07/17 21:03 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 115 | % | 69-136 | 1 | | 08/07/17 21:03 | 1868-53-7 | |
| Toluene-d8 (S) | 109 | % | 64-150 | 1 | | 08/07/17 21:03 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 93 | % | 51-142 | 1 | | 08/07/17 21:03 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 12.1 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-04 (10-12') **Lab ID: 50177019008** Collected: 08/03/17 13:25 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|--|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 8.6 | mg/kg | 1.4 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7440-38-2 | |
| Barium | 13.5 | mg/kg | 1.4 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.69 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7440-43-9 | |
| Chromium | 5.9 | mg/kg | 1.4 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7440-47-3 | |
| Lead | 5.0 | mg/kg | 1.4 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.4 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.69 | 1 | 08/09/17 06:13 | 08/10/17 04:09 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.28 | 1 | 08/09/17 21:46 | 08/10/17 11:25 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 53-70-3 | |
| Fluoranthene | 0.0075 | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.0090 | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 91-57-6 | |
| Naphthalene | 0.029 | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 91-20-3 | |
| Phenanthrene | 0.012 | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0069 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 50 | %. | 30-94 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 45 | %. | 27-102 | 1 | 08/08/17 13:00 | 08/09/17 11:49 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | 0.13 | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 67-64-1 | 2d |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.028 | 1 | | 08/07/17 21:36 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-04 (10-12') Lab ID: 50177019008 Collected: 08/03/17 13:25 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/07/17 21:36 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.022 | 1 | | 08/07/17 21:36 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.028 | 1 | | 08/07/17 21:36 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-04 (10-12') **Lab ID: 50177019008** Collected: 08/03/17 13:25 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/07/17 21:36 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0056 | 1 | | 08/07/17 21:36 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/07/17 21:36 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 116 | % | 69-136 | 1 | | 08/07/17 21:36 | 1868-53-7 | |
| Toluene-d8 (S) | 118 | % | 64-150 | 1 | | 08/07/17 21:36 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 94 | % | 51-142 | 1 | | 08/07/17 21:36 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 27.9 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-05 (0-2') Lab ID: 50177019009 Collected: 08/03/17 12:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 10.1 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7440-38-2 | |
| Barium | 143 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7440-39-3 | |
| Cadmium | 0.57 | mg/kg | 0.53 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7440-43-9 | |
| Chromium | 23.5 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7440-47-3 | |
| Lead | 60.4 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.53 | 1 | 08/09/17 06:13 | 08/10/17 04:11 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 18.7 | mg/kg | 4.6 | 20 | 08/14/17 12:19 | 08/14/17 23:49 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.21 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 83-32-9 | |
| Acenaphthylene | 5.2 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 208-96-8 | |
| Anthracene | 1.3 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 120-12-7 | |
| Benzo(a)anthracene | 1.8 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 56-55-3 | |
| Benzo(a)pyrene | 1.1 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 50-32-8 | |
| Benzo(b)fluoranthene | 1.8 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 205-99-2 | |
| Benzo(g,h,i)perylene | 1.9 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 191-24-2 | |
| Benzo(k)fluoranthene | 2.0 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 207-08-9 | |
| Chrysene | 3.0 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.90 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 53-70-3 | |
| Fluoranthene | 1.7 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 206-44-0 | |
| Fluorene | 0.86 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 1.6 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 193-39-5 | |
| 1-Methylnaphthalene | 0.90 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 1.0 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 91-57-6 | |
| Naphthalene | 1.4 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 91-20-3 | ED |
| Phenanthrene | 1.4 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 85-01-8 | |
| Pyrene | 2.3 | mg/kg | 0.057 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 57 | %. | 30-94 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 73 | %. | 27-102 | 10 | 08/07/17 10:15 | 08/08/17 03:17 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.035 | 1 | | 08/07/17 22:10 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-05 (0-2') **Lab ID: 50177019009** Collected: 08/03/17 12:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.014 | 1 | | 08/07/17 22:10 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.028 | 1 | | 08/07/17 22:10 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.035 | 1 | | 08/07/17 22:10 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-05 (0-2') **Lab ID: 50177019009** Collected: 08/03/17 12:00 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.14 | 1 | | 08/07/17 22:10 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0070 | 1 | | 08/07/17 22:10 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.014 | 1 | | 08/07/17 22:10 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 113 | % | 69-136 | 1 | | 08/07/17 22:10 | 1868-53-7 | |
| Toluene-d8 (S) | 107 | % | 64-150 | 1 | | 08/07/17 22:10 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 91 | % | 51-142 | 1 | | 08/07/17 22:10 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 13.3 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-05 (6-8') Lab ID: 50177019010 Collected: 08/03/17 12:10 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---|---------|-------|--------------|-----|----------------|----------------|-----------|-------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 2.4 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7440-38-2 | |
| Barium | 4.7 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.57 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7440-43-9 | |
| Chromium | 3.8 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7440-47-3 | |
| Lead | 3.9 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.57 | 1 | 08/09/17 06:13 | 08/10/17 04:13 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/09/17 21:46 | 08/10/17 11:33 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | 0.55 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 83-32-9 | |
| Acenaphthylene | 0.16 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 208-96-8 | |
| Anthracene | 1.2 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 120-12-7 | |
| Benzo(a)anthracene | 0.69 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 56-55-3 | |
| Benzo(a)pyrene | 0.25 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 50-32-8 | |
| Benzo(b)fluoranthene | 0.14 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 205-99-2 | |
| Benzo(g,h,i)perylene | 0.12 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 191-24-2 | |
| Benzo(k)fluoranthene | 0.093 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 207-08-9 | |
| Chrysene | 0.91 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.064 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 53-70-3 | |
| Fluoranthene | 0.74 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 206-44-0 | |
| Fluorene | 0.82 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 0.076 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 193-39-5 | |
| 1-Methylnaphthalene | 1.8 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 85-01-8 | |
| Pyrene | 1.3 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 49 | %. | 30-94 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 41 | %. | 27-102 | 1 | 08/07/17 10:15 | 08/08/17 03:34 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 67-64-1 | |
| Acrolein | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 71-43-2 | 1d,D3 |
| Bromobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 3.0 | 100 | | 08/07/17 22:43 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-05 (6-8') **Lab ID: 50177019010** Collected: 08/03/17 12:10 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|-------------|-----------------------------|--------------|-----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | 0.95 | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 1.2 | 100 | | 08/07/17 22:43 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 2.4 | 100 | | 08/07/17 22:43 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 3.0 | 100 | | 08/07/17 22:43 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 1634-04-4 | 3d |
| Naphthalene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-05 (6-8') **Lab ID: 50177019010** Collected: 08/03/17 12:10 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|-----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 12.1 | 100 | | 08/07/17 22:43 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.60 | 100 | | 08/07/17 22:43 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 1.2 | 100 | | 08/07/17 22:43 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 104 | % | 69-136 | 100 | | 08/07/17 22:43 | 1868-53-7 | |
| Toluene-d8 (S) | 98 | % | 64-150 | 100 | | 08/07/17 22:43 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 112 | % | 51-142 | 100 | | 08/07/17 22:43 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 19.7 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

