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January 28, 2015

New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7014

Attn: John Spellman, P.E.

Re: *Final (January 2015) Remedial Investigation Report*
Chevron Troy Asphalt Terminal
7 Water Street
Troy, New York
NYSDEC Site No. 4-42-029
TRC Job No. 194098

Dear Mr. Spellman:

On behalf of Chevron Products USA/Chevron Environmental Management Company, TRC Environmental, Inc. is submitting the attached Revised Remedial Investigation Report. The report has been revised to address comments in your letter dated June 20, 2014 and subsequent email of January 23, 2015.

If you have any questions or need additional information, please contact me at jpotenza@trcsolutions.com or call (908)988-1669.

Very truly yours,

TRC RAVIV ASSOCIATES, INC.

John C. Potenza, P.G. LSRP
Sr. Project Manager/Geologist

cc: Brian Conners - Chevron Environmental Management Company

# REMEDIAL INVESTIGATION REPORT

# FORMER CHEVRON ASPHALT COMPANY
# TROY ASPHALT FACILITY
## 7 Water Street
## Troy, New York

# NYSDEC SITE NO. 4-42-029B

**Project No. 194098**

**October 2013**
**Finalized January 2015**

Prepared For:

Chevron Environmental Management Company
Perth Amboy, New Jersey

Prepared By:

TRC Environmental Corporation
41 Spring Street
New Providence, New Jersey 07974

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## 1.0 INTRODUCTION

On behalf of Chevron Products USA/Chevron Environmental Management Company (Chevron), TRC Environmental, Inc. (TRC) has prepared this Remedial Investigation (RI) Report to summarize the assessment of surface and subsurface soils at the former Chevron Asphalt Facility, (the site) located at 7 Water Street in Troy, New York, currently owned and managed by Chevron.

The RI activities described herein were conducted in accordance with the Remedial Investigation Workplan dated December 5, 2012 submitted to the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER) and approved by the NYSDEC on March 25, 2013.

## 2.0 SITE DESCRIPTION

### 2.1 Site Location

The Chevron Asphalt Facility is located at 7 Water Street in the City of Troy, Rensselaer County, New York. Troy is located approximately 12 miles northeast of the City of Albany. The facility is currently inactive and occupies approximately nine acres located on the west side of Water Street. The site is bordered to the west by the Hudson River, to the east by River Road, railroad tracks and a wooded area, to the north by the former King Fuels property and the south by the former Vinci Oil property. A Site Location Map (United States Geographical Society (USGS) *7.5-Minute Topographic Quadrangle, South Troy, NY*, 1980) is provided in Figure 1.

The subject property (along with several surrounding properties) was formerly owned and operated by the Niagara Mohawk Power Corporation (Niagara Mohawk), the operator of a former manufactured gas plant (MGP) from approximately 1925 to the mid 1950's. The former MGP operations were divided into four areas; Area 1 through Area 4. The Chevron Asphalt Facility is located on a portion of Area 3. A Site Plan depicting the boundaries of the site is provided on Figure 2.

### 2.2 Land Use

The site is located immediately adjacent to the eastern bank of the Hudson River in a developed urban industrial, commercial and residential setting. The properties surrounding the Chevron Facility include a former MGP site (Area 2) located north and upstream of the Chevron property; and a previously remediated tar disposal area located downstream and south of the Chevron property (Area 4). The land to the east of the site is a vacant wooded area that rises steeply up to a residential area. There is a former steel manufacturing facility located approximately 500 feet northeast of the Chevron property, known as the Protec property. Railroad tracks, an access road, residential and light commercial properties are located east and hydraulically upgradient of the site. A portion of the railroad track currently extends onto the

Chevron property and historically additional portions of the railroad track configurations have existed on-site prior to Chevron's ownership of the property that are now beneath up to 10 feet of fill. The site is situated underneath the NYS Route 378 Troy-Menands Bridge which traverses the property in an east-west direction, and there are bridge footings located on the site. A major gas main runs beneath the NYS Route 378 Troy-Menands Bridge and crosses beneath the Hudson River at this location.

### 2.3 Topography

The site area is situated on a relatively flat terrace adjacent to the east bank of the Hudson River. A steep slope (shale outcrop) rises to the east of the site. The terrace upon which the site is situated was gradually built up prior to Chevron's ownership in the early part of the 20th century by extensive filling with slag, cinders, ash, brick, gravel, and other materials. Various types of brick and construction debris are present along the shoreline of the Hudson River adjacent to many portions of the site. Historical photographs show the former shoreline of the Hudson River was a gentle slope that was built up over time through the addition of fill material. Currently the riverbank slope extends about 22 feet down from the site to the edge of water. The slope is steep, heavily wooded and there are several small surficial drainage swales and storm outfalls present. A series of railroad tracks were present along the shoreline and have apparently been buried by fill. The historical air photo review shows the site was filled in the mid-1930's, prior to Chevron's purchase of the property.

### 2.4 Surface Water and Wetlands

The nearest surface water body is the Hudson River, located to the west immediately adjacent to the site. There is a small creek, known as Wynannts Kill (AKA Burden Creek) that outfalls to the Hudson River approximately 1200 feet north (upstream) of the site. There are no significant wetland areas in the vicinity of the site.

### 2.5 Geology and Hydrogeology

The ground surface of the site is occupied by a significant thickness of iron slag, coal slag, masonry and brick fragments, coarse sand, demolition debris and other artificial fill with little to no organic constituents ranging from less than 5 feet to approximately 40 feet. The fill overlies a sequence of alluvial, glaciofluvial, and glaciolacustrine deposits that in aggregate range in thickness from about 5 to 70 feet. These unconsolidated deposits include alluvium (primarily silt with varying amounts of sand, clay and organic matter), glaciofluvial outwash (sand and gravel), glaciolacustrine deposits (silt, stiff gray clay and fine sand), and thin, discontinuous lenses of glacial till. These various unconsolidated units do not form continuous layers under the site; they occur as layers and lenses of varying thicknesses that are interbedded with each other.

The glaciofluvial outwash forms the greater part of the unconsolidated sequence, with thickness as great as 40 feet. The alluvium is absent in many places, and reaches thicknesses of 18 feet in others; the same is true of the glaciolacustrine deposits. The till, where present at the bottom of the sequence directly over bedrock, forms lenses with a maximum thickness of 5 feet.

According to the Geologic Map of New York, Hudson-Mohawk Sheet (New York State Museum, 1970), the bedrock under the site consists of Utica Shale, Canajoharie Shale and/or Normanskill Shale belonging to the Lorraine, Trenton and Black River Groups. These Groups date from the Upper to Middle Ordovician Period and range to approximately 4,500 feet in thickness.

Ground water is encountered in the lower portions of the fill and within the native unconsolidated material underlying the fill. The water table occurs at approximately 20 to 30 feet below the ground surface. Based on water levels measured in the four monitoring wells in Area 3, ground water is inferred to flow generally to the west, toward the Hudson River and does not appear to occur within the fill.

2.6 A Fish and Wildlife Impact Analysis

Based on a review of the U.S. Fish and Wildlife Trust Resources List, no endangered species are present or potentially present at the site and no sensitive habitats are located on the site. A Fish and Wildlife Impact Analysis is included as Appendix F.

## 3.0 OPERATIONAL HISTORY

### 3.1 Environmental and Regulatory History

In 1996, a portion of the site was formally designated as an inactive hazardous waste disposal site (IHWDS) by the NYSDEC. According to the NYSDEC, operation of "the former manufactured gas plant has resulted in the disposal of hazardous waste" in areas of the site, "some of which has migrated from the site to surrounding areas, including Hudson River sediments" (NYSDEC, 2000, Record of Decision [ROD] for the Area 4 Operable Unit #1 at the Niagara Mohawk Troy-Water Street Former MGP Site).

The Niagara Mohawk Troy-Water Street Former MGP Site was divided into four areas for investigational purposes with the approval of the NYSDEC. The four areas are:

- **Area 1** Located immediately west of the Hudson River (across the river from Areas 2, 3 and 4), on Breaker Island;

- **Area 2** Located immediately east of the Hudson River, the location of former coking and gas plant production, and associated MGP waste generation operations, currently owned by King Fuels;

- **Area 3** Located immediately east of the Hudson River, immediately south of and adjacent to Area 2, currently owned by Chevron, consisting of Chevron's inactive asphalt terminal; and

- **Area 4** Located immediately east of the Hudson River and south of Area 3, former disposal area for coal tars and other wastes, currently owned by the County of Rensselaer and Rensselaer County Sewer District No 1.

Each of the four areas were suspected by the NYSDEC of being part of operational or disposal activities associated with Niagara Mohawk's former MGP plant. Areas 1, 2 and 4 have been or are in the process of being investigated or remediated by Niagara Mohawk pursuant to the 1992 Order. Chevron has conducted environmental investigations at Area 3 from 1993 through 2013.

### 3.2 Niagara Mohawk MGP Operations

Under the ownership of a variety of different companies, portions of the site were used for the production of iron and steel from the mid-1860's to approximately the 1920's. Slag and other waste materials generated during steel manufacturing were used to raise the grade of the site; by 1925 many areas of the entire site were underlain by 20 to 40 feet of fill consisting of slag, cinders and other waste material from industrial operations. Historical maps and aerial photographs for Area 2 and Area 4 show that filling occurred from as early as 1914 to approximately 1925. The western end of the former channel of Wynants Kill was filled around 1930 and a new straight canal was constructed (Samuel W. Gowan, April 17, 2001).

Niagara Mohawk Power Corporation (Niagara Mohawk) or its predecessor company owned and operated a manufactured gas plant (MGP) at the site from approximately 1925 into the 1950's. During the period of Niagara Mohawk's operations, a variety of coal-derived products were made for sale including coke, coal gas, coal tars, sulfate of ammonia and benzol. Coal tar and associated substances (MGP wastes) were disposed at the site and are found in a limited area and depth in soil underlying the site. The disposal of MGP wastes has been acknowledged by Niagara Mohawk, resulting in the New York State Department of Environmental Conservation (NYSDEC) entering into an Order on Consent with Niagara Mohawk to investigate and remediate MGP wastes at the former MGP site. The Order on Consent was executed on November 16, 1992.

During Niagara Mohawk's MGP operations, the property currently owned by Chevron (Area 3) was used primarily for coal storage. No coal gas manufacturing took place on the property and primary waste disposal took place south of the Chevron property in Area 4.

### 3.3 Chevron Operations

In January 1955, Chevron's predecessor, American Bituminus & Asphalt Company purchased Area 3 south of the Troy-Menands Bridge (New York State Route 378 Bridge) and Area 4 from Republic Steel Corporation. Most of the manufacturing portion of the former MGP Site (Area 2) was sold by Republic Steel to King Fuels in 1968. In 1958, American Bituminus purchased the small portion of what is now Area 3 north of the Troy-Menands Bridge. In 1965, America Bituminus became Chevron Asphalt Company.

American Bituminus, and subsequently Chevron Asphalt Company, formerly produced and stored asphalt and other road construction materials for sale to the surrounding community. The facility was operational from 1953 to approximately 1999. The facility would obtain refined asphalt by barge or rail, store the asphalt in large above ground storage tanks (ASTs) and subsequently load the asphalt into the customer's tanker trucks.

Asphalt received from barges was unloaded at an off-site dock located approximately 350 feet north (upstream) of the site. The dock was leased from King Fuels. An above-ground pipeline formerly extended from the Chevron facility to the dock. Chevron and its predecessor, American Bituminus & Asphalt Company, maintained an easement for maintaining and operating pipelines to King Fuel's (and formerly Republic Steel's) docks.

Asphalt was moved from barges to storage tanks through a series of heated pipes that maintained the asphalt at sufficiently high temperature such that the material would flow. The asphalt was transferred from the ASTs through pipes to above ground loading racks, which then dispensed the product into the customer's tanker truck. All of the piping used in this system was above ground.

An asphalt emulsion mixing process was performed in a building at the southern end of the site. The purpose of the emulsion operation was to blend asphalt and water, two immiscible materials, through the addition of an emulsifying agent, such as fatty acids, which would promote the emulsification and keep the emulsified asphalt stable. The emulsified asphalt was then sold by Chevron. The emulsion agents and blended products were stored in ASTs adjacent to the emulsion building.

Chevron's asphalt facility operations resulted in the generation of limited process wastewater consisting primarily of non-contact boiler blowdown water. Chevron operated on-site boilers to create steam to keep asphalt transfer pipes and storage tanks heated. The boiler blowdown water consisted of water and any dissolved constituents that build up in the water. As water evaporates within a boiler, dissolved solids present in the water tend to build up over time, resulting in what is typically known as "scale." Boiler blowdown is the removal of water from the boiler to prevent the accumulation of scale. Petroleum or similar types of constituents would not be expected to be found in non-contact boiler blowdown water.

## 4.0 PREVIOUS INVESTIGATIONS

### 4.1 Phase I and Limited Phase II ESA - 1993

A Phase I and Limited Phase II was conducted for the subject property in 1993 by Ecology and Environment, Inc. (E&E). The Phase I was conducted to identify potential environmental liabilities associated with a property transfer. The Phase II investigation was limited to the collection of ground water samples from each of four wells located at the site, collection of potential asbestos-containing material (ACM) samples of wallboard in the boiler room and the collection of two surface soil samples near the bridge construction area, to assess sandblasting residue from the bridge construction. The findings of the Phase I/II work indicated that two areas of soil impacts discovered were related to bridge construction activities, specifically sandblasting and a machine fluid leak, and were not related to site activities. ACM had previously been identified and removed from the site. Ground water samples exhibited concentrations of the PAHs acenaphthene, fluoranthene and naphthalene; and the metals cadmium, lead and arsenic at concentrations exceeding the ground water quality standards in place at the time. E&E recommended

periodic monitoring of ground water at the site. A copy of the 1993 Phase I/Limited Phase II Environmental Site Assessment Report produced by E&E was provided in Appendix C of the RI Workplan.

### 4.2 Site Characterization - 2001

In 2001 Dan Raviv Associates (predecessor of TRC) produced the Expert Report in the Matter of Niagara Mohawk Power Corporation, Plaintiff Against Consolidated Rail Corporation, et. al. (Expert Report) for the subject property (Area 3). This report summarizes the documented site history and presents the results of a preliminary site characterization of Area 3 conducted during 2000 and 2001. The investigation described in this report was conducted to provide a professional opinion about the technical and regulatory environmental issues concerning the subject site, and to support litigation activities between the historical owners and operators of the site. The investigation was conducted to assess the presence or absence of environmental impacts related to site activities and activities at adjacent parcels (Area 2 and Area 4), and to differentiate the type of contaminants (e.g., coal tar or asphalt). The work was not conducted under any regulatory program, and was not reviewed by the NYSDEC. A copy of the Expert Report produced by Dan Raviv Associates was provided in Appendix D of the RI Workplan and analytical data was shown on Figure 3 and summarized in Tables I through VI of the RI Workplan.