Sample: 02-SB-06 (0-2') **Lab ID: 50177019011** Collected: 08/03/17 11:15 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 11.4 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7440-38-2 | |
| Barium | 39.7 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.54 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7440-43-9 | |
| Chromium | 14.6 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7440-47-3 | |
| Lead | 90.5 | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.1 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.54 | 1 | 08/09/17 06:13 | 08/10/17 04:15 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | 7.0 | mg/kg | 1.1 | 5 | 08/09/17 21:46 | 08/10/17 12:37 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 83-32-9 | |
| Acenaphthylene | 3.2 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 208-96-8 | |
| Anthracene | 0.96 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 120-12-7 | |
| Benzo(a)anthracene | 1.8 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 56-55-3 | |
| Benzo(a)pyrene | 1.0 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 50-32-8 | |
| Benzo(b)fluoranthene | 1.8 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 205-99-2 | |
| Benzo(g,h,i)perylene | 1.9 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 191-24-2 | |
| Benzo(k)fluoranthene | 1.6 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 207-08-9 | |
| Chrysene | 2.9 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 218-01-9 | |
| Dibenz(a,h)anthracene | 0.81 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 53-70-3 | |
| Fluoranthene | 1.4 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 206-44-0 | |
| Fluorene | 0.46 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | 1.5 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 193-39-5 | |
| 1-Methylnaphthalene | 0.29 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 90-12-0 | N2 |
| 2-Methylnaphthalene | 0.35 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 91-57-6 | |
| Naphthalene | 0.36 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 91-20-3 | ED |
| Phenanthrene | 1.1 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 85-01-8 | |
| Pyrene | 2.5 | mg/kg | 0.029 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 42 | % | 30-94 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 49 | % | 27-102 | 5 | 08/07/17 10:15 | 08/08/17 03:52 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 08/07/17 23:17 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-06 (0-2') Lab ID: 50177019011 Collected: 08/03/17 11:15 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/07/17 23:17 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.021 | 1 | | 08/07/17 23:17 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 08/07/17 23:17 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-06 (0-2') **Lab ID: 50177019011** Collected: 08/03/17 11:15 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:17 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0053 | 1 | | 08/07/17 23:17 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/07/17 23:17 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 112 | % | 69-136 | 1 | | 08/07/17 23:17 | 1868-53-7 | |
| Toluene-d8 (S) | 109 | % | 64-150 | 1 | | 08/07/17 23:17 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 89 | % | 51-142 | 1 | | 08/07/17 23:17 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 13.3 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-06 (12-14') **Lab ID: 50177019012** Collected: 08/03/17 11:25 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|--|---------|-------|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | | | |
| Arsenic | 1.5 | mg/kg | 1.2 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7440-38-2 | |
| Barium | 3.5 | mg/kg | 1.2 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.58 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7440-43-9 | |
| Chromium | 2.9 | mg/kg | 1.2 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7440-47-3 | |
| Lead | 2.5 | mg/kg | 1.2 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.58 | 1 | 08/09/17 06:13 | 08/10/17 04:17 | 7440-22-4 | |
| 7471 Mercury Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | | | |
| Mercury | ND | mg/kg | 0.24 | 1 | 08/09/17 21:46 | 08/10/17 12:00 | 7439-97-6 | |
| 8270 MSSV PAH by SIM Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 193-39-5 | |
| 1-Methylnaphthalene | 0.018 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 91-57-6 | |
| Naphthalene | 0.026 | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0062 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 39 | % | 30-94 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 34 | % | 27-102 | 1 | 08/07/17 10:15 | 08/08/17 05:01 | 1718-51-0 | |
| 8260 MSV 5035A VOA Analytical Method: EPA 8260 | | | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.029 | 1 | | 08/07/17 23:50 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-06 (12-14') Lab ID: 50177019012 Collected: 08/03/17 11:25 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/07/17 23:50 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.023 | 1 | | 08/07/17 23:50 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.029 | 1 | | 08/07/17 23:50 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-SB-06 (12-14') **Lab ID: 50177019012** Collected: 08/03/17 11:25 Received: 08/04/17 14:08 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/07/17 23:50 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0057 | 1 | | 08/07/17 23:50 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/07/17 23:50 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 110 | % | 69-136 | 1 | | 08/07/17 23:50 | 1868-53-7 | |
| Toluene-d8 (S) | 101 | % | 64-150 | 1 | | 08/07/17 23:50 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 94 | % | 51-142 | 1 | | 08/07/17 23:50 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 19.8 | % | 0.10 | 1 | | 08/09/17 10:07 | | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-DUP-01 Lab ID: 50177022001 Collected: 08/03/17 08:00 Received: 08/04/17 14:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|---|--------------|----|----------------|----------------|-----------|------|
| 6010 MET ICP | | Analytical Method: EPA 6010 Preparation Method: EPA 3050 | | | | | | |
| Arsenic | 4.2 | mg/kg | 1.2 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7440-38-2 | |
| Barium | 6.9 | mg/kg | 1.2 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7440-39-3 | |
| Cadmium | ND | mg/kg | 0.62 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7440-43-9 | |
| Chromium | 4.0 | mg/kg | 1.2 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7440-47-3 | |
| Lead | 3.9 | mg/kg | 1.2 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7439-92-1 | |
| Selenium | ND | mg/kg | 1.2 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7782-49-2 | |
| Silver | ND | mg/kg | 0.62 | 1 | 08/09/17 06:14 | 08/14/17 11:33 | 7440-22-4 | |
| 7471 Mercury | | Analytical Method: EPA 7471 Preparation Method: EPA 7471 | | | | | | |
| Mercury | ND | mg/kg | 0.25 | 1 | 08/14/17 12:14 | 08/14/17 20:13 | 7439-97-6 | |
| 8270 MSSV PAH by SIM | | Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 | | | | | | |
| Acenaphthene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 83-32-9 | |
| Acenaphthylene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 208-96-8 | |
| Anthracene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 120-12-7 | |
| Benzo(a)anthracene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 56-55-3 | |
| Benzo(a)pyrene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 50-32-8 | |
| Benzo(b)fluoranthene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 205-99-2 | |
| Benzo(g,h,i)perylene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 191-24-2 | |
| Benzo(k)fluoranthene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 207-08-9 | |
| Chrysene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 218-01-9 | |
| Dibenz(a,h)anthracene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 53-70-3 | |
| Fluoranthene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 206-44-0 | |
| Fluorene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 86-73-7 | |
| Indeno(1,2,3-cd)pyrene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 193-39-5 | |
| 1-Methylnaphthalene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 90-12-0 | N2 |
| 2-Methylnaphthalene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 91-57-6 | |
| Naphthalene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 91-20-3 | |
| Phenanthrene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 85-01-8 | |
| Pyrene | ND | mg/kg | 0.0063 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 129-00-0 | |
| Surrogates | | | | | | | | |
| 2-Fluorobiphenyl (S) | 40 | %. | 30-94 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 321-60-8 | |
| p-Terphenyl-d14 (S) | 28 | %. | 27-102 | 1 | 08/07/17 10:15 | 08/08/17 04:09 | 1718-51-0 | |
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Acetone | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 67-64-1 | |
| Acrolein | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 107-02-8 | |
| Acrylonitrile | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 107-13-1 | |
| Benzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 71-43-2 | |
| Bromobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 108-86-1 | |
| Bromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 74-97-5 | |
| Bromodichloromethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-27-4 | |
| Bromoform | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-25-2 | |
| Bromomethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 74-83-9 | |
| 2-Butanone (MEK) | ND | mg/kg | 0.027 | 1 | | 08/05/17 15:53 | 78-93-3 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-DUP-01 Lab ID: 50177022001 Collected: 08/03/17 08:00 Received: 08/04/17 14:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|-----------------------------|---------|-----------------------------|--------------|----|----------|----------------|------------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| n-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 104-51-8 | |
| sec-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 135-98-8 | |
| tert-Butylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 98-06-6 | |
| Carbon disulfide | ND | mg/kg | 0.011 | 1 | | 08/05/17 15:53 | 75-15-0 | |
| Carbon tetrachloride | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 56-23-5 | |
| Chlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 108-90-7 | |
| Chloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-00-3 | |
| Chloroform | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 67-66-3 | |
| Chloromethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 74-87-3 | |
| 2-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 95-49-8 | |
| 4-Chlorotoluene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 106-43-4 | |
| Dibromochloromethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 124-48-1 | |
| 1,2-Dibromoethane (EDB) | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 106-93-4 | |
| Dibromomethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 74-95-3 | |
| 1,2-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 95-50-1 | |
| 1,3-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 541-73-1 | |
| 1,4-Dichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 106-46-7 | |
| trans-1,4-Dichloro-2-butene | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 110-57-6 | |
| Dichlorodifluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-71-8 | |
| 1,1-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-34-3 | |
| 1,2-Dichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 107-06-2 | |
| 1,1-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-35-4 | |
| cis-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 156-59-2 | |
| trans-1,2-Dichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 156-60-5 | |
| 1,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 78-87-5 | |
| 1,3-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 142-28-9 | |
| 2,2-Dichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 594-20-7 | |
| 1,1-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 563-58-6 | |
| cis-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 10061-01-5 | |
| trans-1,3-Dichloropropene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 10061-02-6 | |
| Ethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 100-41-4 | |
| Ethyl methacrylate | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 97-63-2 | |
| Hexachloro-1,3-butadiene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 87-68-3 | |
| n-Hexane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 110-54-3 | |
| 2-Hexanone | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 591-78-6 | |
| Iodomethane | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 74-88-4 | |
| Isopropylbenzene (Cumene) | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 98-82-8 | |
| p-Isopropyltoluene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 99-87-6 | |
| Methylene Chloride | ND | mg/kg | 0.022 | 1 | | 08/05/17 15:53 | 75-09-2 | |
| 4-Methyl-2-pentanone (MIBK) | ND | mg/kg | 0.027 | 1 | | 08/05/17 15:53 | 108-10-1 | |
| Methyl-tert-butyl ether | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 1634-04-4 | |
| Naphthalene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 91-20-3 | |
| n-Propylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 103-65-1 | |
| Styrene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 100-42-5 | |
| 1,1,1,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 630-20-6 | |
| 1,1,2,2-Tetrachloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 79-34-5 | |