### 4.3 Site Investigation - 2005

In 2005 TRC Raviv Associates (predecessor of TRC) conducted a Facility Closure Site Investigation to support Chevron's decommissioning and closure of the former asphalt facility which operated as a Major Oil Storage Facility (MOSF, License No. 4-1540) pursuant to State of New York Navigation Law. The investigation was conducted in accordance with Chevron's January 27, 2005 Site Investigation Work Plan. A report summarizing the investigation findings was submitted to the NYSDEC on July 5, 2005. A copy of the Site Investigation Report produced by TRC Raviv Associates was provided in Appendix E of the RI Workplan.

Investigation activities were focused around the areas of the former above-ground storage tanks (ASTs), and included the collection of surficial and sub-surface soil samples, grab-type groundwater samples from selected soil borings and groundwater samples from the four monitoring wells located in Area 3.

Forty soil borings were completed during the investigation. Of those, 15 were completed to a depth of 20 feet below ground surface (feet bgs). The remaining 25 were completed to depths ranging from 3 to 16 feet bgs. Soils were visually examined for evidence of contamination and field-screened using a photoionization detector (PID) to screen for volatile organic vapors. Samples were also collected for laboratory analysis for VOCs and SVOCs, The findings of the 2005 investigations indicated that there are surface soils affected by the presence of relatively low concentrations of SVOCs marginally exceeding applicable cleanup objectives. Subsurface soils, generally ranging in depth from approximately 4.0 – 14.0 feet bgs have been marginally impacted by VOCs consisting of benzene, ethylbenzene, toluene and xylenes (BTEX) compounds and various SVOCs. Local occurrences of tar-stained fill material were observed in several borings at distinct thin horizons which appear to be related to the filling of the site since either low or no impacts were observed in the soil column above the impacted zones. The data obtained during the 2005 site

investigation was presented on Figure 3 and summarized in Tables VII and VIII of the RI Workplan, and was compared to the applicable Part 375 soil cleanup objectives.

Portions of the data obtained during the 2000-2001 and 2005 investigations were reported with laboratory reporting limits that were higher than applicable cleanup objectives currently in use (Part 375 Soil Cleanup Objectives), as the Part 375 SCO's were not in place at the time of those investigations. However these data provide useful information about the overall distribution of contaminants and the relative magnitude of impacts. Therefore, historical data is presented and discussed as warranted within this RI Report in terms of its qualitative value. It was the intention of the investigation described herein to provide uniform and reliable data to support and augment historical data, and a basis for interpreting investigation results and proposing remedial actions.

## 5.0 REMEDIAL INVESTIGATION SCOPE AND METHODS

### 5.1 Applicable Standards, Criteria and Guidance (SCG)

The RI was conducted in accordance with the NYSDEC Division of Environmental Remediation (DER) Final Technical Guidance for Site Investigation and Remediation (DER-10), dated May, 2010 and the NYSDEC-approved RI Work Plan, dated December 5, 2012.

Per NYSDEC requirements, the soil sample analysis results obtained during the 2001 and 2005 site investigations, and the analytical results obtained during the remedial investigation (RI) were compared to the following Standards, Criteria and Guidance (SCGs):

- Unrestricted Use Soil Cleanup Objectives contained in 6 NYCRR Part 375, Subpart 375-6, Table 375-6.8(a), effective December 14, 2006 (Part 375-a);

- Restricted Use Soil Cleanup Objectives under the Protection of Public Health, Industrial Category contained in 6 NYCRR Part 375, Subpart 375-6, Table 375-6.8(b) ), effective December 14, 2006 (Part 375-b);

- Restricted Use Soil Cleanup Objectives under the Protection of Groundwater Category, contained in 6 NYCRR Part 375, Subpart 375-6, Table 375-6.8(b), effective December 14, 2006 (Part 375-b), and;

- Commissioner Policy 51, Soil Cleanup Guidance Policy (CP-51), dated October 21, 2010.

Based on the anticipated future use of the former Chevron Asphalt Facility as non-residential industrial and/or commercial property, the applicable soil cleanup criteria are the Restricted Use Soil Cleanup Objectives referenced above. However, in accordance with DER-10, as clarified in the NYSDEC's June 20, 2014 comment letter (Appendix E), the soil analytical results are also compared to the Unrestricted Use Soil Cleanup Objectives discussed in Section 6.1, and summarized in Tables 1& 2 and on Figure 3.

### 5.2 Contaminants of Concern (COCs)

Figure 3 herein provides a comparison of the 2000-2001 and 2005 soil sample analysis data to the current Part 375 soil cleanup objectives. Pursuant to this comparison, the site-specific Contaminants of Concern (COCs), identified as those compounds detected at concentrations exceeding the applicable Part 375 soil cleanup objectives, include the following compounds:

| |
|---|
| Anthracene |
| Benzene |
| B(a)A = Benzo(a)anthracene |
| B(a)P = Benzo(a)pyrene |
| B(b)F = Benzo(b)fluoranthene |
| B(k)F = Benzo(k)fluoranthene |
| D(a,h)a = Dibenzo(a,h)anthracene |
| Chrysene |
| Dibenzofuran |
| Ethylbenzene |
| Fluorene |
| Fluoranthene |
| I(1,2,3-cd)P = Indeno (1,2,3-cd) Pyrene |
| 2-Methylnaphthalene |
| Naphthalene |
| 2-Nitroaniline |
| Phenanthrene |
| Pyrene |
| 2-Methylphenol |
| 4-Methylphenol |
| Toluene |
| Xylenes |
| Arsenic |
| Cyanide |
| Manganese |

### 5.3 Site Survey

Surveying and mapping of the site was provided by a New York State Professional Licensed Surveyor (PLS). The site survey included a title search and report, metes and bounds survey, locations of physical features and structures, completed soil boring locations, tar patch locations and a topographic survey provided on an approximate 2-foot contour interval. The survey data was used to develop the Site Plan provided in Figure 2 and the Remedial Investigation Data Summary Map provided in Figure 3.

### 5.4 Soil Sampling

All remedial investigation activities were conducted in general accordance with DER-10, and with the Quality Assurance Project Plan (QAPP) provided in Section 4.0 of the RI Work Plan.

The investigation study area extended from the approximate mid-line of the Route 378 bridge, southward to the northern boundary of the historic Area 4 (See Section 3.3 above). Soil borings were advanced in the area extending from the eastern edge of the property, along the existing fenceline, to the western fenceline at top of the slope that descends down to the edge of the river. The riverbank slope was also visually inspected.

A total of 29 soil borings were advanced and 33 samples were analyzed to support investigation objectives. Completed soil boring locations are depicted on Figure 3. Soil borings were advanced using direct-push drilling equipment via either a truck-mounted or tracked Geoprobe® Direct-Push Technology (DPT) drill rig. The drill rig utilized either a 4-foot long, or 5-foot long 2-inch diameter steel macro-core with a dedicated acetate liner to collect a soil sample.

A geologic description was recorded for each sample. Readings of each sample were taken using a photo-ionization detector (PID), and samples for laboratory analysis were selected based on field observations, elevated PID readings, changes in lithological material and investigation objectives. Field Soil Boring Logs are contained in Appendix A.

### 5.5 Community Air Monitoring Plan

Concurrent with the implementation of field investigation activities, TRC implemented air monitoring in accordance with the site-specific Community Air Monitoring Plan (CAMP) provided in Appendix A of the RI Work Plan. The CAMP included real-time monitoring for COCs and particulates (i.e., dust) at the downwind perimeter of each work area during intrusive work. The CAMP was implemented by the scientist/engineer overseeing the investigation activities. Air monitoring data indicated that at no time were volatile vapors or particulates detected at levels exceeding background. Air monitoring data is provided in Appendix B.

### 5.6 Laboratory Analysis

Soil samples were analyzed by TestAmerica of Buffalo NY, an ELAP-certified laboratory using EPA Methods 8260 (VOCs) and 8270 (PAHs). Table 1 and Table 2 contain a summary of laboratory analytical data for VOCs and PAHs respectively. Category B laboratory report deliverables were furnished by the analytical laboratory. Laboratory data packages are provided as Appendix D in electronic format on compact disk (CD) and have been submitted electronically to the NYSDEC Environmental Information Management System.

### 5.7 Data Review and Validation

Laboratory data generated during the RI was submitted to Alpha Geoscience, Inc. (Alpha) of Clifton Park, New York for third party validation. The data validation protocol included a review of laboratory deliverables pertaining to the investigation sample set(s). The review was conducted based on the procedures outlined in the EPA Region II data validation guidance for volatile and semi-volatile organics by SW-846. A data usability summary report (DUSR) for the laboratory sample delivery group (SDG) pertaining to this project is provided in Appendix C. As indicated in the DUSR, the laboratory fulfilled the requirements of the analytical method. The data were mostly acceptable with some minor issues identified. Selected data were flagged as "J" (estimated) values based on either: (1) levels reported in samples were not significantly higher (more than 10 times) the highest associated blank level, or (2) results of the initial analysis were extrapolated beyond the highest calibration standard and were flagged as "E" (Exceeding calibration range) by the laboratory, and these samples were re-analyzed under a dilution factor. Laboratory electronic data deliverables (EDDs) have been formatted and uploaded to the NYSDEC EQuIS database in accordance with the requirements stated in DER-10.

### 5.8 Inspection of Riverbank Slope Area

A visual inspection was made of the Hudson Riverbank adjacent to the subject property (Area 3) on May 17, 2013 to identify tar and/or asphalt material on the ground surface. The inspection was completed by physically traversing the riverbank slope and shoreline and documenting visual observations. The approximate locations of existing surficial deposits of tar and/or asphalt were determined by recording geophysical coordinates surrounding the deposits using a portable global positioning system (GPS) receiver. Coordinate data was transferred to the project surveyor, and the GPS points were plotted onto the survey basemap. The mapped points were then connected to form polygons showing the approximate locations and extent of tar and/or asphalt deposits. The deposits were also photo-documented. The area of the riverbank slope inspection and the approximate locations of tar and/or asphalt deposits are shown on Figure 3.

## 6.0 RESULTS OF REMEDIAL INVESTIGATION

### 6.1 Soil Sampling

Soil borings were advanced at the 20 locations specified in the NYSDEC-approved RI Workplan, and at nine additional locations. A total of 33 primary soil samples were submitted for laboratory analysis for PAHs and 13 samples were submitted for analysis for VOCs. Observations made through the advancement of soil borings and soil sample analysis were used to evaluate subsurface conditions over the area of the site and step-out borings were completed where field observations warranted.

Consistent with historical data, field observations indicated that a fill layer consisting of iron slag, coal slag, cinders, ash, brick and masonry fragments, crushed or pulverized shale and stone, sand and gravel overlies most of the site. The fill was observed to extend to approximately 17-26 feet in depth over most of the

central area of the site, and was observed to approximately 30 feet at location DPT-05, near the northern section of the study area. The fill contained little to no organic constituents. The water table was observed at approximately 14-20 feet bgs during this investigation, generally at the fill/native material interface.

Underlying the fill material is a sequence of river and glacial lake deposits consisting of moderately dense to very dense gray, dark gray or black silt, with trace to little amounts of clay and very fine sand. The dense nature of the silt resulted in boring refusal at several locations during the RI, however the unconsolidated deposits have been reported to occur in a wide range of thickness (5–70 feet) in the general area of the site during previous investigations. The bedrock under the unconsolidated deposits consists of a thinly bedded gray to black shale.

Laboratory results were compared to the NYSDEC Unrestricted Use Soil Cleanup Objective, as well as the Restricted Use Soil Cleanup Objective. Tables 1 and 2 list the analytical data with exceedances of two criteria highlighted for clarity. It should be noted that several samples required laboratory dilutions due to high concentrations of one or more compounds that resulted in elevated detection limits; in some cases the detection limits were higher than the Unrestricted Use Soil Cleanup Objective, therefore, the laboratory reported estimated concentrations below the laboratory reporting limit.

Laboratory analytical results indicated that no samples exhibited concentrations of VOCs that exceeded cleanup objectives for industrial areas. Five samples contained VOCs above the Unrestricted Use Soil Cleanup Objective but below the Restricted Use Soil Cleanup Objective. Of the five soil samples that contained VOCs above the Unrestricted Use Soil Cleanup Objective, three contained only methylene chloride or acetone at low levels. Two soil samples (DPT-02 and DPT-16) contained low levels of BTEX compounds. PAHs were detected at concentrations exceeding industrial cleanup objectives in 7 of the 33 samples analyzed.

PAHs were found at concentrations exceeding industrial cleanup objectives at location DPT-02 (4.5-5 ft. bgs). This boring is located under the Route 378 bridge. Samples were collected from two other boring locations, DPT-01(13.5-14 ft. bgs) and DPT-05 (22.5-23 ft. bgs), adjacent to DPT-02. Neither of these samples exhibited concentrations of PAHs exceeding industrial cleanup objectives. Additionally, soil boring SB-6, completed as part of the site characterization in 2001 (See Figure 3), exhibited a concentration of benzo(a)pyrene of 2.1 mg/kg (0.5-1 ft. bgs) which only slightly exceeding the industrial cleanup objective of 1.1 mg/kg for this compound.

The soil sample collected from location DPT-24 (9-10 ft. bgs), near the west-central area of the site exhibited concentrations of PAHs exceeding cleanup objectives, however the sample collected from location DPT-07, co-located with DPT-24, from 11-11.5 ft. bgs did not exhibit any exceedances. Samples collected from DPT- 08 (3.5-4 ft. bgs) and DPT-26 (17-17.5 ft. bgs), located adjacent to DPT-24/DPT-07, also did not exhibit any exceedances; and shallow soil samples AST-21 and AST-22 (both from 0.5-1 ft. bgs), collected as part of the site investigation in 2005 also did not exhibit any exceedances.

This data indicates that PAH concentrations exceeding industrial cleanup objectives are generally localized in the vicinity of DPT-02 and DPT-24/DPT-07, and do not represent widespread areas of horizontal or vertical impacts.

Concentrations of PAHs were observed in the central area of the site at locations DPT-15 (10-11 ft. bgs), DPT-16 (9.5-10 ft. bgs), DPT-24 (9-10 ft. bgs), DPT-25 (22-23 ft. bgs), DPT-27 (12-13 ft. bgs) and DPT-29 (1-2 ft. bgs). A layer of tar-stained fill was observed at locations DPT-15, DPT-18, DPT-27, DPT-28 and DPT-29. The staining was consistently present between approximately 10-12 feet bgs, and consisted of a very thick, viscous substance, heavily embedded with silt, fine sand and fine gravel. No free liquids or mobile material was observed. The approximate extent of observed tar-stained fill is shown in Figure 3.

In all cases the detected concentrations of PAHs exceeding cleanup objectives, and observed tar-staining, were observed only in the fill material, above the silt layer. Samples from locations DPT-15 (17-17.5 ft. bgs) and DPT-17 (18.5-19.0 ft. bgs) were collected from greater depths as the samples discussed above, and these samples did not show concentrations of PAHs exceeding cleanup objectives, which indicates a vertical delineation of impacts in these borings. Samples of the silt material collected from borings DPT-09 (22.5-23 ft. bgs), DPT-11 (23-23.5 ft. bgs) and DPT-27 (22-22.5 ft. bgs) did not exhibit concentrations exceeding cleanup objectives. Additionally, several samples collected from surface or near-surface soils over the site exhibited either no detections, or lower PAH concentrations than deeper intervals.

Soil samples were collected from five soil borings: DPT-01 (13.5-14 ft. bgs), DPT-09 (22.5-23 ft. bgs), DPT-10 (4-4.5 ft. bgs), DPT-11 (23-23.5 ft. bgs) and DPT-21 (3-3.5 and 21.5-22 ft. bgs) along the eastern border of the site. None of the samples from these locations exhibited concentrations of PAHs exceeding applicable cleanup objectives. This data indicates that exceedances of cleanup objectives observed in the central area of the site, and in the DPT-24/DPT-07 and DPT-02 areas discussed above, do not extend eastward off the site.

Soil samples were collected from two soil borings: DPT-13 (7.5-8 and 15-15.5 ft. bgs) and DPT-14 (16-16.5 ft. bgs) in the vicinity of the former emulsion building. None of the samples from these locations exhibited concentrations of PAHs exceeding applicable cleanup objectives. Soil samples collected from the south side of the building in 2001 (SB-2 and S-9/S-9R), and the north side of the building in 2005 (AST-1, AST-17 and AST-18) exhibited concentrations of two PAHs that exceeded cleanup objectives. The data obtained from this RI confirms that although PAHs are present in some shallow soils in the vicinity of the building, these detections were generally low and do not indicate the presence of an extensively affected area.

Two soil borings (DPT-20 and DPT-21) were advanced near the southern perimeter of the site. None of the samples from these locations exhibited concentrations of PAHs exceeding applicable cleanup objectives.

### 6.2 Riverbank Slope Area

Surficial asphalt deposits were observed on the riverbank slope extending from the Route 378 bridge approximately 800 feet southward. These deposits were observed as hardened asphalt containing various amounts of embedded debris, stones, soil and organic material, that had flowed down the slope and hardened as it cooled. Ripple marks are present in some areas. In several locations the asphalt appeared to have been fragmented or shifted due to sloughing of soil on the slope itself. Asphalt deposits were observed on the slope and along the edge of water along the river. In at least three locations, asphalt deposits extended into the river, and the extent of the deposit could not be determined. The thickness of the observed asphalt was approximately 1 to 2 inches and was confined to the surface, appearing to be the result of the surface spill and not originating from the subsurface. Two severely rusted and broken 55-gallon drums were also found. The drums appeared to have formerly contained asphalt. The drums were overturned and partially buried in the ground and surrounded by smaller asphalt deposits.

## 7.0 CONCLUSIONS

The findings of the RI indicate that conditions at the site are generally consistent with historical results. A fill layer consisting of iron slag, coal slag, cinders, ash, brick and masonry fragments, crushed or pulverized shale and stone, sand and gravel overlies most of the site to approximately 17-26 feet in depth. The water table was encountered from approximately 14 ft. to 20 ft. bgs.

No VOCs were detected above the Restricted Use Soil Cleanup Objective in any of the soil samples analyzed. VOCs were detected in five soil samples marginally above the Unrestricted Use Soil Cleanup Objective yet orders of magnitude below the Restricted Use Soil Cleanup Objective Concentrations of PAHs are present in localized areas and depth intervals over some sections of the site. A thin zone of heavily tar-stained fill was identified in an approximate 8,000 square foot area in the central section of the site, from approximately 10 ft. to 12 ft. below the ground surface.

In areas where the most significant detections of PAHs were found (DPT-02, DPT-15, DPT-16, DPT-24, DPT-27 and DPT-29), and borings where tar was observed (DPT-15, DPT-18, DPT-27, DPT-28 and DPT-29), additional samples were collected from lower depths that were non-detect or only exhibited low concentrations of PAHs. Also, samples of the silt material collected from borings DPT-09 (22-23 ft. bgs), DPT-11 (23-23.5 ft. bgs) and DPT-27 (22-22.5 ft. bgs) did not exhibit concentrations exceeding cleanup objectives. This data generally establishes the lower limit of subsurface contamination, and confirms that the silt consists of an underlying clean zone.

Data obtained from samples collected along the eastern section of the site indicated that exceedances of cleanup objectives observed on site do not extend eastward off the site, and there are no significant concerns regarding subsurface conditions in this area.

Samples from borings advanced along the northern perimeter of the site under the bridge indicated that PAHs are present at concentrations exceeding cleanup objectives in shallow soils from location DPT-02

(4-5 ft. bgs). This data indicates that subsurface impacts are present in a localized area near the bridge. Delineation of affected areas toward the north is not technically feasible due to the presence of a large-diameter underground natural gas line that extends along the approximate centerline of the bridge.

### 7.1 Feasibility Study

In accordance with the June 27, 2013 Consent Order, Section IIB, Item 1, a Feasibility Study will be undertaken to develop and evaluate, using the factors in 375-1.8(f), alternatives for all contaminated media identified by the investigation of the site. The Feasibility Study is required within sixty (60) days of the NYSDEC approval of this Remedial Investigation Report.

## 8.0 REFERENCES

New York State Department of Environmental Conservation (NYSDEC). 2006. Subpart 375-6: Remedial Program Soil Cleanup Objectives, NYSDEC, 15 pp.

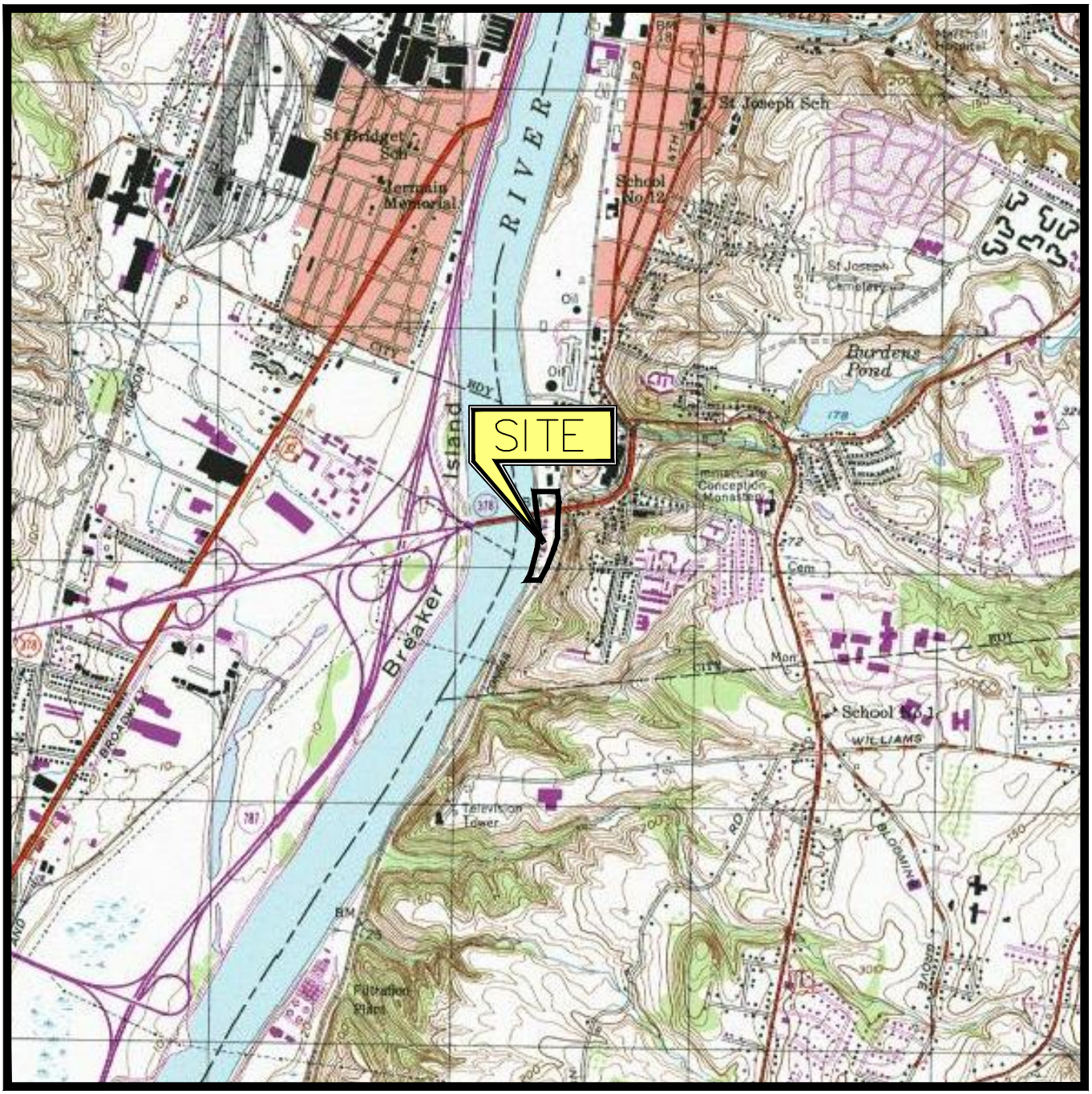
New York State Department of Environmental Conservation (NYSDEC). 2010. Commissioners Policy No. 51 (CP-51), Soil Cleanup Guidance, NYSDEC , 21 pp.

New York State Department of Environmental Conservation (NYSDEC). 2010. Division of Environmental Remediation (DER), Technical Guidance for Site Investigation and Remediation, NYSDEC, 226 pp.

Ecology and Environment, Inc. (E&E). 1993. Phase I Environmental Site Assessment, E&E, 98 pp.

Dan Raviv Associates. 2001. Expert Report in the Matter of Niagara Mohawk Power Corporation, Plaintiff Against Consolidated Rail Corporation, et. al., Dan Raviv Associates, 161 pp.

TRC Raviv Associates. 2005. Facility Closure Site Investigation Report, TRC Raviv Associates, 42 pp.




TROY SOUTH, N.Y. QUADRANGLE

0 2000 FT.

APPROXIMATE SCALE

N

TRC ENVIRONMENTAL CORP.
57 East Willow Street
Millburn, New Jersey 07041

SITE LOCATION MAP

CHEVRON ASPHALT TERMINAL - TRY, NEW YORK

JOB NO. 194098

| SS/ODL | DATE: OCTOBER 2012 | FIGURE: 1 |
|---|---|---|

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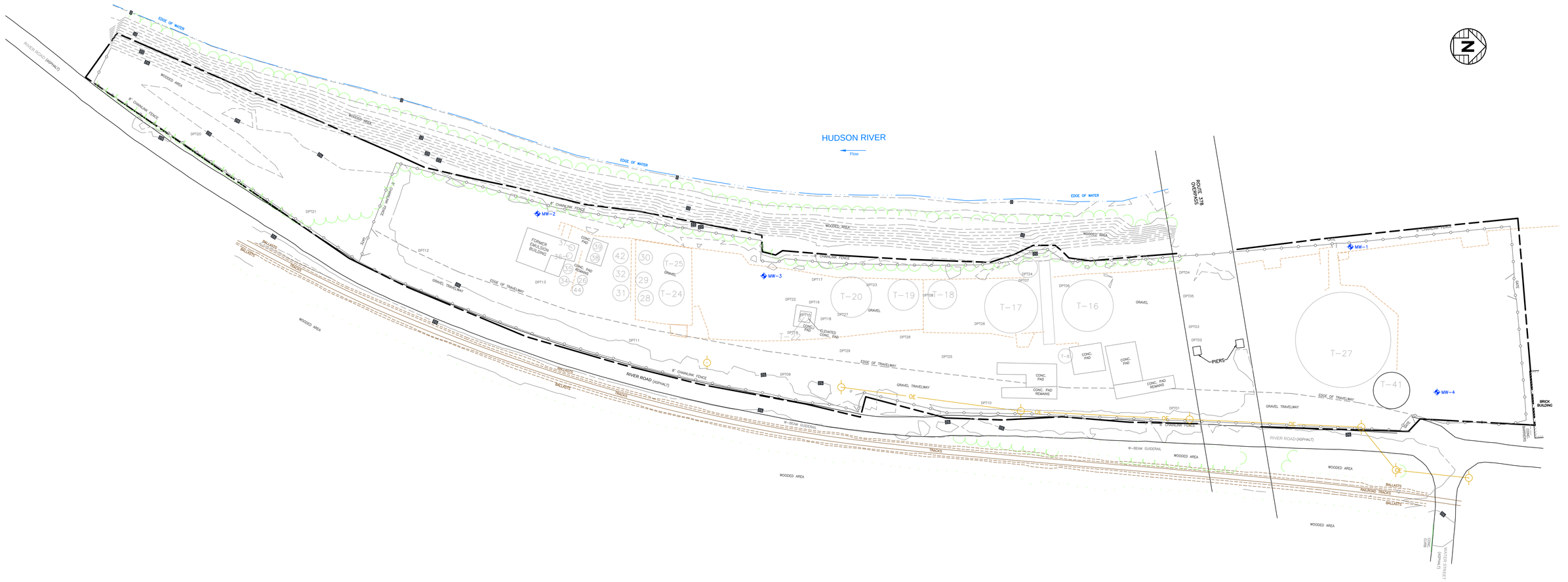



LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- OE — UTILITY POLE WITH OVERHEAD ELECTRIC
- EDGE OF WOODS
- CHAINLINK FENCE
- EDGE OF WATER
- T-24 — FORMER ABOVE-GROUND STORAGE TANK
- FORMER ABOVE-GROUND PIPING
- MW-1 — MONITORING WELL

0 50 FT.
APPROXIMATE SCALE

SOURCES:
BASE MAP PREPARED FROM A FIELD SURVEY CONDUCTED BY M.J. ENGINEERING AND LAND SURVEYING, P.C. MAY 2013.
FORMER ABOVE-GROUND STORAGE TANK LOCATIONS FROM HISTORICAL CHEVRON DRAWINGS.