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

Sample: 02-DUP-01 **Lab ID: 50177022001** Collected: 08/03/17 08:00 Received: 08/04/17 14:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

| Parameters | Results | Units | Report Limit | DF | Prepared | Analyzed | CAS No. | Qual |
|---------------------------|-------------|-----------------------------|--------------|----|----------|----------------|-----------|------|
| 8260 MSV 5035A VOA | | Analytical Method: EPA 8260 | | | | | | |
| Tetrachloroethene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 127-18-4 | |
| Toluene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 108-88-3 | |
| 1,2,3-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 87-61-6 | |
| 1,2,4-Trichlorobenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 120-82-1 | |
| 1,1,1-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 71-55-6 | |
| 1,1,2-Trichloroethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 79-00-5 | |
| Trichloroethene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 79-01-6 | |
| Trichlorofluoromethane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-69-4 | |
| 1,2,3-Trichloropropane | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 96-18-4 | |
| 1,2,4-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 95-63-6 | |
| 1,3,5-Trimethylbenzene | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 108-67-8 | |
| Vinyl acetate | ND | mg/kg | 0.11 | 1 | | 08/05/17 15:53 | 108-05-4 | |
| Vinyl chloride | ND | mg/kg | 0.0054 | 1 | | 08/05/17 15:53 | 75-01-4 | |
| Xylene (Total) | ND | mg/kg | 0.011 | 1 | | 08/05/17 15:53 | 1330-20-7 | |
| Surrogates | | | | | | | | |
| Dibromofluoromethane (S) | 113 | % | 69-136 | 1 | | 08/05/17 15:53 | 1868-53-7 | |
| Toluene-d8 (S) | 104 | % | 64-150 | 1 | | 08/05/17 15:53 | 2037-26-5 | |
| 4-Bromofluorobenzene (S) | 88 | % | 51-142 | 1 | | 08/05/17 15:53 | 460-00-4 | |
| Percent Moisture | | Analytical Method: SM 2540G | | | | | | |
| Percent Moisture | 20.9 | % | 0.10 | 1 | | 08/08/17 11:19 | | |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

QC Batch: 400584 Analysis Method: EPA 7471
 QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
 Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019010, 50177019011, 50177019012

METHOD BLANK: 1844315 Matrix: Solid
 Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019010, 50177019011, 50177019012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury | mg/kg | ND | 0.20 | 08/10/17 10:37 | |

LABORATORY CONTROL SAMPLE: 1844316

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury | mg/kg | .5 | 0.49 | 99 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1844317 1844318

| Parameter | Units | 50177019001 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|----------------|-----------------|-----------|------------|----------|-----------|--------------|-----|---------|-------|
| Mercury | mg/kg | 7.4 | .57 | .57 | 3.2 | 6.2 | -731 | -200 | 75-125 | 63 | 20 | P6,R1 |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

QC Batch: 400759

Analysis Method: EPA 7471

QC Batch Method: EPA 7471

Analysis Description: 7471 Mercury

Associated Lab Samples: 50177022001

METHOD BLANK: 1845015

Matrix: Solid

Associated Lab Samples: 50177022001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury | mg/kg | ND | 0.20 | 08/14/17 20:08 | |

LABORATORY CONTROL SAMPLE: 1845016

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury | mg/kg | .48 | 0.44 | 92 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1845017 1845018

| Parameter | Units | 50176927006 | | MS | | MSD | | MS | | MSD | | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|-------------|-------|-------------|-------------|--------|--------|-------|-------|--------|---|--------------|-----|---------|------|
| | | Result | Conc. | Spike Conc. | Spike Conc. | Result | Result | % Rec | % Rec | | | | | | |
| Mercury | mg/kg | ND | | .61 | .58 | 0.59 | 0.61 | 93 | 103 | 75-125 | 4 | 20 | | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

QC Batch: 401177 Analysis Method: EPA 7471
 QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
 Associated Lab Samples: 50177019009

METHOD BLANK: 1847013 Matrix: Solid

Associated Lab Samples: 50177019009

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Mercury | mg/kg | ND | 0.19 | 08/14/17 21:14 | |

LABORATORY CONTROL SAMPLE: 1847014

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Mercury | mg/kg | .48 | 0.50 | 105 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1847015 1847016

| Parameter | Units | 50177364001 | | 1847015 | | 1847016 | | % Rec Limits | RPD | Max RPD | Qual | |
|-----------|-------|-------------|-----------------|----------------|-----------------|-----------|------------|--------------|-----|---------|------|----------|
| | | MS Result | MSD Spike Conc. | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | | | | | MS % Rec |
| Mercury | mg/kg | ND | .53 | .53 | .53 | 0.46 | 0.46 | 68 | 67 | 75-125 | 0 | 20 M3 |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

QC Batch: 399983 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019009, 50177019010, 50177019011, 50177019012

METHOD BLANK: 1841875 Matrix: Solid
Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019009, 50177019010, 50177019011, 50177019012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Arsenic | mg/kg | ND | 1.0 | 08/10/17 03:18 | |
| Barium | mg/kg | ND | 1.0 | 08/10/17 03:18 | |
| Cadmium | mg/kg | ND | 0.50 | 08/10/17 03:18 | |
| Chromium | mg/kg | ND | 1.0 | 08/10/17 03:18 | |
| Lead | mg/kg | ND | 1.0 | 08/10/17 03:18 | |
| Selenium | mg/kg | ND | 1.0 | 08/10/17 03:18 | |
| Silver | mg/kg | ND | 0.50 | 08/10/17 03:18 | |

LABORATORY CONTROL SAMPLE: 1841876

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Arsenic | mg/kg | 50 | 48.8 | 98 | 80-120 | |
| Barium | mg/kg | 50 | 45.1 | 90 | 80-120 | |
| Cadmium | mg/kg | 50 | 46.7 | 93 | 80-120 | |
| Chromium | mg/kg | 50 | 47.4 | 95 | 80-120 | |
| Lead | mg/kg | 50 | 45.3 | 91 | 80-120 | |
| Selenium | mg/kg | 50 | 45.2 | 90 | 80-120 | |
| Silver | mg/kg | 25 | 23.8 | 95 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1841877 1841878

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual | |
|-----------|-------|--------------------|-------------|-------------|-----------|----------|-----------|--------------|--------|---------|------|------------|
| | | 50176998002 Result | Spike Conc. | Spike Conc. | MS Result | | | | | | | MSD Result |
| Arsenic | mg/kg | 2.1 | 50.7 | 48.1 | 50.2 | 48.2 | 95 | 96 | 75-125 | 4 | 20 | |
| Barium | mg/kg | 8.0 | 50.7 | 48.1 | 53.1 | 50.6 | 89 | 88 | 75-125 | 5 | 20 | |
| Cadmium | mg/kg | ND | 50.7 | 48.1 | 46.1 | 44.4 | 91 | 92 | 75-125 | 4 | 20 | |
| Chromium | mg/kg | 5.8 | 50.7 | 48.1 | 50.8 | 47.3 | 89 | 86 | 75-125 | 7 | 20 | |
| Lead | mg/kg | 2.6 | 50.7 | 48.1 | 42.1 | 41.1 | 78 | 80 | 75-125 | 2 | 20 | |
| Selenium | mg/kg | ND | 50.7 | 48.1 | 43.5 | 42.2 | 86 | 88 | 75-125 | 3 | 20 | |
| Silver | mg/kg | ND | 25.3 | 24.1 | 23.9 | 22.3 | 94 | 93 | 75-125 | 7 | 20 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

QC Batch: 400022 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 50177022001

METHOD BLANK: 1841992 Matrix: Solid
Associated Lab Samples: 50177022001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------|-------|--------------|-----------------|----------------|------------|
| Arsenic | mg/kg | ND | 1.0 | 08/14/17 11:20 | |
| Barium | mg/kg | ND | 1.0 | 08/14/17 11:20 | |
| Cadmium | mg/kg | ND | 0.50 | 08/14/17 11:20 | |
| Chromium | mg/kg | ND | 1.0 | 08/14/17 11:20 | |
| Lead | mg/kg | ND | 1.0 | 08/14/17 11:20 | |
| Selenium | mg/kg | ND | 1.0 | 08/14/17 11:20 | |
| Silver | mg/kg | ND | 0.50 | 08/14/17 11:20 | |