TRC ENVIRONMENTAL CORP.
57 East Willow Street
Millburn, New Jersey 07041

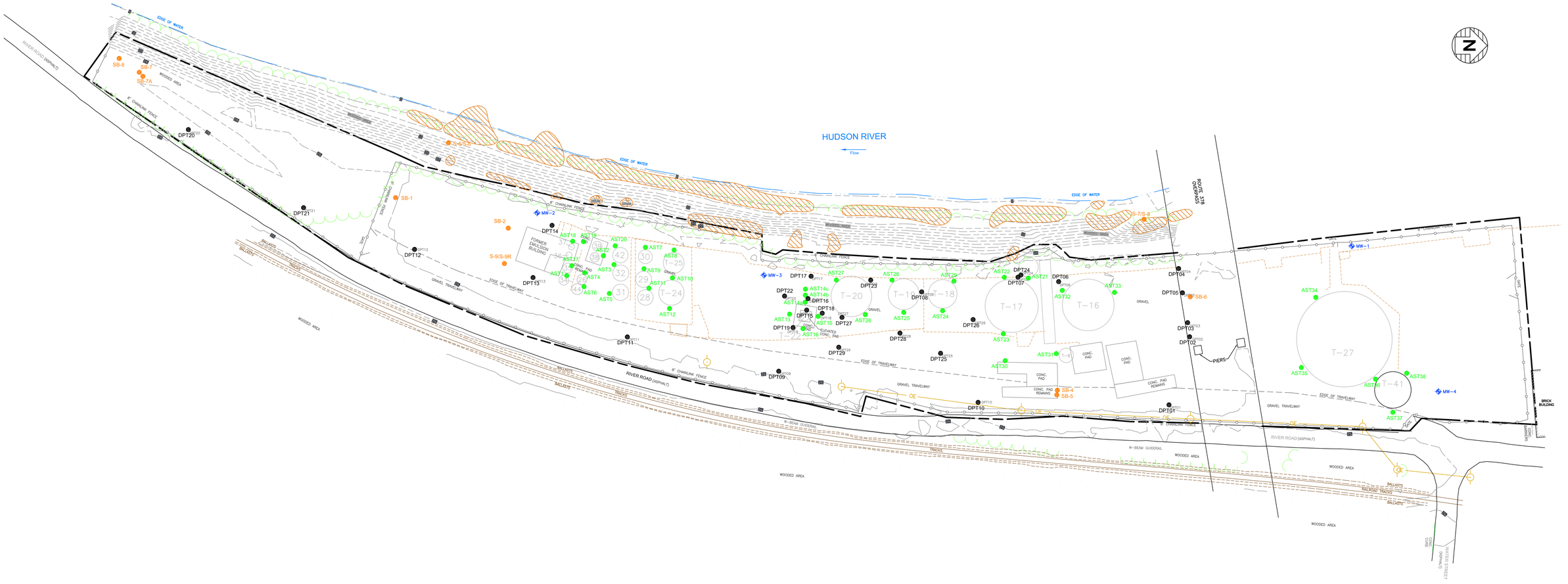
REMEDIAL INVESTIGATION REPORT
SITE PLAN
CHEVRON ENVIRONMENTAL MANAGEMENT CO.
FORMER TROY ASPHALT FACILITY

7 WATER STREET – TROY, NEW YORK

JOB NO. 194098

| HS/LB | DATE: SEPTEMBER 2013 | FIGURE: 2 |
|---|---|---|

FILE: M:\CAD FILES\VISION PROJECTS\194098\CHEVRON TROY NY\FIGURE 2 – SITE PLAN.DWG, DATE: 09/10/2013 11:42:42AM




## 2013 Soil Data

DPT-01

| | |
|---|---|
| Date | 05/06/13 |
| Depth | 13.5-14.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-02

| | |
|---|---|
| Date | 05/06/13 |
| Depth | 4.5-5.0 |
| VOCs | <RUSCO |
| B(a)P | **550** |
| B(a)A | **970** |
| B(b)F | **830** |
| B(k)F | **310** |
| Chrysene | **720** |
| D(a,h)a | **340** |
| Fluoranthene | **1900** |
| I(1,2,3-cd)P | **500** |
| Naphthalene | **2300** |
| Phenanthrene | **3000** |
| Pyrene | **1400** |
| Other PAHs | <RUSCO |

DPT-03

| | |
|---|---|
| Date | 05/06/13 |
| Depth | 14.5-15.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-05

| | | |
|---|---|---|
| Date | 05/06/13 | 05/06/13 |
| Depth | 2.5-3.0 | 22.5-23.0 |
| VOCs | NA | <RUSCO |
| PAHs | <RUSCO | <RUSCO |

DPT-07

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 11.0-11.5 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-08

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 3.5-4.0 |
| VOCs | ND |
| PAHs | <RUSCO |

DPT-09

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 22.5-23.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-10

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 4.0-4.5 |
| VOCs | <RUSCO |
| PAHs | <RUSCO |

DPT-11

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 23.0-23.5 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-12

| | |
|---|---|
| Date | 05/08/13 |
| Depth | 3.5-4.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-13

| | | |
|---|---|---|
| Date | 05/08/13 | 05/08/13 |
| Depth | 7.5-8.0 | 15.0-15.5 |
| VOCs | NA | NA |
| PAHs | <RUSCO | <RUSCO |

DPT-14

| | | |
|---|---|---|
| Date | 05/08/13 | 05/08/13 |
| Depth | 6.0-6.5 | 16.0-16.5 |
| VOCs | NA | NA |
| PAHs | <RUSCO | <RUSCO |

DPT-15

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 10.0-11.0 | 17.0-17.5 |
| VOCs | <RUSCO | NA |
| B(a)P | **490** | <RUSCO |
| B(a)A | **680** | <RUSCO |
| B(b)F | **730** | <RUSCO |
| B(k)F | **260** | <RUSCO |
| Chrysene | **560** | <RUSCO |
| D(a,h)a | **160** | ND |
| Fluoranthene | **1500** | <RUSCO |
| I(1,2,3-cd)P | **240** | <RUSCO |
| Naphthalene | **1900** | <RUSCO |
| Phenanthrene | **2400** | <RUSCO |
| Other PAHs | <RUSCO | <RUSCO |

DPT-16

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 9.5-10.0 |
| VOCs | ND |
| B(a)P | **730** |
| B(a)A | **1400** |
| B(b)F | **1500** |
| B(k)F | **540** |
| Chrysene | **1300** |
| D(a,h)a | **670** |
| Fluoranthene | **3100** |
| Fluorene | **1300** |
| I(1,2,3-cd)P | **900** |
| Naphthalene | **6800 D** |
| Phenanthrene | **5200** |
| Pyrene | **2200** |
| Other PAHs | <RUSCO |

DPT-17

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 18.5-19.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-18

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 3.5-4.0 |
| VOCs | ND |
| PAHs | <RUSCO |

DPT-19

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 15.5-16.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-20

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 12.0-12.5 |
| VOCs | <RUSCO |
| PAHs | <RUSCO |

DPT-21

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 3.0-3.5 | 21.5-22.0 |
| VOCs | <RUSCO | NA |
| PAHs | <RUSCO | <RUSCO |

DPT-22

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 13.5-14.0 |
| VOCs | <RUSCO |
| PAHs | <RUSCO |

DPT-23

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 2.5-3.0 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-24

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 9.0-10.0 |
| VOCs | ND |
| B(a)P | **1600** |
| B(a)A | **2400** |
| B(b)F | **1900** |
| B(k)F | **1100** |
| Chrysene | **2000** |
| D(a,h)a | **530** |
| Fluoranthene | **3700 D** |
| I(1,2,3-cd)P | **1000** |
| Naphthalene | **2300** |
| Phenanthrene | **4000** |
| Pyrene | **2700** |
| Other PAHs | <RUSCO |

DPT-25

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 22.0-23.0 |
| VOCs | NA |
| B(a)P | **5.7** |
| D(a,h)a | **2.4** |
| Other PAHs | <RUSCO |

DPT-26

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 17.0-17.5 |
| VOCs | NA |
| PAHs | <RUSCO |

DPT-27

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 12.0-13.0 | 22.0-22.5 |
| VOCs | NA | NA |
| B(a)P | **15** | <RUSCO |
| B(a)A | **20** | <RUSCO |
| B(b)F | **20** | <RUSCO |
| D(a,h)a | **4.8** | <RUSCO |
| I(1,2,3-cd)P | **12** | <RUSCO |
| Other PAHs | <RUSCO | <RUSCO |

DPT-29

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 6.0-7.0 | 1.0-2.0 |
| VOCs | <RUSCO | ND |
| B(a)P | <RUSCO | **1.5** |
| Other PAHs | <RUSCO | <RUSCO |

FD051013

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 6.0-7.0 |
| VOCs | <RUSCO |
| PAHs | <RUSCO |

| Parameter (mg/kg) | *RUSCO -* |
|---|---|
| Acenaphthene | *1000* |
| Acenaphthylene | *1000* |
| Anthracene | *1000* |
| B(a)P = Benzo(a)pyrene | *1.1* |
| B(a)A = Benzo(a)anthracene | *11* |
| B(b)F = Benzo(b)fluoranthene | *11* |
| Benzo(ghi)perylene | *1000* |
| B(k)F = Benzo(k)fluoranthene | *110* |
| Chrysene | *110* |
| D(a,h)a = | *1.1* |
| Fluoranthene | *1000* |
| Fluorene | *1000* |
| I(1,2,3-cd)P = Indeno (1,2,3-cd) | *11* |
| Naphthalene | *1000* |
| Phenanthrene | *1000* |
| Pyrene | *1000* |

VOCs = Volatile Organic Compounds
PAHs = Polycyclic Aromatic Hydrocarbons
RUSCO = NYDEC's Restricted Use Soil Cleanup Objectives (Industrial)
Bold and Highlighted indicates concentration above RUSCO
NA = Not Analyzed
ND = Not detected above laboratory reporting limit (RL). RL's
D = Diluted sample - see data tables for note

SOURCES:
BASE MAP PREPARED FROM A FIELD SURVEY CONDUCTED BY M.J. ENGINEERING AND LAND SURVEYING, P.C. MAY 2013.
FORMER ABOVE-GROUND STORAGE TANK LOCATIONS FROM HISTORICAL CHEVRON DRAWINGS.

LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- OE — UTILITY POLE WITH OVERHEAD ELECTRIC
- EDGE OF WOODS
- CHAINLINK FENCE
- EDGE OF WATER
- T-24 — FORMER ABOVE-GROUND STORAGE TANK
- FORMER ABOVE-GROUND PIPING
- DRUM
- APPROXIMATE LOCATION AND EXTENT OF SURFICIAL ASPHALT/TAR
- MW-1 — MONITORING WELL
- AST-2 — 2005 SOIL BORING
- SB-4 — 2001 SOIL BORING
- AST-2 — 2013 RI SOIL BORING

0 50 FT.
APPROXIMATE SCALE

TRC ENVIRONMENTAL CORP.
57 East Willow Street
Millburn, New Jersey 07041

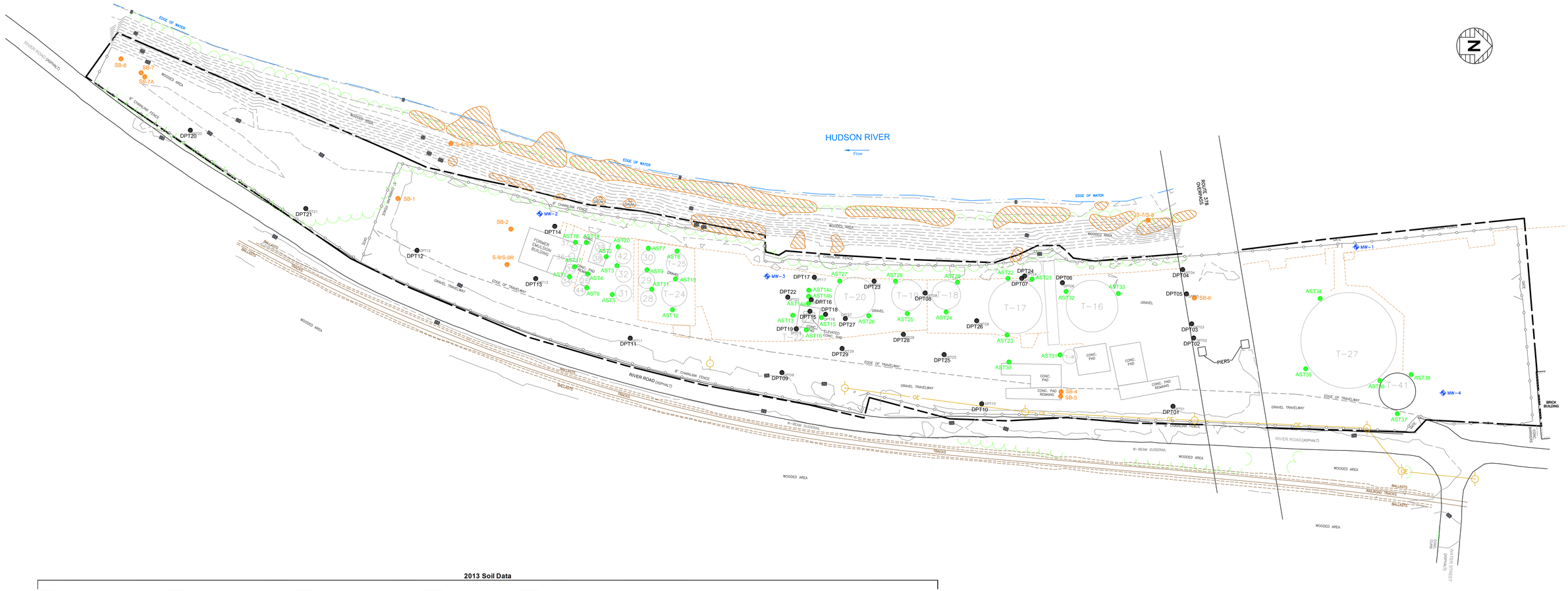
REMEDIAL INVESTIGATION REPORT
SOIL ANALYTICAL RESULTS
CHEVRON ENVIRONMENTAL MANAGEMENT CO.
FORMER TROY ASPHALT FACILITY

7 WATER STREET – TROY, NEW YORK

JOB NO. 194098

| HS/LB | DATE: AUGUST 2013 | FIGURE: 3 |
|---|---|---|

FILE: M:\CAD FILES\VISION PROJECTS\194098\CHEVRON TROY NY\FIGURE 3 - SOIL ANALYTICAL RESULTS.DWG, DATE: 10/29/2013 02:34:14PM




## 2013 Soil Data

**DPT-01**

| | |
|---|---|
| Date | 05/06/13 |
| Depth | 13.5-14.0 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-02**

| | |
|---|---|
| Date | 05/06/13 |
| Depth | 4.5-5.0 |
| Benzene | 6.6 |
| Toluene | 12 |
| Xylene | 33 |
| Other VOCs | <UUSCO |
| Acenaphthene | 58 |
| Acenaphthyle | 500 |
| Anthracene | 800 |
| B(a)P | 550 |
| B(a)A | 970 |
| B(b)F | 830 |
| B(ghi)p | 310 |
| B(k)F | 310 |
| Chrysene | 720 |
| D(a,h)a | 340 |
| Fluoranthene | 1900 |
| Fluorene | 1000 |
| I(1,2,3-cd)P | 500 |
| Naphthalene | 2300 |
| Phenanthrene | 3000 |
| Pyrene | 1400 |
| Other PAHs | <UUSCO |

**DPT-03**

| | |
|---|---|
| Date | 05/06/13 |
| Depth | 14.5-15.0 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-05**

| | | |
|---|---|---|
| Date | 05/06/13 | 05/06/13 |
| Depth | 2.5-3.0 | 22.5-23.0 |
| VOCs | NA | <UUSCO |
| PAHs | <UUSCO | <UUSCO |

**DPT-07**

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 11.0-11.5 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-08**

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 3.5-4.0 |
| VOCs | <UUSCO |
| PAHs | <UUSCO |

**DPT-09**

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 22.5-23.0 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-10**

| | |
|---|---|
| Date | 05/07/13 |
| Depth | <UUSCO |
| VOCs | <UUSCO |
| PAHs | <UUSCO |

**DPT-11**

| | |
|---|---|
| Date | 05/07/13 |
| Depth | 23.0-23.5 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-12**

| | |
|---|---|
| Date | 05/08/13 |
| Depth | 3.5-4.0 |
| VOCs | NA |
| B(b)F | 1.3 |
| D(a,h)a | 0.72 |
| I(1,2,3-cd)P | 0.92 |
| Other PAHs | <UUSCO |

**DPT-13**

| | | |
|---|---|---|
| Date | 05/08/13 | 05/08/13 |
| Depth | 7.5-8.0 | 15.0-15.5 |
| VOCs | NA | NA |
| B(a)P | 1.1 | 0.39 |
| B(a)A | 1.4 | 0.6 |
| B(b)F | 2 | 0.5 |
| Chrysene | 1.4 | 0.48 |
| D(a,h)a | 0.85 | 0.2 |
| I(1,2,3-cd)P | 1.2 | 0.3 |
| Other PAHs | <UUSCO | <UUSCO |

**DPT-14**

| | | |
|---|---|---|
| Date | 05/08/13 | 05/08/13 |
| Depth | 6.0-6.5 | 16.0-16.5 |
| VOCs | NA | NA |
| PAHs | <UUSCO | <UUSCO |

**DPT-15**

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 10.0-11.0 | 17.0-17.5 |
| MC | 1 | NA |
| Other VOCs | <UUSCO | NA |
| Acenaphthene | 65 | 0.032 |
| Acenaphthyle | 380 | ND |
| Anthracene | 580 | 0.16 |
| B(a)P | 490 | 0.7 |
| B(a)A | 680 | 0.74 |
| B(b)F | 730 | 1.2 |
| B(ghi)p | 170 | 0.27 |
| B(k)F | 260 | 0.46 |
| Chrysene | 560 | 0.62 |
| D(a,h)a | 160 | ND |
| Fluoranthene | 1500 | 1.1 |
| Fluorene | 880 | ND |
| I(1,2,3-cd)P | 240 | 0.97 |
| Naphthalene | 1900 | 1.7 |
| Phenanthrene | 2400 | 0.48 |
| Pyrene | 930 | 0.95 |
| Other PAHs | <UUSCO | <UUSCO |

**DPT-16**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 9.5-10.0 |
| Benzene | 9 |
| EB | 1.7 |
| MC | 1.1 |
| Toluene | 19 |
| Xylene | 46 |
| Other VOCs | <UUSCO |
| Acenaphthene | 120 |
| Acenaphthyle | 270 |
| Anthracene | 100 |
| B(a)P | 840 |
| B(a)A | 1300 |
| B(b)F | 1200 |
| B(ghi)p | 290 |
| B(k)F | 560 |
| Chrysene | 1100 |
| D(a,h)a | 210 |
| Fluoranthene | 2900 |
| Fluorene | 1300 |
| I(1,2,3-cd)P | 360 |
| Naphthalene | 6800 D |
| Phenanthrene | 4800 |
| Pyrene | 1700 |
| Other PAHs | <UUSCO |

**DPT-17**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 18.5-19.0 |
| VOCs | NA |
| B(k)F | 0.96 |
| Other PAHs | <UUSCO |

**DPT-18**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 3.5-4.0 |
| VOCs | ND |
| B(b)F | 1.3 |
| I(1,2,3-cd)P | 1.3 |
| Naphthalene | 82 D |
| Other PAHs | <UUSCO |

**DPT-19**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 15.5-16.0 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-20**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 12.0-12.5 |
| Acetone | 0.072 |
| Other VOCs | <UUSCO |
| PAHs | <UUSCO |

**DPT-21**

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 3.0-3.5 | 21.5-22.0 |
| Acetone | 0.067 | NA |
| Other VOCs | <UUSCO | NA |
| PAHs | <UUSCO | <UUSCO |

**DPT-22**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 13.5-14.0 |
| Acetone | 0.38 |
| Other VOCs | <UUSCO |
| I(1,2,3-cd)P | 0.8 |
| Other PAHs | <UUSCO |

**DPT-23**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 2.5-3.0 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-24**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 9.0-10.0 |
| MC | 1.2 |
| Other VOCs | ND |
| Acenaphthene | 66 |
| Acenaphthyle | 210 |
| Anthracene | 930 |
| B(a)P | 1600 |
| B(a)A | 2100 |
| B(b)F | 2200 |
| B(ghi)p | 480 |
| B(k)F | 1000 |
| Chrysene | 1700 |
| D(a,h)a | 210 |
| Fluoranthene | 3700 D |
| Fluorene | 660 |
| I(1,2,3-cd)P | 490 |
| Naphthalene | 2100 |
| Phenanthrene | 4000 D |
| Pyrene | 2100 |
| Other PAHs | <UUSCO |

**DPT-25**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 22.0-23.0 |
| VOCs | NA |
| B(a)P | 8.7 |
| B(a)A | 8 |
| B(b)F | 8.5 |
| B(k)F | 3.7 |
| Chrysene | 6.4 |
| D(a,h)a | 2.4 |
| I(1,2,3-cd)P | 3.4 |
| Other PAHs | <UUSCO |

**DPT-26**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 17.0-17.5 |
| VOCs | NA |
| PAHs | <UUSCO |

**DPT-27**

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 12.0-13.0 | 22.0-22.5 |
| VOCs | NA | NA |
| B(a)P | 15 | 0.073 |
| B(a)A | 20 | 0.12 |
| B(b)F | 20 | 0.2 |
| B(k)F | 9.8 | 0.039 |
| Chrysene | 18 | 0.14 |
| D(a,h)a | 4.8 | 0.15 |
| I(1,2,3-cd)P | 12 | 0.17 |
| Other PAHs | <UUSCO | <UUSCO |

**DPT-29**

| | | |
|---|---|---|
| Date | 05/10/13 | 05/10/13 |
| Depth | 6.0-7.0 | 1.0-2.0 |
| VOCs | <UUSCO | <UUSCO |
| B(a)P | 0.072 | 1.5 |
| B(a)A | 0.12 | 2 |
| B(b)F | 0.2 | 2.7 |
| B(k)F | 0.039 | 0.86 |
| Chrysene | 0.14 | 1.9 |
| D(a,h)a | 0.15 | 0.83 |
| I(1,2,3-cd)P | 0.17 | 1.2 |
| Other PAHs | <UUSCO | <UUSCO |

**FD051013**

| | |
|---|---|
| Date | 05/10/13 |
| Depth | 6.0-7.0 |
| VOCs | <UUSCO |
| B(a)A | 1.7 |
| B(b)F | 1.4 |
| Chrysene | 1.5 |
| I(1,2,3-cd)P | 0.56 |
| Other PAHs | <UUSCO |

| Parameter (mg/kg) | RUSCO - Industrial(ppm) | UUSCO (ppm) |
|---|---|---|
| Acetone | 1000 | 0.05 |
| Benzene | 89 | 0.06 |
| Ethylbenzene = EB | 780 | 1 |
| Methylene chloride = MC | 1000 | 0.05 |
| Toluene | 1000 | 0.7 |
| Xylenes (total) = Xylene | 1000 | 0.26 |
| Acenaphthene | 20 | 1000 |
| Acenaphthylene | 100 | 1000 |
| Anthracene | 100 | 1000 |
| B(a)P = Benzo(a)pyrene | 1 | 11 |
| B(a)A = Benzo(a)anthracene | 1 | 11 |
| B(b)F = Benzo(b)fluoranthene | 1 | 11 |
| Benzo(ghi)perylene = B(ghi)p | 100 | 1000 |
| B(k)F = Benzo(k)fluoranthene | 0.8 | 110 |
| Chrysene | 1 | 110 |
| D(a,h)a = Dibenzo(a,h)anthracene | 0.33 | 1.1 |
| Fluoranthene | 100 | 1000 |
| Fluorene | 30 | 1000 |
| I(1,2,3-cd)P = Indeno (1,2,3-cd) | 0.5 | 11 |
| Naphthalene | 12 | 1000 |
| Phenanthrene | 100 | 1000 |
| Pyrene | 100 | 1000 |

VOCs = Volatile Organic Compounds
PAHs = Polycyclic Aromatic Hydrocarbons
RUSCO = NYDEC's Restricted Use Soil Cleanup Objectives (Industrial)
UUSCO = NYDEC's Unrestricted Use Soil Cleanup Objectives
Bold and Yellow Highlighting indicates concentration above RUSCO
Bold and orange highlighting indicates concentration above UUSCO but below the RUSCO
NA = Not Analyzed
J = Estimated value
ND = Not detected above laboratory reporting limit (RL). RL's are shown in data summary tables (Appendix C)

## LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- UTILITY POLE WITH OVERHEAD ELECTRIC (OE)
- EDGE OF WOODS
- CHAINLINK FENCE
- EDGE OF WATER
- FORMER ABOVE-GROUND STORAGE TANK (T-24)
- FORMER ABOVE-GROUND PIPING
- DRUM
- APPROXIMATE LOCATION AND EXTENT OF SURFICIAL ASPHALT/TAR
- MW-1 MONITORING WELL
- AST-2 2005 SOIL BORING
- SB-4 2001 SOIL BORING
- AST-2 2013 RI SOIL BORING

0 50 FT.
APPROXIMATE SCALE

SOURCES:
BASE MAP PREPARED FROM A FIELD SURVEY CONDUCTED BY M.J. ENGINEERING AND LAND SURVEYING, P.C. MAY 2013.
FORMER ABOVE-GROUND STORAGE TANK LOCATIONS FROM HISTORICAL CHEVRON DRAWINGS.

TRC ENVIRONMENTAL CORP.
57 East Willow Street
Millburn, New Jersey 07041

SOIL ANALYTICAL RESULTS
COMPARISON TO NYSDEC's UNRESTRICTED USE SOIL CLEANUP OBJECTIVES

7 WATER STREET – TROY, NEW YORK

JOB NO. 194098

HS/ODL | DATE: SEPTEMBER 2014 | FIGURE: 4

# TABLE I

## Summary of Laboratory Analytical Data – Volatile Organic Compounds (VOCs) in Soils

**Table I**
**Chevron Products USA, Troy Asphalt Terminal**
**Troy, New York**
**NYSDEC Site No. 442029**
**Remedial Investigation Report**
**Summary of Laboratory Analytical Data - Volatile Organic Compounds ( VOCs) in Soil**

| Parameter (ug/L) | Part 375-6.8 Soil Cleanup Objectives | | | DPT-02 (4.5-5.0) 5/6/2013 | DPT-05 (22.5-23.0) 5/6/2013 | DPT-08 (3.5-4.0) 5/7/2013 | DPT-10 (4.0-4.5) 5/7/2013 | DPT-15(10.0-11.0) 5/10/2013 | DPT-16(9.5-10.0) 5/10/2013 | DPT-18(3.5-4.0) 5/10/2013 |
|---|---|---|---|---|---|---|---|---|---|---|
| | Unrestricted Use | Restricted Use (Protection of GW) | Restricted Use (Industrial) | Dilution factor - 20 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 40 | Dilution factor - 40 | Dilution factor - 40 |
| Acetone | 0.05 | 0.05 | 1000 | 14 U | 0.027 U | 0.0058 J | 0.0094 J | 24 U | 27 U | 22 U |
| Benzene | 0.06 | 0.06 | 89 | **6.6** | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | **9** | 4.5 U |
| Bromodichloromethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Bromoform | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Bromomethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 2-Butanone (MEK) | 0.12 | 0.12 | 1000 | 14 U | 0.027 U | 0.029 U | 0.027 U | 24 U | 27 U | 22 U |
| Carbon Disulfide | -- | 2.7 | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Carbon tetrachloride | 0.76 | 0.76 | 44 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Chlorobenzene | 1.1 | 1.1 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Chloroethane | -- | 1.9 | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Chloroform | 0.37 | 0.37 | 700 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Chloromethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| cis-1,2-Dichloroethene | 0.25 | 0.25 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| cis-1,3-Dichloropropene | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Cyclohexane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,2-Dibromo-3-chloropropane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Dibromochloromethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,2-Dibromoethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,2-Dichlorobenzene | 1.1 | 1.1 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,3-Dichlorobenzene | 2.4 | 2.4 | 560 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,4-Dichlorobenzene | 1.8 | 1.8 | 250 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 0.78 J | 5.4 U | 4.5 U |
| Dichlorodifluoromethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,1-Dichloroethane | 0.27 | 0.27 | 480 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,2-Dichloroethane | 0.02 | 0.02 | 60 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,1-Dichloroethene | 0.33 | 0.33 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,2-Dichloropropane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Ethylbenzene | 1 | 1 | 780 | 0.88 J | 0.00049 J | 0.0058 U | 0.0054 U | 4.8 U | **1.7** J | 4.5 U |
| 2-Hexanone | -- | -- | -- | 14 U | 0.027 U | 0.029 U | 0.027 U | 24 U | 27 U | 22 U |
| Isopropylbenzene | -- | 2.3 | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Methyl Acetate | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Methyl Tert Butyl Ether (MTBE) | 0.93 | 0.93 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 4-methyl-2-pentanone (MIBK) | -- | 1 | -- | 14 U | 0.027 U | 0.029 U | 0.027 U | 24 U | 27 U | 22 U |
| Methylcyclohexane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Methylene chloride | 0.05 | 0.05 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | **1 J B** | **1.1 J B** | 4.5 U |
| Styrene | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,1,2,2-Tetrachloroethane | -- | 0.6 | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Tetrachloroethene | 1.3 | 1.3 | 300 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Toluene | 0.7 | 0.7 | 1000 | **12** | 0.0053 U | 0.0058 U | 0.00051 J | 4.8 U | **19** | 4.5 U |
| trans-1,2-Dichloroethene | 0.19 | 0.19 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| trans-1,3-Dichloropropene | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Freon 113 | -- | 6 | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,1,1-Trichloroethane | 0.68 | 0.68 | 1000 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,1,2-Trichloroethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Trichloroethene | 0.47 | 0.47 | 400 | 2.8 U | 0.0053 U | 0.002 J | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Trichlorofluoromethane | -- | -- | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| 1,2,4-Trichlorobenzene | -- | 3.4 | -- | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 13 | 2.9 J | 4.5 U |
| Vinyl Chloride | 0.02 | 0.02 | 27 | 2.8 U | 0.0053 U | 0.0058 U | 0.0054 U | 4.8 U | 5.4 U | 4.5 U |
| Xylenes (total) | 0.26 | 1.6 | 1000 | **33** | 0.0017 J | 0.012 U | 0.011 U | 9.5 U | **46** | 9 U |
| Total VOC TIC | -- | -- | -- | 2043 | 0.0065 | NA | NA | 584.6 | 3497 | 814 |