LABORATORY CONTROL SAMPLE: 1841993

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------|-------|-------------|------------|-----------|--------------|------------|
| Arsenic | mg/kg | 50 | 50.4 | 101 | 80-120 | |
| Barium | mg/kg | 50 | 49.0 | 98 | 80-120 | |
| Cadmium | mg/kg | 50 | 47.6 | 95 | 80-120 | |
| Chromium | mg/kg | 50 | 47.3 | 95 | 80-120 | |
| Lead | mg/kg | 50 | 46.1 | 92 | 80-120 | |
| Selenium | mg/kg | 50 | 49.1 | 98 | 80-120 | |
| Silver | mg/kg | 25 | 23.9 | 96 | 80-120 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1841994 1841995

| Parameter | Units | MS | | MSD | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual |
|-----------|-------|--------------------|-------------|-------------|-----------|----------|-----------|--------------|--------|---------|----------|
| | | 50176927006 Result | Spike Conc. | Spike Conc. | MS Result | | | | | | |
| Arsenic | mg/kg | 17.3 | 53.1 | 58.7 | 65.5 | 72.9 | 91 | 95 | 75-125 | 11 | 20 |
| Barium | mg/kg | 29.4 | 53.1 | 58.7 | 92.8 | 82.3 | 119 | 90 | 75-125 | 12 | 20 |
| Cadmium | mg/kg | ND | 53.1 | 58.7 | 48.3 | 55.5 | 91 | 94 | 75-125 | 14 | 20 |
| Chromium | mg/kg | 14.1 | 53.1 | 58.7 | 54.0 | 61.2 | 75 | 80 | 75-125 | 13 | 20 |
| Lead | mg/kg | 8.2 | 53.1 | 58.7 | 46.6 | 57.2 | 72 | 84 | 75-125 | 21 | 20 4d,M0 |
| Selenium | mg/kg | ND | 53.1 | 58.7 | 48.0 | 54.6 | 90 | 93 | 75-125 | 13 | 20 |
| Silver | mg/kg | ND | 26.6 | 29.4 | 25.1 | 28.8 | 95 | 98 | 75-125 | 14 | 20 |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

QC Batch: 399997 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50177022001

METHOD BLANK: 1841925 Matrix: Solid
Associated Lab Samples: 50177022001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 08/05/17 06:25 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 08/05/17 06:25 | |
| Acetone | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Acrolein | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Benzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Bromoform | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Bromomethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 08/05/17 06:25 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Chloroethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Chloroform | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Chloromethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

METHOD BLANK: 1841925 Matrix: Solid
Associated Lab Samples: 50177022001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Iodomethane | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Methylene Chloride | mg/kg | ND | 0.020 | 08/05/17 06:25 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| n-Hexane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Naphthalene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Styrene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Toluene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 08/05/17 06:25 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 08/05/17 06:25 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 08/05/17 06:25 | |
| 4-Bromofluorobenzene (S) | % | 101 | 51-142 | 08/05/17 06:25 | |
| Dibromofluoromethane (S) | % | 111 | 69-136 | 08/05/17 06:25 | |
| Toluene-d8 (S) | % | 96 | 64-150 | 08/05/17 06:25 | |

LABORATORY CONTROL SAMPLE: 1841926

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.052 | 104 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.044 | 88 | 68-125 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.054 | 107 | 70-132 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.045 | 89 | 70-118 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.050 | 101 | 76-122 | |
| Benzene | mg/kg | .05 | 0.054 | 107 | 75-119 | |
| Chlorobenzene | mg/kg | .05 | 0.048 | 97 | 75-114 | |
| Chloroform | mg/kg | .05 | 0.051 | 101 | 71-114 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

LABORATORY CONTROL SAMPLE: 1841926

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.055 | 110 | 79-121 | |
| Ethylbenzene | mg/kg | .05 | 0.048 | 96 | 73-121 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.048 | 96 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.050 | 101 | 74-121 | |
| Naphthalene | mg/kg | .05 | 0.042 | 85 | 65-122 | |
| Tetrachloroethene | mg/kg | .05 | 0.049 | 98 | 68-120 | |
| Toluene | mg/kg | .05 | 0.047 | 94 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.054 | 107 | 76-125 | |
| Trichloroethene | mg/kg | .05 | 0.052 | 105 | 77-115 | |
| Vinyl chloride | mg/kg | .05 | 0.049 | 99 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.14 | 95 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 96 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 100 | 69-136 | |
| Toluene-d8 (S) | % | | | 96 | 64-150 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1841927 1841928

| Parameter | Units | 1841927 | | 1841928 | | MS % Rec | MSD % Rec | % Rec Limits | RPD | Max RPD | Qual | |
|---------------------------|-------|--------------------|----------------|-----------------|-----------|----------|-----------|--------------|--------|---------|------|------------|
| | | 50176948005 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | | | | | | | MSD Result |
| 1,1,1-Trichloroethane | mg/kg | ND | .05 | .051 | 0.049 | 0.049 | 98 | 96 | 31-146 | 0 | 20 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | .05 | .051 | 0.041 | 0.037 | 81 | 73 | 22-171 | 9 | 20 | |
| 1,1-Dichloroethene | mg/kg | ND | .05 | .051 | 0.052 | 0.050 | 104 | 99 | 53-154 | 3 | 20 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | .05 | .051 | 0.036 | 0.036 | 71 | 71 | 10-162 | 2 | 20 | |
| 1,2-Dichloropropane | mg/kg | ND | .05 | .051 | 0.045 | 0.045 | 91 | 88 | 49-140 | 1 | 20 | |
| Benzene | mg/kg | ND | .05 | .051 | 0.048 | 0.048 | 96 | 94 | 43-141 | 0 | 20 | |
| Chlorobenzene | mg/kg | ND | .05 | .051 | 0.035 | 0.035 | 70 | 69 | 20-141 | 1 | 20 | |
| Chloroform | mg/kg | ND | .05 | .051 | 0.047 | 0.045 | 93 | 88 | 49-134 | 4 | 20 | |
| cis-1,2-Dichloroethene | mg/kg | ND | .05 | .051 | 0.049 | 0.047 | 98 | 93 | 50-144 | 3 | 20 | |
| Ethylbenzene | mg/kg | ND | .05 | .051 | 0.039 | 0.040 | 79 | 79 | 21-149 | 2 | 20 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | .05 | .051 | 0.037 | 0.039 | 74 | 77 | 15-152 | 5 | 20 | |
| Methyl-tert-butyl ether | mg/kg | ND | .05 | .051 | 0.050 | 0.049 | 99 | 96 | 60-141 | 1 | 20 | |
| Naphthalene | mg/kg | ND | .05 | .051 | 0.012 | 0.014 | 25 | 28 | 10-134 | 15 | 20 | |
| Tetrachloroethene | mg/kg | ND | .05 | .051 | 0.044 | 0.044 | 88 | 87 | 21-155 | 1 | 20 | |
| Toluene | mg/kg | ND | .05 | .051 | 0.042 | 0.041 | 85 | 81 | 30-146 | 2 | 20 | |
| trans-1,2-Dichloroethene | mg/kg | ND | .05 | .051 | 0.049 | 0.049 | 99 | 96 | 50-146 | 0 | 20 | |
| Trichloroethene | mg/kg | ND | .05 | .051 | 0.043 | 0.043 | 86 | 84 | 25-162 | 0 | 20 | |
| Vinyl chloride | mg/kg | ND | .05 | .051 | 0.051 | 0.049 | 102 | 96 | 51-160 | 4 | 20 | |
| Xylene (Total) | mg/kg | ND | .15 | .15 | 0.11 | 0.12 | 76 | 75 | 15-151 | 2 | 20 | |
| 4-Bromofluorobenzene (S) | % | | | | | | 88 | 92 | 51-142 | | | |
| Dibromofluoromethane (S) | % | | | | | | 101 | 100 | 69-136 | | | |
| Toluene-d8 (S) | % | | | | | | 105 | 102 | 64-150 | | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

QC Batch: 400215 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019009, 50177019010, 50177019011, 50177019012

METHOD BLANK: 1842681 Matrix: Solid
Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019009, 50177019010, 50177019011, 50177019012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| 1,1,1,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,1,1-Trichloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,1,2-Trichloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,1-Dichloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,1-Dichloroethene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,1-Dichloropropene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2,3-Trichlorobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2,3-Trichloropropane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2,4-Trichlorobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2,4-Trimethylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2-Dibromoethane (EDB) | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2-Dichloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,2-Dichloropropane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,3,5-Trimethylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,3-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,3-Dichloropropane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 1,4-Dichlorobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 2,2-Dichloropropane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 2-Butanone (MEK) | mg/kg | ND | 0.025 | 08/07/17 15:28 | |
| 2-Chlorotoluene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 2-Hexanone | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| 4-Chlorotoluene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| 4-Methyl-2-pentanone (MIBK) | mg/kg | ND | 0.025 | 08/07/17 15:28 | |
| Acetone | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Acrolein | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Acrylonitrile | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Benzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Bromobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Bromochloromethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Bromodichloromethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Bromoform | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Bromomethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Carbon disulfide | mg/kg | ND | 0.010 | 08/07/17 15:28 | |
| Carbon tetrachloride | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Chlorobenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Chloroethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Chloroform | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Chloromethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

METHOD BLANK: 1842681

Matrix: Solid

Associated Lab Samples: 50177019001, 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019008, 50177019009, 50177019010, 50177019011, 50177019012

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|-----------------------------|-------|--------------|-----------------|----------------|------------|
| cis-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| cis-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Dibromochloromethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Dibromomethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Dichlorodifluoromethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Ethyl methacrylate | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Ethylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Hexachloro-1,3-butadiene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Iodomethane | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Isopropylbenzene (Cumene) | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Methyl-tert-butyl ether | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Methylene Chloride | mg/kg | 0.022 | 0.020 | 08/07/17 15:28 | |
| n-Butylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| n-Hexane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| n-Propylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Naphthalene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| p-Isopropyltoluene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| sec-Butylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Styrene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| tert-Butylbenzene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Tetrachloroethene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Toluene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| trans-1,2-Dichloroethene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| trans-1,3-Dichloropropene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| trans-1,4-Dichloro-2-butene | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Trichloroethene | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Trichlorofluoromethane | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Vinyl acetate | mg/kg | ND | 0.10 | 08/07/17 15:28 | |
| Vinyl chloride | mg/kg | ND | 0.0050 | 08/07/17 15:28 | |
| Xylene (Total) | mg/kg | ND | 0.010 | 08/07/17 15:28 | |
| 4-Bromofluorobenzene (S) | % | 100 | 51-142 | 08/07/17 15:28 | |
| Dibromofluoromethane (S) | % | 111 | 69-136 | 08/07/17 15:28 | |
| Toluene-d8 (S) | % | 96 | 64-150 | 08/07/17 15:28 | |

LABORATORY CONTROL SAMPLE: 1842682

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1,1,1-Trichloroethane | mg/kg | .05 | 0.050 | 100 | 72-126 | |
| 1,1,2,2-Tetrachloroethane | mg/kg | .05 | 0.045 | 89 | 68-125 | |
| 1,1-Dichloroethene | mg/kg | .05 | 0.052 | 104 | 70-132 | |
| 1,2,4-Trimethylbenzene | mg/kg | .05 | 0.048 | 97 | 70-118 | |
| 1,2-Dichloropropane | mg/kg | .05 | 0.048 | 97 | 76-122 | |
| Benzene | mg/kg | .05 | 0.052 | 103 | 75-119 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

LABORATORY CONTROL SAMPLE: 1842682

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|---------------------------|-------|-------------|------------|-----------|--------------|------------|
| Chlorobenzene | mg/kg | .05 | 0.050 | 100 | 75-114 | |
| Chloroform | mg/kg | .05 | 0.048 | 95 | 71-114 | |
| cis-1,2-Dichloroethene | mg/kg | .05 | 0.050 | 99 | 79-121 | |
| Ethylbenzene | mg/kg | .05 | 0.051 | 102 | 73-121 | |
| Isopropylbenzene (Cumene) | mg/kg | .05 | 0.051 | 102 | 72-122 | |
| Methyl-tert-butyl ether | mg/kg | .05 | 0.048 | 95 | 74-121 | |
| Naphthalene | mg/kg | .05 | 0.044 | 87 | 65-122 | |
| Tetrachloroethene | mg/kg | .05 | 0.056 | 112 | 68-120 | |
| Toluene | mg/kg | .05 | 0.049 | 99 | 71-114 | |
| trans-1,2-Dichloroethene | mg/kg | .05 | 0.054 | 107 | 76-125 | |
| Trichloroethene | mg/kg | .05 | 0.053 | 105 | 77-115 | |
| Vinyl chloride | mg/kg | .05 | 0.049 | 98 | 66-139 | |
| Xylene (Total) | mg/kg | .15 | 0.15 | 101 | 71-119 | |
| 4-Bromofluorobenzene (S) | % | | | 100 | 51-142 | |
| Dibromofluoromethane (S) | % | | | 97 | 69-136 | |
| Toluene-d8 (S) | % | | | 100 | 64-150 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

QC Batch: 400073 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM
Associated Lab Samples: 50177019001

METHOD BLANK: 1842245 Matrix: Solid
Associated Lab Samples: 50177019001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| 1-Methylnaphthalene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | N2 |
| 2-Methylnaphthalene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Acenaphthene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Acenaphthylene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Anthracene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Benzo(a)anthracene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Benzo(a)pyrene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Benzo(b)fluoranthene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Benzo(g,h,i)perylene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Benzo(k)fluoranthene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Chrysene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Dibenz(a,h)anthracene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Fluoranthene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Fluorene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Naphthalene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Phenanthrene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| Pyrene | mg/kg | ND | 0.0050 | 08/07/17 17:44 | |
| 2-Fluorobiphenyl (S) | % | 53 | 30-94 | 08/07/17 17:44 | |
| p-Terphenyl-d14 (S) | % | 80 | 27-102 | 08/07/17 17:44 | |

LABORATORY CONTROL SAMPLE: 1842246

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1-Methylnaphthalene | mg/kg | .33 | 0.17 | 52 | 38-105 | N2 |
| 2-Methylnaphthalene | mg/kg | .33 | 0.18 | 53 | 38-104 | |
| Acenaphthene | mg/kg | .33 | 0.18 | 53 | 39-108 | |
| Acenaphthylene | mg/kg | .33 | 0.18 | 55 | 39-108 | |
| Anthracene | mg/kg | .33 | 0.20 | 60 | 41-119 | |
| Benzo(a)anthracene | mg/kg | .33 | 0.25 | 76 | 42-125 | |
| Benzo(a)pyrene | mg/kg | .33 | 0.23 | 69 | 33-143 | |
| Benzo(b)fluoranthene | mg/kg | .33 | 0.25 | 74 | 31-143 | |
| Benzo(g,h,i)perylene | mg/kg | .33 | 0.24 | 71 | 34-138 | |
| Benzo(k)fluoranthene | mg/kg | .33 | 0.20 | 60 | 32-140 | |
| Chrysene | mg/kg | .33 | 0.23 | 70 | 44-121 | |
| Dibenz(a,h)anthracene | mg/kg | .33 | 0.24 | 74 | 32-144 | |
| Fluoranthene | mg/kg | .33 | 0.24 | 72 | 42-122 | |
| Fluorene | mg/kg | .33 | 0.20 | 61 | 40-114 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | .33 | 0.24 | 72 | 33-142 | |
| Naphthalene | mg/kg | .33 | 0.17 | 51 | 37-101 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

LABORATORY CONTROL SAMPLE: 1842246

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------|-------|-------------|------------|-----------|--------------|------------|
| Phenanthrene | mg/kg | .33 | 0.22 | 66 | 40-116 | |
| Pyrene | mg/kg | .33 | 0.23 | 68 | 43-121 | |
| 2-Fluorobiphenyl (S) | % | | | 47 | 30-94 | |
| p-Terphenyl-d14 (S) | % | | | 59 | 27-102 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1842247 1842248