All results in parts per milion (ppm)
U = Compound not detected at a
J = Concentration is greater than
B - Compound also detected in the associated Method Blank.
Bold and yellow highlighted = Value is greater than the Resticted Use, Industrial Cleanup Objective and the Unrestricted Use Soil Cleanup Objective
Bold and orange highlighted = Value is greater than the Unresticted Use Soil Cleanup Objective
Green highlighted = Laboratory Reporting limit exceeds the Unrestricted Use Soil Cleanup Objective due to sample dilution

**Table I**
**Chevron Products USA, Troy Asphalt Terminal**
**Troy, New York**
**NYSDEC Site No. 442029**
**Remedial Investigation Report**
**Summary of Laboratory Analytical Data - Volatile Organic Compounds ( VOCs) in Soil**

| Parameter (ug/L) | Part 375-6.8 Soil Cleanup Objectives | | | DPT-20(12.0-12.5) 5/10/2013 | DPT-21(3.0-3.5) 5/10/2013 | DPT-22(13.5-14.0) 5/10/2013 | DPT-24(9.0-10.0) 5/10/2013 | DPT-29(6.0-7.0) 5/10/2013 | DPT-29(1.0-2.0) 5/10/2013 |
|---|---|---|---|---|---|---|---|---|---|
| | Unrestricted Use | Restricted Use (Protection of GW) | Restricted Use (Industrial) | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 40 | Dilution factor - 1 | Dilution factor - 1 |
| Acetone | 0.05 | 0.05 | 1000 | **0.072** | **0.067** | **0.38** | 28 U | 0.028 U | 0.028 U |
| Benzene | 0.06 | 0.06 | 89 | 0.00056 J | 0.0026 J | 0.063 U | 5.6 U | 0.0026 J | 0.0055 U |
| Bromodichloromethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Bromoform | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Bromomethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 2-Butanone (MEK) | 0.12 | 0.12 | 1000 | 0.016 J | 0.019 J | 0.063 J | 28 U | 0.028 U | 0.028 U |
| Carbon Disulfide | -- | 2.7 | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Carbon tetrachloride | 0.76 | 0.76 | 44 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Chlorobenzene | 1.1 | 1.1 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Chloroethane | -- | 1.9 | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Chloroform | 0.37 | 0.37 | 700 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Chloromethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| cis-1,2-Dichloroethene | 0.25 | 0.25 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| cis-1,3-Dichloropropene | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Cyclohexane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,2-Dibromo-3-chloropropane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Dibromochloromethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,2-Dibromoethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,2-Dichlorobenzene | 1.1 | 1.1 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,3-Dichlorobenzene | 2.4 | 2.4 | 560 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,4-Dichlorobenzene | 1.8 | 1.8 | 250 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Dichlorodifluoromethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,1-Dichloroethane | 0.27 | 0.27 | 480 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,2-Dichloroethane | 0.02 | 0.02 | 60 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,1-Dichloroethene | 0.33 | 0.33 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,2-Dichloropropane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Ethylbenzene | 1 | 1 | 780 | 0.00096 J | 0.0029 J | 0.01 J | 5.6 U | 0.0056 U | 0.0055 U |
| 2-Hexanone | -- | -- | -- | 0.029 U | 0.029 U | 0.32 U | 28 U | 0.028 U | 0.028 U |
| Isopropylbenzene | -- | 2.3 | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Methyl Acetate | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Methyl Tert Butyl Ether (MTBE) | 0.93 | 0.93 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 4-methyl-2-pentanone (MIBK) | -- | 1 | -- | 0.029 U | 0.029 U | 0.32 U | 28 U | 0.028 U | 0.028 U |
| Methylcyclohexane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0019 J |
| Methylene chloride | 0.05 | 0.05 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | **1.2 J B** | 0.0056 U | 0.0055 U |
| Styrene | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,1,2,2-Tetrachloroethane | -- | 0.6 | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Tetrachloroethene | 1.3 | 1.3 | 300 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Toluene | 0.7 | 0.7 | 1000 | 0.0016 J | 0.0075 | 0.044 J | 5.6 U | 0.0013 J | 0.0055 U |
| trans-1,2-Dichloroethene | 0.19 | 0.19 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| trans-1,3-Dichloropropene | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Freon 113 | -- | 6 | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,1,1-Trichloroethane | 0.68 | 0.68 | 1000 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,1,2-Trichloroethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Trichloroethene | 0.47 | 0.47 | 400 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Trichlorofluoromethane | -- | -- | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| 1,2,4-Trichlorobenzene | -- | 3.4 | -- | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Vinyl Chloride | 0.02 | 0.02 | 27 | 0.0058 U | 0.0058 U | 0.063 U | 5.6 U | 0.0056 U | 0.0055 U |
| Xylenes (total) | 0.26 | 1.6 | 1000 | 0.012 U | 0.0045 J | 0.014 J | 11 U | 0.011 U | 0.011 U |
| Total VOC TIC | -- | -- | -- | 0.227 | 0.7199 | 15.8 | 387.8 | 0.0071 | 0.2355 |

All results in parts per milion (ppm)
U = Compound not detected at a
J = Concentration is greater than
B - Compound also detected in the associated Method Blank.
Bold and yellow highlighted = Value is greater than the Resticted Use, Industrial Cleanup Objective and the Unrestricted Use Soil Cleanup Objective
Bold and orange highlighted = Value is greater than the Unresticted Use Soil Cleanup Objective
Green highlighted = Laboratory Reporting limit exceeds the Unrestricted Use Soil Cleanup Objective due to sample dilution

# TABLE II

## Summary of Laboratory Analytical Data – Poly-Aromatic Hydrocarbons (PAHs) in Soils

**Table II**
**Chevron Products USA, Troy Asphalt Terminal**
**Troy, New York**
**NYSDEC Site No. 442029**
**Remedial Investigation Report**
**Summary of Laboratory Analytical Data - Poly-Aromatic Hydrocarbons ( PAHs) in Soil**

| Parameter (mg/kg) | Part 375-6.8 Soil Cleanup Objectives | | DPT-01 (13.5-14.0) 5/6/2013 | DPT-02 (4.5-5.0) 5/6/2013 | DPT-03 (14.5-15.0) 5/6/2013 | DPT-05 (2.5-3.0) 5/6/2013 | DPT-05 (22.5-23.0) 5/6/2013 | DPT-07 (11.0-11.5) 5/7/2013 | DPT-08 (3.5-4.0) 5/7/2013 | DPT-09 (22.5-23.0) 5/7/2013 | DPT-10 (4.0-4.5) 5/7/2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unrestricted Use | Restricted Use (Industrial) | Dilution factor - 1 | Dilution factor - 400 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 |
| Acenaphthene | 20 | 1000 | 0.006 J | **58 J** | 0.0072 J | 0.19 U | 0.18 U | 0.2 U | 0.2 U | 0.18 U | 0.18 U |
| Acenaphthylene | 100 | 1000 | 0.032 J | **500** | 0.03 J | 0.025 J | 0.18 U | 0.2 U | 0.2 U | 0.18 U | 0.018 J |
| Anthracene | 100 | 1000 | 0.19 U | **880** | 0.064 J | 0.0095 J | 0.18 U | 0.2 U | 0.2 U | 0.0072 J | 0.026 J |
| Benzo(a)pyrene | 1 | 1.1 | 0.19 U | **550** | 0.22 | 0.091 J | 0.019 J | 0.2 U | 0.2 U | 0.019 J | 0.13 J |
| Benzo(a)anthracene | 1 | 11 | 0.19 U | **970** | 0.35 | 0.067 J | 0.023 J | 0.2 U | 0.2 U | 0.026 J | 0.15 J |
| Benzo(b)fluoranthene | 1 | 11 | 0.19 U | **830** | 0.43 | 0.2 | 0.12 J | 0.2 U | 0.099 J | 0.12 J | 0.25 |
| Benzo(ghi)perylene | 100 | 1000 | 0.19 U | **310** J | 0.15 J | 0.11 J | 0.028 J | 0.2 U | 0.2 U | 0.017 J | 0.1 J |
| Benzo(k)fluoranthene | 0.8 | 110 | 0.19 U | **310** J | 0.15 J | 0.048 J | 0.013 J | 0.2 U | 0.2 U | 0.012 J | 0.072 J |
| Chrysene | 1 | 110 | 0.19 U | **720** | 0.37 | 0.055 J | 0.044 J | 0.2 U | 0.0037 J | 0.052 J | 0.17 J |
| Dibenz(a,h)anthracene | 0.33 | 1.1 | 0.19 U | **340** J | 0.17 J | 0.16 J | 0.13 J | 0.2 U | 0.2 U | 0.18 U | 0.14 J |
| Fluoranthene | 100 | 1000 | 0.0078 J | **1900** | 0.49 | 0.057 J | 0.024 J | 0.0058 J | 0.2 U | 0.043 J | 0.18 |
| Fluorene | 30 | 1000 | 0.032 J | **1000** | 0.022 J | 0.19 U | 0.18 U | 0.2 U | 0.2 U | 0.18 U | 0.0094 J |
| Indeno(1,2,3-cd)pyrene | 0.5 | 11 | 0.19 U | **500** | 0.24 | 0.21 | 0.14 J | 0.2 U | 0.2 U | 0.13 J | 0.19 |
| Naphthalene | 12 | 1000 | 1.3 | **2300** | 0.19 J | 0.022 J | 0.18 U | 0.2 U | 0.063 J | 0.021 J | 0.028 J |
| Phenanthrene | 100 | 1000 | 0.032 J | **3000** | 0.27 | 0.044 J | 0.02 J | 0.011 J | 0.011 J | 0.051 J | 0.11 J |
| Pyrene | 100 | 1000 | 0.19 U | **1400** | 0.4 | 0.042 J | 0.023 J | 0.2 U | 0.2 U | 0.033 J | 0.17 J |

| Parameter (mg/kg) | Part 375-6.8 Soil Cleanup Objectives | | DPT-11 (23.0-23.5) 5/7/2013 | DPT-12 (3.5-4.0) 5/8/2013 | DPT-13 (7.5-8.0) 5/8/2013 | DPT-13 (15.0-15.5) 5/8/2013 | DPT-14 (6.0-6.5) 5/8/2013 | DPT-14 (16.0-16.5) 5/8/2013 | DPT-15(10.0-11.0) 5/10/2013 | DPT-15(17.0-17.5) 5/10/2013 | DPT-16(9.5-10.0) 5/10/2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unrestricted Use | Restricted Use (Industrial) | Dilution factor - 1 | Dilution factor - 5 | Dilution factor - 5 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 50 | Dilution factor - 5 | Dilution factor - 40 |
| Acenaphthene | 20 | 1000 | 0.028 J | 0.9 U | 0.033 J | 0.0067 J | 0.18 U | 0.19 U | **65 J** | 0.032 J | **120 J** |
| Acenaphthylene | 100 | 1000 | 0.022 J | 0.13 J | 0.22 J | 0.079 J | 0.019 J | 0.19 U | **380** | 1.2 U | **270** |
| Anthracene | 100 | 1000 | 0.2 | 0.17 J | 0.26 J | 0.17 J | 0.015 J | 0.19 U | **580** | 0.16 J | **1000** |
| Benzo(a)pyrene | 1 | 1.1 | 0.41 | 0.65 J | **1.1** | 0.39 | 0.058 J | 0.19 U | **490** | 0.7 J | **840** |
| Benzo(a)anthracene | 1 | 11 | 0.52 | 0.94 | **1.4** | 0.6 | 0.12 J | 0.19 U | **680** | 0.74 J | **1300** |
| Benzo(b)fluoranthene | 1 | 11 | 0.51 | **1.3** | **2** | 0.5 | 0.18 | 0.19 U | **730** | **1.2** | **1200** |
| Benzo(ghi)perylene | 100 | 1000 | 0.22 | 0.38 J | 0.71 J | 0.18 J | 0.051 J | 0.19 U | **170** | 0.27 J | **290** |
| Benzo(k)fluoranthene | 0.8 | 110 | 0.18 J | 0.49 J | 0.62 J | 0.28 | 0.038 J | 0.19 U | **260** | 0.46 J | **560** |
| Chrysene | 1 | 110 | 0.47 | 0.95 | **1.4** | 0.48 | 0.11 J | 0.19 U | **560** | 0.62 J | **1100** |
| Dibenz(a,h)anthracene | 0.33 | 1.1 | 0.19 J | **0.72 J** | **0.85 J** | 0.2 J | 0.14 J | 0.19 U | **160** | **1.2 U** | **210** |
| Fluoranthene | 100 | 1000 | 0.8 | 1.7 | 2.2 | 0.95 | 0.21 | 0.19 U | **1500** | 1.1 J | **2900** |
| Fluorene | 30 | 1000 | 0.06 J | 0.11 J | 0.077 J | 0.085 J | 0.18 U | 0.19 U | **880** | 1.2 U | **1300** |
| Indeno(1,2,3-cd)pyrene | 0.5 | 11 | 0.29 | **0.92** | **1.2** | 0.3 | 0.15 J | 0.19 U | **240** | **0.97** J | **360** |
| Naphthalene | 12 | 1000 | 0.054 J | 0.9 U | 0.15 J | 0.022 J | 0.18 U | 0.19 U | **1900** | 1.7 | **6800 D** |
| Phenanthrene | 100 | 1000 | 0.34 | 1.2 | 1.7 | 0.74 | 0.07 J | 0.007 J | **2400** | 0.48 J | **4800** |
| Pyrene | 100 | 1000 | 0.76 | 1.3 | 1.6 | 0.75 | 0.17 J | 0.19 U | **930** | 0.95 J | **1700** |