| Parameter | Units | 50176998001 | | MSD | | MS | | MSD | | % Rec Limits | RPD | Max RPD | Qual |
|------------------------|-------|-------------|-------------|-------------|-----------|------------|----------|-----------|--------|--------------|-----|---------|------|
| | | Result | Spike Conc. | Spike Conc. | MS Result | MSD Result | MS % Rec | MSD % Rec | | | | | |
| 1-Methylnaphthalene | mg/kg | ND | .35 | .35 | 0.24 | 0.24 | 67 | 68 | 14-124 | 1 | 20 | N2 | |
| 2-Methylnaphthalene | mg/kg | 5.5 ug/kg | .35 | .35 | 0.25 | 0.25 | 70 | 69 | 13-123 | 1 | 20 | | |
| Acenaphthene | mg/kg | ND | .35 | .35 | 0.25 | 0.24 | 69 | 68 | 20-120 | 3 | 20 | | |
| Acenaphthylene | mg/kg | ND | .35 | .35 | 0.25 | 0.25 | 71 | 71 | 22-116 | 2 | 20 | | |
| Anthracene | mg/kg | ND | .35 | .35 | 0.24 | 0.24 | 66 | 68 | 19-128 | 1 | 20 | | |
| Benzo(a)anthracene | mg/kg | 7.1 ug/kg | .35 | .35 | 0.29 | 0.30 | 80 | 82 | 16-134 | 1 | 20 | | |
| Benzo(a)pyrene | mg/kg | 5.9 ug/kg | .35 | .35 | 0.26 | 0.26 | 71 | 73 | 10-148 | 2 | 20 | | |
| Benzo(b)fluoranthene | mg/kg | 8.3 ug/kg | .35 | .35 | 0.28 | 0.27 | 77 | 74 | 10-148 | 5 | 20 | | |
| Benzo(g,h,i)perylene | mg/kg | 8.2 ug/kg | .35 | .35 | 0.27 | 0.27 | 73 | 75 | 10-141 | 2 | 20 | | |
| Benzo(k)fluoranthene | mg/kg | 6.6 ug/kg | .35 | .35 | 0.23 | 0.25 | 63 | 68 | 10-146 | 6 | 20 | | |
| Chrysene | mg/kg | 10.4 ug/kg | .35 | .35 | 0.28 | 0.28 | 75 | 78 | 15-133 | 2 | 20 | | |
| Dibenz(a,h)anthracene | mg/kg | ND | .35 | .35 | 0.27 | 0.27 | 75 | 75 | 10-142 | 1 | 20 | | |
| Fluoranthene | mg/kg | 14.1 ug/kg | .35 | .35 | 0.29 | 0.31 | 76 | 83 | 13-135 | 7 | 20 | | |
| Fluorene | mg/kg | ND | .35 | .35 | 0.27 | 0.26 | 75 | 75 | 21-125 | 1 | 20 | | |
| Indeno(1,2,3-cd)pyrene | mg/kg | 6.1 ug/kg | .35 | .35 | 0.27 | 0.27 | 73 | 74 | 10-143 | 0 | 20 | | |
| Naphthalene | mg/kg | ND | .35 | .35 | 0.24 | 0.23 | 66 | 65 | 12-123 | 2 | 20 | | |
| Phenanthrene | mg/kg | 12.8 ug/kg | .35 | .35 | 0.28 | 0.29 | 75 | 80 | 13-133 | 4 | 20 | | |
| Pyrene | mg/kg | 13.9 ug/kg | .35 | .35 | 0.28 | 0.30 | 75 | 81 | 11-137 | 6 | 20 | | |
| 2-Fluorobiphenyl (S) | % | | | | | | 60 | 60 | 30-94 | | | | |
| p-Terphenyl-d14 (S) | % | | | | | | 65 | 66 | 27-102 | | | | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

QC Batch: 400074 Analysis Method: EPA 8270 by SIM
QC Batch Method: EPA 3546 Analysis Description: 8270 MSSV PAH by SIM
Associated Lab Samples: 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019009, 50177019010, 50177019011, 50177019012, 50177022001

METHOD BLANK: 1842249 Matrix: Solid
Associated Lab Samples: 50177019002, 50177019003, 50177019004, 50177019005, 50177019006, 50177019007, 50177019009, 50177019010, 50177019011, 50177019012, 50177022001

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| 1-Methylnaphthalene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | N2 |
| 2-Methylnaphthalene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Acenaphthene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Acenaphthylene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Anthracene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Benzo(a)anthracene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Benzo(a)pyrene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Benzo(b)fluoranthene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Benzo(g,h,i)perylene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Benzo(k)fluoranthene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Chrysene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Dibenz(a,h)anthracene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Fluoranthene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Fluorene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Naphthalene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Phenanthrene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| Pyrene | mg/kg | ND | 0.0049 | 08/08/17 00:40 | |
| 2-Fluorobiphenyl (S) | % | 57 | 30-94 | 08/08/17 00:40 | |
| p-Terphenyl-d14 (S) | % | 70 | 27-102 | 08/08/17 00:40 | |

LABORATORY CONTROL SAMPLE: 1842250

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|-----------------------|-------|-------------|------------|-----------|--------------|------------|
| 1-Methylnaphthalene | mg/kg | .33 | 0.25 | 75 | 38-105 | N2 |
| 2-Methylnaphthalene | mg/kg | .33 | 0.25 | 75 | 38-104 | |
| Acenaphthene | mg/kg | .33 | 0.24 | 71 | 39-108 | |
| Acenaphthylene | mg/kg | .33 | 0.24 | 73 | 39-108 | |
| Anthracene | mg/kg | .33 | 0.24 | 73 | 41-119 | |
| Benzo(a)anthracene | mg/kg | .33 | 0.30 | 91 | 42-125 | |
| Benzo(a)pyrene | mg/kg | .33 | 0.28 | 83 | 33-143 | |
| Benzo(b)fluoranthene | mg/kg | .33 | 0.30 | 91 | 31-143 | |
| Benzo(g,h,i)perylene | mg/kg | .33 | 0.29 | 86 | 34-138 | |
| Benzo(k)fluoranthene | mg/kg | .33 | 0.23 | 69 | 32-140 | |
| Chrysene | mg/kg | .33 | 0.28 | 83 | 44-121 | |
| Dibenz(a,h)anthracene | mg/kg | .33 | 0.29 | 88 | 32-144 | |
| Fluoranthene | mg/kg | .33 | 0.29 | 86 | 42-122 | |
| Fluorene | mg/kg | .33 | 0.26 | 79 | 40-114 | |

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

LABORATORY CONTROL SAMPLE: 1842250

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| Indeno(1,2,3-cd)pyrene | mg/kg | .33 | 0.29 | 86 | 33-142 | |
| Naphthalene | mg/kg | .33 | 0.23 | 70 | 37-101 | |
| Phenanthrene | mg/kg | .33 | 0.27 | 81 | 40-116 | |
| Pyrene | mg/kg | .33 | 0.28 | 83 | 43-121 | |
| 2-Fluorobiphenyl (S) | % | | | 61 | 30-94 | |
| p-Terphenyl-d14 (S) | % | | | 72 | 27-102 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1842251 1842252

| Parameter | Units | 50176948005 | | 1842251 | | 1842252 | | % Rec | % Rec | % Rec | Limits | RPD | Max RPD | Qual |
|------------------------|-------|-------------|----------------|-----------------|-----------|------------|----|-------|--------|-------|--------|-----|---------|------|
| | | Result | MS Spike Conc. | MSD Spike Conc. | MS Result | MSD Result | | | | | | | | |
| 1-Methylnaphthalene | mg/kg | ND | .35 | .35 | 0.25 | 0.23 | 72 | 65 | 14-124 | 9 | 20 | N2 | | |
| 2-Methylnaphthalene | mg/kg | ND | .35 | .35 | 0.26 | 0.24 | 72 | 66 | 13-123 | 7 | 20 | | | |
| Acenaphthene | mg/kg | ND | .35 | .35 | 0.25 | 0.23 | 70 | 65 | 20-120 | 7 | 20 | | | |
| Acenaphthylene | mg/kg | ND | .35 | .35 | 0.26 | 0.23 | 73 | 65 | 22-116 | 10 | 20 | | | |
| Anthracene | mg/kg | ND | .35 | .35 | 0.25 | 0.22 | 70 | 62 | 19-128 | 12 | 20 | | | |
| Benzo(a)anthracene | mg/kg | 5.8 ug/kg | .35 | .35 | 0.32 | 0.28 | 88 | 77 | 16-134 | 12 | 20 | | | |
| Benzo(a)pyrene | mg/kg | ND | .35 | .35 | 0.29 | 0.25 | 80 | 70 | 10-148 | 13 | 20 | | | |
| Benzo(b)fluoranthene | mg/kg | ND | .35 | .35 | 0.32 | 0.28 | 89 | 78 | 10-148 | 13 | 20 | | | |
| Benzo(g,h,i)perylene | mg/kg | ND | .35 | .35 | 0.29 | 0.26 | 81 | 71 | 10-141 | 11 | 20 | | | |
| Benzo(k)fluoranthene | mg/kg | ND | .35 | .35 | 0.25 | 0.22 | 69 | 60 | 10-146 | 12 | 20 | | | |
| Chrysene | mg/kg | 6.0 ug/kg | .35 | .35 | 0.29 | 0.26 | 81 | 72 | 15-133 | 11 | 20 | | | |
| Dibenz(a,h)anthracene | mg/kg | ND | .35 | .35 | 0.30 | 0.26 | 84 | 73 | 10-142 | 13 | 20 | | | |
| Fluoranthene | mg/kg | 12.6 ug/kg | .35 | .35 | 0.31 | 0.28 | 85 | 77 | 13-135 | 9 | 20 | | | |
| Fluorene | mg/kg | ND | .35 | .35 | 0.28 | 0.26 | 78 | 71 | 21-125 | 8 | 20 | | | |
| Indeno(1,2,3-cd)pyrene | mg/kg | ND | .35 | .35 | 0.29 | 0.26 | 83 | 72 | 10-143 | 13 | 20 | | | |
| Naphthalene | mg/kg | ND | .35 | .35 | 0.24 | 0.22 | 67 | 63 | 12-123 | 7 | 20 | | | |
| Phenanthrene | mg/kg | 13.0 ug/kg | .35 | .35 | 0.30 | 0.27 | 81 | 71 | 13-133 | 11 | 20 | | | |
| Pyrene | mg/kg | 10.8 ug/kg | .35 | .35 | 0.29 | 0.27 | 80 | 72 | 11-137 | 9 | 20 | | | |
| 2-Fluorobiphenyl (S) | % | | | | | | 65 | 57 | 30-94 | | | | | |
| p-Terphenyl-d14 (S) | % | | | | | | 73 | 63 | 27-102 | | | | | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