All results in parts per milion (ppm)
U = Compound not detected at a concentration exceeding the indicated Laboratory Reporting Limit (RL).
J = Concentration is greater than the Method Detection Level but less than the RL. The value is estimated.
D = Concentration in the initial analysis exceeded the instrument calibration range. The sample was reanalyzed at a dilution factor.
Bold and yellow highlighted = Value is greater than the Resticted Use, Industrial Soil Cleanup Objective
Bold and orange highlighted = Value is greater than the Unresticted Use, Soil Cleanup Objective
Green highlighted = Laboratory Reporting limit exceeds the Unrestricted Use Soil Cleanup Objective

**Table II**
**Chevron Products USA, Troy Asphalt Terminal**
**Troy, New York**
**NYSDEC Site No. 442029**
**Remedial Investigation Report**
**Summary of Laboratory Analytical Data - Poly-Aromatic Hydrocarbons ( PAHs) in Soil**

| Parameter (mg/kg) | Part 375-6.8 Soil Cleanup Objectives | | DPT-17(18.5-19.0) 5/10/2013 | DPT-18(3.5-4.0) 5/10/2013 | DPT-19(15.5-16.0) 5/10/2013 | DPT-20(12.0-12.5) 5/10/2013 | DPT-21(3.0-3.5) 5/10/2013 | DPT-21(21.5-22.0) 5/10/2013 | DPT-22(13.5-14.0) 5/10/2013 | DPT-23(2.5-3.0) 5/10/2013 | DPT-24(9.0-10.0) 5/10/2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Unrestricted Use | Restricted Use (Industrial) | Dilution factor - 1 | Dilution factor - 40 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 1 | Dilution factor - 40 |
| Acenaphthene | 20 | 1000 | 0.036 J | 1.9 U | 0.19 U | 0.0027 J | 0.015 J | 0.023 J | 1.1 U | 0.02 J | **66** J |
| Acenaphthylene | 100 | 1000 | 0.016 J | 1.9 U | 0.19 U | 0.2 U | 0.014 J | 0.043 J | 1.1 U | 0.2 U | **210** |
| Anthracene | 100 | 1000 | 0.063 J | 0.12 J | 0.0083 J | 0.2 U | 0.0058 J | 0.015 J | 1.1 U | 0.034 J | **930** |
| Benzo(a)pyrene | 1 | 1.1 | 0.16 J | 0.11 J | 0.027 J | 0.0047 J | 0.005 J | 0.017 J | 0.11 J | 0.72 | **1600** |
| Benzo(a)anthracene | 1 | 11 | 0.18 J | 0.22 J | 0.03 J | 0.017 J | 0.2 U | 0.24 U | 0.16 J | 0.37 | **2100** |
| Benzo(b)fluoranthene | 1 | 11 | 0.33 | **1.3** J | 0.14 J | 0.11 J | 0.11 J | 0.14 J | 0.66 J | 0.89 | **2200** |
| Benzo(ghi)perylene | 100 | 1000 | 0.083 J | 0.097 J | 0.014 J | 0.2 U | 0.2 U | 0.015 J | 0.12 J | 0.49 | **480** |
| Benzo(k)fluoranthene | 0.8 | 110 | **0.096** J | 0.18 J | 0.018 J | 0.2 U | 0.0033 J | 0.019 J | 0.075 J | 0.42 | **1000** |
| Chrysene | 1 | 110 | 0.19 J | 0.42 J | 0.056 J | 0.014 J | 0.014 J | 0.054 J | 0.17 J | 0.35 | **1700** |
| Dibenz(a,h)anthracene | 0.33 | 1.1 | 0.17 J | 1.9 U | 0.19 U | 0.2 U | 0.2 U | 0.24 U | 1.1 U | 0.24 | **210** |
| Fluoranthene | 100 | 1000 | 0.36 | 0.52 J | 0.04 J | 0.0067 J | 0.0081 J | 0.03 J | 0.13 J | 0.29 | **3700 D** |
| Fluorene | 30 | 1000 | 0.037 J | 1.9 U | 0.0081 J | 0.2 U | 0.036 J | 0.11 J | 1.1 U | 0.0083 J | **860** |
| Indeno(1,2,3-cd)pyrene | 0.5 | 11 | 0.2 J | **1.3** J | 0.14 J | 0.2 U | 0.2 U | 0.17 J | **0.8** J | 0.49 | **490** |
| Naphthalene | 12 | 1000 | 0.1 J | **82** D | 0.25 | 0.055 J | 2.2 | 5.8 | 1.1 U | 0.15 J | **2100** |
| Phenanthrene | 100 | 1000 | 0.41 | 0.53 J | 0.073 J | 0.02 J | 0.033 J | 0.12 J | 0.091 J | 0.14 J | **4000 D** |
| Pyrene | 100 | 1000 | 0.28 | 0.3 J | 0.029 J | 0.2 U | 0.0064 J | 0.025 J | 0.14 J | 0.26 | **2100** |

| Parameter (mg/kg) | Part 375-6.8 Soil Cleanup Objectives | | DPT-25(22.0-23.0) 5/10/2013 | DPT-26(17.0-17.5) 5/10/2013 | DPT-27(12.0-13.0) 5/10/2013 | DPT-27(22.0-22.5) 5/10/2013 | DPT-29(1.0-2.0) 5/10/2013 | DPT-29(6.0-7.0) 5/10/2013 |
|---|---|---|---|---|---|---|---|---|
| | Unrestricted Use | Restricted Use (Industrial) | Dilution factor - 10 | Dilution factor - 1 | Dilution factor - 20 | Dilution factor - 1 | Dilution factor - 5 | Dilution factor - 1 |
| Acenaphthene | 20 | 1000 | 0.75 J | 0.29 | 0.14 J | 0.017 J | 0.94 U | 0.13 J |
| Acenaphthylene | 100 | 1000 | 0.35 J | 0.2 U | 1.2 J | 0.037 J | 0.35 J | 0.36 |
| Anthracene | 100 | 1000 | 4.3 | 0.2 U | 7.8 | 0.077 J | 0.44 J | 0.76 |
| Benzo(a)pyrene | 1 | 1.1 | **5.7** | 0.069 J | **15** | 0.073 J | **1.5** | 1 |
| Benzo(a)anthracene | 1 | 11 | **8** | 0.08 J | **20** | 0.12 J | **2** | **1.7** |
| Benzo(b)fluoranthene | 1 | 11 | **8.5** | 0.2 | **20** | 0.2 | **2.7** | **1.4** |
| Benzo(ghi)perylene | 100 | 1000 | 2 J | 0.031 J | 13 | 0.05 J | 0.75 J | 0.48 |
| Benzo(k)fluoranthene | 0.8 | 110 | **3.7** | 0.047 J | **9.8** | 0.039 J | **0.86** J | 0.66 |
| Chrysene | 1 | 110 | **6.4** | 0.1 J | **18** | 0.14 J | **1.9** | **1.5** |
| Dibenz(a,h)anthracene | 0.33 | 1.1 | **2.4** J | 0.15 J | **4.8** | 0.15 J | **0.83** J | 0.29 |
| Fluoranthene | 100 | 1000 | 17 | 0.18 J | 44 | 0.23 | 3.2 | 3.9 |
| Fluorene | 30 | 1000 | 6 | 0.2 U | 0.82 J | 0.15 J | 0.16 J | 1 |
| Indeno(1,2,3-cd)pyrene | 0.5 | 11 | **3.4** | 0.16 J | **12** | 0.17 J | **1.2** | **0.56** |
| Naphthalene | 12 | 1000 | 8.1 | 0.12 J | 1.3 J | 0.83 | 0.46 J | 5.1 |
| Phenanthrene | 100 | 1000 | 22 | 0.31 | 33 | 0.44 | 2.4 | 4.7 |
| Pyrene | 100 | 1000 | 11 | 0.16 J | 33 | 0.16 J | 2.4 | 2.5 |

All results in parts per milion (ppm)
U = Compound not detected at a concentration exceeding the indicated Laboratory Reporting Limit (RL).
J = Concentration is greater than the Method Detection Level but less than the RL. The value is estimated.
D = Concentration in the initial analysis exceeded the instrument calibration range. The sample was reanalyzed at a dilution factor.
Bold and yellow highlighted = Value is greater than the Resticted Use, Industrial Soil Cleanup Objective
Bold and orange highlighted = Value is greater than the Unresticted Use, Soil Cleanup Objective
Green highlighted = Laboratory Reporting limit exceeds the Unrestricted Use Soil Cleanup Objective due to sample dilution

# APPENDIX A

## Field Soil Boring Logs

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-01** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/06/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 15.5 ft. bgs | DRILLER: **ADT** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 27.1 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 34.8 | ND<br>ND<br>40 | | | FILL; black, medium to coarse sand, fine gravel, cinders, some ash |
| 2 | | | 40<br>ND | | | |
| 3 | | | ND<br>ND | | | |
| 4 | | | ND | | | |
| 5 | | 45.6 | ND<br>ND<br>ND | | | FILL; black slag, sand, gravel, asphalt, fragments, moist |
| 6 | | | ND<br>14 | | | |
| 7 | | | 14<br>ND | | | |
| 8 | | | ND | | | |
| 9 | | 42 | ND<br>ND<br>ND | | | FILL; black slag, sand, gravel, asphalt, fragments, moist |
| 10 | | | ND<br>ND | | | |
| 11 | | | ND<br>ND | | | |
| 12 | | | ND | | | |
| 13 | | 48 | 8<br>8<br>10 | DPT-01/13.5-14 | | 12 - 14.2 ft - FILL; black, fine to coarse sand with gravel, slightly moist.<br><br>Wet at 14.2 ft |
| 14 | | | 10<br>6 | | | 14.2 - 14.8 ft - FILL; dark brown clay, little mottles, moderately dense |
| 15 | | | 6<br>6 | | | 14.8 - 16 ft - FILL; clay with fine to medium sand, some slag and asphalt, moist to wet |
| 16 | | | 6 | | | |
| 17 | | 48 | ND<br>ND<br>ND | | | FILL; black, fine to coarse sand with gravel, little slag, moist<br><br>18.5 - 18.9 ft - shale fragment, wet |
| 18 | | | ND<br>ND | | | |
| 19 | | | ND<br>ND | | | |
| 20 | | | ND | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-01** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/06/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 15.5 ft. bgs | DRILLER: **ADT** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 27.1 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| | | | ND | | | 20-22.5 - FILL; black, fine to coarse sand with gravel, |
| 21 | | | ND | | | no odors, moderately dense, moist, wet at 21 ft |
| | | 48 | ND | | | |
| 22 | | | ND | | | 22.5-23 ft- fine to medium SAND, wet, dense |
| | | | ND | | | 23-23.5 ft - brown to gray CLAY with shale fragment embedded, |
| 23 | | | ND | | | slightly moist |
| | | | ND | | | 23.5-24 ft - dark gray, SILT and very fine to fine, dense SAND, |
| 24 | | | ND | | | no mottles, little trace mica, slightly moist |
| | | | ND | | | 24 - 26 ft - dark brown, fine to coarse SAND, some silt, saturated |
| 25 | | | ND | | | |
| | | 44.4 | ND | | | |
| 26 | | | ND | | | 26-26.7 ft - gray, medium SAND, little to trace silt and clay, wet |
| | | | ND | | | 26.7- 27.1 ft - dark brown to dark gray, fine to medium SAND, |
| 27 | | | ND | | | wood fragments at bottom, moist |
| | | | | | | |
| 28 | | | | | | |
| | | | | | | EOB - Refusal at 27.1 |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-02** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/06/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 15.2 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 32.4 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; fine to medium sand with gravel, a few larger stones on top, asphalt and cinders, some asphalt fragments, soft, and loose, dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 32.4 | 77<br>77<br>7-10<br>7-10<br>7-10<br>7-10<br>ND<br>ND | DPT-02/4.5-5 | | FILL; fine to medium sand with gravel, asphalt and cinders, some asphalt fragments, soft, and loose, dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 43.2 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; fine to medium sand with gravel, asphalt and cinders, some asphalt fragments, soft, and loose, dry |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; fine to medium sand with gravel, asphalt and cinders, some asphalt fragments, soft, and loose, dry |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| | | | | | | EOB - Refusal at 15.2 |