QC Batch: 400322

Analysis Method: EPA 8270 by SIM

QC Batch Method: EPA 3546

Analysis Description: 8270 MSSV PAH by SIM

Associated Lab Samples: 50177019008

METHOD BLANK: 1843046

Matrix: Solid

Associated Lab Samples: 50177019008

| Parameter | Units | Blank Result | Reporting Limit | Analyzed | Qualifiers |
|------------------------|-------|--------------|-----------------|----------------|------------|
| 1-Methylnaphthalene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | N2 |
| 2-Methylnaphthalene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Acenaphthene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Acenaphthylene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Anthracene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Benzo(a)anthracene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Benzo(a)pyrene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Benzo(b)fluoranthene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Benzo(g,h,i)perylene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Benzo(k)fluoranthene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Chrysene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Dibenz(a,h)anthracene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Fluoranthene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Fluorene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Naphthalene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Phenanthrene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| Pyrene | mg/kg | ND | 0.0050 | 08/09/17 07:46 | |
| 2-Fluorobiphenyl (S) | % | 60 | 30-94 | 08/09/17 07:46 | |
| p-Terphenyl-d14 (S) | % | 69 | 27-102 | 08/09/17 07:46 | |

LABORATORY CONTROL SAMPLE: 1843047

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|------------------------|-------|-------------|------------|-----------|--------------|------------|
| 1-Methylnaphthalene | mg/kg | .33 | 0.26 | 79 | 38-105 | N2 |
| 2-Methylnaphthalene | mg/kg | .33 | 0.25 | 76 | 38-104 | |
| Acenaphthene | mg/kg | .33 | 0.25 | 74 | 39-108 | |
| Acenaphthylene | mg/kg | .33 | 0.25 | 76 | 39-108 | |
| Anthracene | mg/kg | .33 | 0.30 | 90 | 41-119 | |
| Benzo(a)anthracene | mg/kg | .33 | 0.31 | 93 | 42-125 | |
| Benzo(a)pyrene | mg/kg | .33 | 0.28 | 84 | 33-143 | |
| Benzo(b)fluoranthene | mg/kg | .33 | 0.31 | 95 | 31-143 | |
| Benzo(g,h,i)perylene | mg/kg | .33 | 0.29 | 88 | 34-138 | |
| Benzo(k)fluoranthene | mg/kg | .33 | 0.25 | 75 | 32-140 | |
| Chrysene | mg/kg | .33 | 0.29 | 89 | 44-121 | |
| Dibenz(a,h)anthracene | mg/kg | .33 | 0.30 | 91 | 32-144 | |
| Fluoranthene | mg/kg | .33 | 0.31 | 93 | 42-122 | |
| Fluorene | mg/kg | .33 | 0.27 | 81 | 40-114 | |
| Indeno(1,2,3-cd)pyrene | mg/kg | .33 | 0.30 | 89 | 33-142 | |
| Naphthalene | mg/kg | .33 | 0.24 | 74 | 37-101 | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

LABORATORY CONTROL SAMPLE: 1843047

| Parameter | Units | Spike Conc. | LCS Result | LCS % Rec | % Rec Limits | Qualifiers |
|----------------------|-------|-------------|------------|-----------|--------------|------------|
| Phenanthrene | mg/kg | .33 | 0.27 | 81 | 40-116 | |
| Pyrene | mg/kg | .33 | 0.29 | 88 | 43-121 | |
| 2-Fluorobiphenyl (S) | % | | | 77 | 30-94 | |
| p-Terphenyl-d14 (S) | % | | | 89 | 27-102 | |

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1843048 1843049

| Parameter | Units | 1843048 | | 1843049 | | MS % Rec | MSD % Rec | % Rec Limits | Max | | | |
|------------------------|-------|--------------------|----------------|-----------------|-----------|----------|-----------|--------------|------------|-----|-----|-------|
| | | 50177165004 Result | MS Spike Conc. | MSD Spike Conc. | MS Result | | | | MSD Result | RPD | RPD | Qual |
| 1-Methylnaphthalene | mg/kg | 0.0096 | .4 | .4 | 0.30 | 0.21 | 74 | 51 | 14-124 | 35 | 20 | N2,R1 |
| 2-Methylnaphthalene | mg/kg | 0.0099 | .4 | .4 | 0.33 | 0.21 | 80 | 51 | 13-123 | 43 | 20 | R1 |
| Acenaphthene | mg/kg | ND | .4 | .4 | 0.30 | 0.19 | 75 | 49 | 20-120 | 42 | 20 | R1 |
| Acenaphthylene | mg/kg | ND | .4 | .4 | 0.26 | 0.19 | 66 | 47 | 22-116 | 34 | 20 | R1 |
| Anthracene | mg/kg | ND | .4 | .4 | 0.29 | 0.18 | 73 | 45 | 19-128 | 45 | 20 | R1 |
| Benzo(a)anthracene | mg/kg | 0.011 | .4 | .4 | 0.31 | 0.19 | 76 | 45 | 16-134 | 50 | 20 | R1 |
| Benzo(a)pyrene | mg/kg | 0.012 | .4 | .4 | 0.27 | 0.16 | 67 | 38 | 10-148 | 52 | 20 | R1 |
| Benzo(b)fluoranthene | mg/kg | 0.016 | .4 | .4 | 0.30 | 0.16 | 73 | 36 | 10-148 | 63 | 20 | R1 |
| Benzo(g,h,i)perylene | mg/kg | 0.013 | .4 | .4 | 0.27 | 0.17 | 66 | 39 | 10-141 | 49 | 20 | R1 |
| Benzo(k)fluoranthene | mg/kg | 0.011 | .4 | .4 | 0.23 | 0.17 | 57 | 41 | 10-146 | 31 | 20 | R1 |
| Chrysene | mg/kg | 0.016 | .4 | .4 | 0.30 | 0.19 | 72 | 43 | 15-133 | 47 | 20 | R1 |
| Dibenz(a,h)anthracene | mg/kg | 0.0077 | .4 | .4 | 0.27 | 0.17 | 67 | 41 | 10-142 | 46 | 20 | R1 |
| Fluoranthene | mg/kg | 0.016 | .4 | .4 | 0.33 | 0.20 | 79 | 48 | 13-135 | 46 | 20 | R1 |
| Fluorene | mg/kg | ND | .4 | .4 | 0.29 | 0.20 | 73 | 51 | 21-125 | 35 | 20 | R1 |
| Indeno(1,2,3-cd)pyrene | mg/kg | 0.011 | .4 | .4 | 0.27 | 0.17 | 66 | 40 | 10-143 | 47 | 20 | R1 |
| Naphthalene | mg/kg | ND | .4 | .4 | 0.40 | 0.22 | 99 | 54 | 12-123 | 59 | 20 | R1 |
| Phenanthrene | mg/kg | 0.0087 | .4 | .4 | 0.35 | 0.19 | 87 | 47 | 13-133 | 58 | 20 | R1 |
| Pyrene | mg/kg | 0.014 | .4 | .4 | 0.32 | 0.19 | 77 | 44 | 11-137 | 52 | 20 | R1 |
| 2-Fluorobiphenyl (S) | % | | | | | | 67 | 46 | 30-94 | | | |
| p-Terphenyl-d14 (S) | % | | | | | | 72 | 43 | 27-102 | | | |

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

QC Batch: 400265

Analysis Method: SM 2540G

QC Batch Method: SM 2540G

Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 50177022001

SAMPLE DUPLICATE: 1842832

| Parameter | Units | 50176719001 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | % | 9.9 | 10.2 | 3 | 5 | |

SAMPLE DUPLICATE: 1842833

| Parameter | Units | 50176889009 Result | Dup Result | RPD | Max RPD | Qualifiers |
|------------------|-------|-----------------------|---------------|-----|------------|------------|
| Percent Moisture | % | 7.8 | 7.4 | 6 | 5 | R1 |

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

| | |
|----|--|
| 1d | Benzene ND at an estimated RL of 0.034 mg/kg based on the MDL. grm 8-8-17 |
| 2d | Compound results may be biased high due to vial contamination. grm 8-9-17 |
| 3d | MtBE ND at an estimated RL of 0.180 mg/kg based on the MDL. grm 8-8-17 |
| 4d | RPD is outside control limits due to sample non-homogeneity. FRW 8-14-17 |
| C8 | Result may be biased high due to carryover from previously analyzed sample. |
| D3 | Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference. |
| D4 | Sample was diluted due to the presence of high levels of target analytes. |
| ED | Due to the extract's physical characteristics, the analysis was performed at dilution. |
| M0 | Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits. |
| M3 | Matrix spike recovery was outside laboratory control limits due to matrix interferences. |
| N2 | The lab does not hold NELAC/TNI accreditation for this parameter. |
| P2 | Re-extraction or re-analysis could not be performed due to insufficient sample amount. |
| P6 | Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level. |
| R1 | RPD value was outside control limits. |
| S8 | Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-extraction and/or re-analysis) |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor
Pace Project No.: 50177019

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|-------------------|-----------------|----------|-------------------|------------------|
| 50177019001 | 02-SB-01 (0-2') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019002 | 02-SB-01 (18-20') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019003 | 02-SB-02 (0-2') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019004 | 02-SB-02 (16-18') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019005 | 02-SB-03 (0-2') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019006 | 02-SB-03 (10-12') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019007 | 02-SB-04 (0-2') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019008 | 02-SB-04 (10-12') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019009 | 02-SB-05 (0-2') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019010 | 02-SB-05 (6-8') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019011 | 02-SB-06 (0-2') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177022001 | 02-DUP-01 | EPA 3050 | 400022 | EPA 6010 | 401184 |
| 50177019012 | 02-SB-06 (12-14') | EPA 3050 | 399983 | EPA 6010 | 400659 |
| 50177019001 | 02-SB-01 (0-2') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019002 | 02-SB-01 (18-20') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019003 | 02-SB-02 (0-2') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019004 | 02-SB-02 (16-18') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019005 | 02-SB-03 (0-2') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019006 | 02-SB-03 (10-12') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019007 | 02-SB-04 (0-2') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019008 | 02-SB-04 (10-12') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019009 | 02-SB-05 (0-2') | EPA 7471 | 401177 | EPA 7471 | 401280 |
| 50177019010 | 02-SB-05 (6-8') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019011 | 02-SB-06 (0-2') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177022001 | 02-DUP-01 | EPA 7471 | 400759 | EPA 7471 | 401279 |
| 50177019012 | 02-SB-06 (12-14') | EPA 7471 | 400584 | EPA 7471 | 400712 |
| 50177019001 | 02-SB-01 (0-2') | EPA 3546 | 400073 | EPA 8270 by SIM | 400190 |
| 50177019002 | 02-SB-01 (18-20') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019003 | 02-SB-02 (0-2') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019004 | 02-SB-02 (16-18') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019005 | 02-SB-03 (0-2') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019006 | 02-SB-03 (10-12') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019007 | 02-SB-04 (0-2') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019008 | 02-SB-04 (10-12') | EPA 3546 | 400322 | EPA 8270 by SIM | 400465 |
| 50177019009 | 02-SB-05 (0-2') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019010 | 02-SB-05 (6-8') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019011 | 02-SB-06 (0-2') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177022001 | 02-DUP-01 | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019012 | 02-SB-06 (12-14') | EPA 3546 | 400074 | EPA 8270 by SIM | 400188 |
| 50177019001 | 02-SB-01 (0-2') | EPA 8260 | 400215 | | |
| 50177019002 | 02-SB-01 (18-20') | EPA 8260 | 400215 | | |
| 50177019003 | 02-SB-02 (0-2') | EPA 8260 | 400215 | | |
| 50177019004 | 02-SB-02 (16-18') | EPA 8260 | 400215 | | |

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: NICTD Westlake Corridor

Pace Project No.: 50177019

| Lab ID | Sample ID | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|-------------------|-----------------|----------|-------------------|------------------|
| 50177019005 | 02-SB-03 (0-2') | EPA 8260 | 400215 | | |
| 50177019006 | 02-SB-03 (10-12') | EPA 8260 | 400215 | | |
| 50177019007 | 02-SB-04 (0-2') | EPA 8260 | 400215 | | |
| 50177019008 | 02-SB-04 (10-12') | EPA 8260 | 400215 | | |
| 50177019009 | 02-SB-05 (0-2') | EPA 8260 | 400215 | | |
| 50177019010 | 02-SB-05 (6-8') | EPA 8260 | 400215 | | |
| 50177019011 | 02-SB-06 (0-2') | EPA 8260 | 400215 | | |
| 50177022001 | 02-DUP-01 | EPA 8260 | 399997 | | |
| 50177019012 | 02-SB-06 (12-14') | EPA 8260 | 400215 | | |
| 50177019001 | 02-SB-01 (0-2') | SM 2540G | 400457 | | |
| 50177019002 | 02-SB-01 (18-20') | SM 2540G | 400457 | | |
| 50177019003 | 02-SB-02 (0-2') | SM 2540G | 400457 | | |
| 50177019004 | 02-SB-02 (16-18') | SM 2540G | 400457 | | |
| 50177019005 | 02-SB-03 (0-2') | SM 2540G | 400457 | | |
| 50177019006 | 02-SB-03 (10-12') | SM 2540G | 400457 | | |
| 50177019007 | 02-SB-04 (0-2') | SM 2540G | 400457 | | |
| 50177019008 | 02-SB-04 (10-12') | SM 2540G | 400457 | | |
| 50177019009 | 02-SB-05 (0-2') | SM 2540G | 400457 | | |
| 50177019010 | 02-SB-05 (6-8') | SM 2540G | 400457 | | |
| 50177019011 | 02-SB-06 (0-2') | SM 2540G | 400457 | | |
| 50177022001 | 02-DUP-01 | SM 2540G | 400265 | | |
| 50177019012 | 02-SB-06 (12-14') | SM 2540G | 400457 | | |

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt



Project # 50177019

Courier: Fed Ex UPS USPS Client Commercial Pace Other _____

Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other _____

Thermometer 1 2 3 4 5 6 A B C D E F Type of Ice: Wet Blue None Samples on ice, cooling process has begun

Cooler Temperature 0.0/0.0 0.7/0.7 Ice Visible in Sample Containers: yes no
 (Initial/Corrected) Temp should be above freezing to 6°C

Date/Time and Initials of person examining contents: 8/4/17 MBS KAR Comments

| | | | |
|---|--|-----|--|
| Are samples from West Virginia? Document any containers out of temp. | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 1. | |
| Chain of Custody Present: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 2. | |
| Chain of Custody Filled Out: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 3. | |
| Short Hold Time Analysis (<72hr): | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 4. | Date/Time 5035A T/C placed in Freezer: <u>8/4/17 MBS KAR</u> Short Holds Taken to Lab: <u>TCS</u> |
| Rush Turn Around Time Requested: | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 5. | |
| Containers Intact: | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 6. | |
| Sample Labels match COC: -Includes date/time/ID/Analysis | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 7. | Sample: 02-SB-05 (4-6") Not Rec'd But on COC Sample: 02-SB-05 (6-8) Rec'd But on COC NOT |
| All containers needing acid/base pres. have been checked? exceptions: VOA, coliform, O&G | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 8. | (Circle) HNO3 H2SO4 NaOH NaOH/ZnAc |
| All containers needing preservation are found to be in compliance with EPA recommendation (<2, >9, >12) unless otherwise noted. | | | |
| Residual Chlorine Check (SVOC 625 Pest/PCB 608) | | 9. | Present Absent |
| Residual Chlorine Check (Total/Amenable/Free Cyanide) | | 10. | Present Absent |
| Headspace in VOA Vials (>6mm): | <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A | 11 | |
| Headspace Wisconsin Sulfide | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | 12 | |
| Trip Blank Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Custody Seals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | 13 | |

Client Notification/ Resolution:
 Person Contacted: S. Raman Date/Time: 8/7/17 via email
 Comments/ Resolution:

Use 02-SB-05 (6-8) as ID.
8/7/17
TMJ