TRC **Environmental Corporation**

57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006

**SOIL BORING LOG**

BORING NUMBER

**DPT-03**

**PROJECT NAME:** Chevron Troy **LOCATION:** Troy, New York

**PROJECT NO.:** 194098 **CONTRACTOR:** Advanced Drilling Technology

DATE DRILLED: **05/06/13**

**SAMPLER TYPE/DIA.:** Macrocore/2" **DEPTH TO WATER:** 15.0 ft. bgs

DRILLER: **ADP**

**BORING METHOD:** Direct Push **TOTAL DEPTH DRILLED:** 15 ft. bgs

LOGGED BY: **R. Totino**

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND | | | FILL; fine to coarse sand with gravel, some slag, asphalt fragments, stones, loose, soft, and dry |
| 2 | | | ND | | | |
| 3 | | | ND | | | |
| 4 | | | ND | | | |
| 5 | | 36 | ND | | | FILL; fine to coarse sand with gravel, some slag, asphalt fragments, stones, loose, soft, and dry |
| 6 | | | ND | | | |
| 7 | | | ND | | | |
| 8 | | | ND | | | |
| 9 | | 40.8 | ND | | | FILL; fine to coarse sand with gravel, some slag, asphalt fragments, stones, loose, soft, and dry |
| 10 | | | ND | | | |
| 11 | | | ND | | | |
| 12 | | | ND | | | |
| 13 | | 48 | ND | | | FILL; fine to coarse sand with gravel, some slag, asphalt fragments, stones, loose, soft, and dry |
| 14 | | | ND | | | |
| 15 | | | ND | DPT-03/14.5-15 | | wet at 14.8 - 15.0 ft |
| 16 | | | | | | |
| | | | | | | EOB - Refusal at 15.0 |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>DPT-04 |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/06/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 13.5 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 44.4 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to medium sand with gravel, some cinders, asphalt, slag, loose, soft, and dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 31.2 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to medium sand with gravel, some cinders, asphalt, slag, loose, soft, and dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 34.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 8 - 10.5 ft - FILL; black, fine to medium sand with gravel, some cinders, asphalt, slag, loose, soft, and dry<br><br>10.5- 10.9 ft - FILL; black, fine to medium sand with gravel, some cinders, asphalt, slag, loose, soft, wet |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 48 | ND<br>ND<br>ND | | | FILL; black, fine to medium sand with gravel, some cinders, asphalt, slag, loose, soft, wet |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| | | | | | | EOB - Refusal at 13.5 |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-05** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/06/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 23 feet | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 40 feet | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 40.8 | ND<br>ND<br>4.7-7 | | | FILL; fine to coarse sand with gravel, some slag fragments, ash, cinders, loose, soft, and dry |
| 2 | | | 4.7-7<br>10.7 | | | |
| 3 | | | 10.7<br>ND | DPT-05/2.5-3 | | |
| 4 | | | ND | | | |
| 5 | | 40.8 | ND<br>ND<br>ND | | | 4 - 5 ft -FILL; fine to coarse sand with gravel, some slag fragments, ash, cinders, loose, soft, and dry<br>5 - 7 ft - FILL; dark brown and black silt with very fine to fine sand, little and trace clay, slightly moist |
| 6 | | | ND<br>ND | | | |
| 7 | | | ND<br>ND | | | 7 - 7.3 ft - FILL; pulverized stone and concrete |
| 8 | | | ND<br>ND | | | 7.3 - 7.6 ft - FILL; black and brown sand, gravel, cinders, and fragments |
| 9 | | 38.4 | ND<br>ND<br>ND | | | 8 - 10.7 ft - FILL; black and brown sand, gravel, cinders,and fragments |
| 10 | | | ND<br>ND | | | |
| 11 | | | ND<br>ND | | | 10.7 ft - FILL; silty clay, trace, very fine to fine sand, moist |
| 12 | | | ND<br>ND | | | |
| 13 | | 44.4 | ND<br>ND<br>ND | | | FILL; silty clay, trace, very fine to fine sand |
| 14 | | | ND<br>ND | | | |
| 15 | | | ND<br>ND | | | |
| 16 | | | ND<br>ND | | | |
| 17 | | 45.6 | ND<br>ND<br>ND | | | 16 - 18 ft - FILL; silty clay, trace, very fine to fine sand, slightly moist |
| 18 | | | ND<br>ND | | | 18 - 19 ft - a little more clay and silt |
| 19 | | | ND<br>ND | | | |
| 20 | | | ND | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-05** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/06/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 23 feet | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 40 feet | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 21 | | 42 | ND<br>ND<br>ND<br>ND<br>ND<br>300<br>60-80<br>60-80 | DPT-05/22.5-23 | | 20 - 23 ft - FILL; silty clay, trace, very fine to fine sand, slightly moist<br><br>Wet at 23 ft<br>23 - 23.5 ft - shale fragments |
| 25 | | 30 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; fine to coarse sand and gravel, little silt, trace clay, shale fragments 1 - 2 cm, saturated |
| 29 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 28 - 30 ft - FILL; fine to coarse sand and gravel, little silt, trace clay, shale fragments 1 - 2 cm, wet to saturated<br><br>30 - 31 ft - FILL; dark gray silt, very fine to fine sand, trace clay, saturated |
| 33 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 32 - 33.5 ft - FILL; fine to coarse sand, gravel, some slag or cinders, moderately dense, wet<br>33.5 - 34.5 ft - dark gray SILT, little clay<br><br>34.5 - 36 ft - dark black and gray SILT and very fine to fine SAND with sub-rounded, white gravel up to .5 cm, dense, moist to slightly wet |
| 37 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 36 - 37 ft - fine to coarse SAND with gravel<br><br>37 - 38 ft - dark gray, SILT, trace to little clay, moist and wet<br><br>38 - 40 ft - fine to medium SAND with fine gravel to small white stones up to 2 mm, silt, trace clay, moderately dense |
| | | | | | | EOB - Refusal at 40.0 |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-06** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 9 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND<br>ND<br>10-12<br>10-12<br>ND<br>ND | | | 0 - 1.5 ft - FILL; brown fine to medium sand, some gravel and stone fragments<br>1.5 - 3 ft 0 FILL; black, fine to medium sand, gravel, asphalt and cinders, pulverized red brick fragments |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 4 - 6.5 ft - FILL; black, fine to medium sand, gravel, asphalt and cinders pulverized red brick fragments<br>6.5 - 7 ft - FILL; light tan crushed stone and slag, some grey pulverized stone |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 48 | ND<br>ND | | | 8 - 9 ft - FILL; light tan crushed stone and slag, some grey pulverized stone |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| | | | | | | EOB - Refusal at 9.0 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-07** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 11.5 feet | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 34.8 | 15<br>15<br>5.7<br>5.7<br>15.7<br>15.7<br>ND<br>ND | | | 0 - 1.9 ft - FILL; brown, fine sand with silt, some gravel, trace organics<br><br>1.9 - 2.9 ft - FILL; black, fine to coarse sand, gravel, slag, shale fragments |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 31.2 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, slag, shale fragments |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, slag, shale fragments |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | DPT-07/11-11.5 | | |
| | | | | | | EOB - Refusal at 11.5 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-08** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 11.5 feet | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND | | | 0 - 2.6 ft - FILL; brown, fine to medium sand, silt, gravel, loose and dry |
| 2 | | | ND<br>167 | | | 2 - 3 ft - FILL; black, fine to coarse sand, gravel, cinders, pulverized slag |
| 3 | | | 167<br>ND | | | |
| 4 | | | ND | DPT-08/3.5-4 | | |
| 5 | | 36 | 170<br>170<br>ND | | | FILL; black, fine to coarse sand, gravel, cinders, pulverized slag |
| 6 | | | ND<br>ND | | | |
| 7 | | | ND<br>ND | | | |
| 8 | | | ND<br>ND | | | |
| 9 | | 37.2 | 27<br>27<br>7 | | | FILL; black, fine to coarse sand, gravel, cinders, pulverized slag |
| 10 | | | 7<br>1.6 | | | |
| 11 | | | 1.6<br>ND | | | |
| 12 | | | ND | | | |
| 13 | | 37.2 | 15-20<br>15-20<br>15-20 | | | 12 -13.5 ft - FILL; black, fine to coarse sand, gravel, cinders, pulverized slag<br>13.5 - 15.1 ft - FILL; crushed and pulverized shale, some silt, trace clay, moist to wet |
| 14 | | | 15-20<br>15-20 | | | |
| 15 | | | 15-20<br>15-20 | | | |
| 16 | | | 15-20<br>15-20 | | | |
| | | | | | | EOB - Refusal at 15.6 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-09** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 17.0 ft. bgs | DRILLER: **ADT** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 23 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 33.6 | ND | | | FILL; black, fine to coarse sand, gravel, crushed stone, cinders, little ash, pulverized slag |
| 2 | | | ND | | | |
| 3 | | | ND | | | |
| 4 | | | ND | | | |
| 5 | | 42 | ND | | | FILL; black, fine to coarse sand, gravel, crushed stone, cinders, little ash, pulverized slag |
| 6 | | | ND | | | |
| 7 | | | ND | | | |
| 8 | | | ND | | | |
| 9 | | 32.4 | ND | | | FILL; black, fine to coarse sand, gravel, crushed stone, cinders, little ash, pulverized slag |
| 10 | | | ND | | | |
| 11 | | | ND | | | |
| 12 | | | ND | | | |
| 13 | | 37.2 | ND | | | 12 - 14 ft - FILL; black, fine to coarse sand, gravel, crushed stone, cinders, little ash, pulverized slag |
| 14 | | | ND | | | 14 -15 ft - FILL; black, fine to coarse sand, gravel, crushed stone, cinders, little ash, pulverized slag, crushed red brick |
| 15 | | | ND | | | |
| 16 | | | ND | | | |
| 17 | | 36 | ND | | | FILL; black, fine to coarse sand, gravel, crushed stone, cinders, little ash, pulverized slag, crushed red brick, more dense, little more clay, moist to slightly wet at 17 ft. |
| 18 | | | ND | | | |
| 19 | | | ND | | | |
| 20 | | | ND | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-09** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 17.0 ft. bgs | DRILLER: **ADT** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 23 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| | | | ND | | | 20 - 22.5 ft - FILL; black, fine to coarse sand, gravel, |
| 21 | | | ND | | | crushed stone, cinders, little ash, pulverized slag, crushed red |
| | | | ND | | | brick, more dense, little more clay, moist |
| 22 | | 43.2 | ND | | | |
| | | | ND | | | |
| 23 | | | ND | DPT-09/22.5-23 | | 22.5 - 23 ft - dark gray and black silt, very fine sand, dense |
| | | | ND | | | |
| 24 | | | | | | |
| | | | | | | EOB - 23 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-10** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 18.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 23 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; crushed stone, fine to coarse sand and gravel, cinders, slag, ash |
| 5 | | 39.6 | 2.9<br>2.9<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-10/4-4.5 | | FILL; crushed stone, fine to coarse sand and gravel, cinders, slag, ash |
| 9 | | 39.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; crushed stone, fine to coarse sand and gravel, cinders, slag, ash |
| 13 | | 39.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; crushed stone, fine to coarse sand and gravel, cinders, slag, ash |
| 17 | | 43.2 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 16 - 19.1 ft - FILL; crushed stone, fine to coarse sand and gravel, cinders, slag, ash, slightly moist<br><br>19.1 - 19.6 ft - FILL; dark gray silt, little clay, moist |
| 20 | | | | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-10** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 18.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 23 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| | | | ND | | | 20 - 21 ft - FILL; dark gray silt, little clay, moist |
| 21 | | | ND | | | 21 - 21.8 ft - FILL; black fine to coarse sand, gravel, shale |
| | | | ND | | | fragments, some slag and cinders, trace brick fragments |
| 22 | | 31.2 | ND | | | 21.8 - 22 ft - dark gray SILT with very fine to fine sand, moist |
| | | | ND | | | 22 - 22.6 ft - fragmented SHALE with some silt, wet |
| 23 | | | ND | | | |
| | | | ND | | | |
| 24 | | | ND | | | |
| | | | | | | EOB - Refusal at 23 |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-11** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 28 feet | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 42 | ND | | | 0 - 0.5 ft - FILL; crushed asphalt and concrete<br>0.5 - 3.5 ft - FILL; layers of crushed stone, shale fragments, brick, sand and gravel, reworked silt |
| 2 | | | ND | | | |
| 3 | | | ND | | | |
| 4 | | | ND | | | |
| 5 | | 34.8 | ND | | | FILL; layers of crushed stone, shale fragments, brick, sand and gravel, reworked silt |
| 6 | | | ND | | | |
| 7 | | | ND | | | |
| 8 | | | ND | | | |
| 9 | | 30 | ND | | | FILL; layers of crushed stone, shale fragments, brick, sand and gravel, reworked silt |
| 10 | | | ND | | | |
| 11 | | | ND | | | |
| 12 | | | ND | | | |
| 13 | | 0 | ND | | | 12 - 16 ft - no recovery |
| 14 | | | ND | | | |
| 15 | | | ND | | | |
| 16 | | | ND | | | |
| 17 | | 45.6 | ND | | | 16 - 20 ft - no recovery |
| 18 | | | ND | | | |
| 19 | | | ND | | | |
| 20 | | | ND | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-11** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/07/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 28 feet | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| | | | ND | | | 20 - 22.5 ft - no recovery |
| 21 | | | ND | | | |
| | | | ND | | | |
| 22 | | 38.4 | ND | | | |
| | | | ND | | | 22.5 - 23.2 ft - dark brown and dark gray SILT, moist |
| 23 | | | ND | | | |
| | | | ND | DPT-11/23-23.5 | | |
| 24 | | | ND | | | |
| | | | | | | 24 - 28 ft - no Recovery |
| 25 | | | | | | |
| | | 0 | | | | |
| 26 | | | | | | |
| | | | | | | |
| 27 | | | | | | |
| | | | | | | |
| 28 | | | | | | |
| | | | | | | EOB 28 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-12** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 15.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 15.2 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 42 | ND | DPT-12/3.5-4 | | FILL; black, fine to coarse sand and gravel with cinders, slag and shale fragments, trace to little ash, slightly dense, dry |
| 2 | | | ND | | | |
| 3 | | | ND | | | |
| 4 | | | ND | | | |
| 5 | | 43.2 | ND | | | FILL; black, fine to coarse sand and gravel with cinders, slag and shale fragments, trace to little ash, slightly dense, dry |
| 6 | | | ND | | | |
| 7 | | | ND | | | |
| 8 | | | ND | | | |
| 9 | | 44.4 | ND | | | FILL; black, fine to coarse sand and gravel with cinders, slag and shale fragments, trace to little ash, slightly dense, dry |
| 10 | | | ND | | | |
| 11 | | | ND | | | |
| 12 | | | ND | | | |
| 13 | | 38.4 | ND | | | 12 - 14.6 ft - FILL; black, fine to coarse sand and gravel with cinders, slag and shale fragments, trace to little ash, slightly dense, dry |
| 14 | | | ND | | | |
| 15 | | | ND | | | 14.6 - 15.2 ft - FILL; black, fine to coarse sand and gravel with cinders, slag and shale framents, trace to little ash, slightly dense, wet |
| 16 | | | ND | | | |
| | | | | | | EOB - Refusal at 15.2 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-13** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 15.5 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 18.8 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 40.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - .5 ft - crushed concrete<br>.5 - 3.4 ft - FILL; black, fine to coarse sand and gravel, some shale and asphalt fragments, cinders, moderately to slightly dense, dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, some shale and asphalt fragments, cinders, moderately to slightly dense, dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | DPT-13/7.5-8 | | |
| 9 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, some shale and asphalt fragments, cinders, moderately dense, dry |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 12 - 14.4 ft -FILL; black, fine to coarse sand and gravel, some shale and asphalt fragments, cinders, dense to moderately dense, dry<br>14.4 - 15.5 ft - FILL; dark brown and orange, fine to medium, sand, gravel, clay, silt, dense, slightly wet<br>15.5 - 16 ft - FILL; dark brown and orange, fine to medium, sand, gravel, clay, with more dark gray silt, dense, moist to slightly wet |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | DPT-13/15-15.5 | | |
| 17 | | 36 | ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, cinders, shale and slag fragments, little ash, dry to slightly moist |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | | | EOB - Refusal at 18.8 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-14** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 18.0 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, some shale and slag fragments, ash, cinders, brick fragments, crushed concrete, slightly dense and dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 33.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-14/6-6.5 | | FILL; black, fine to coarse sand and gravel, some shale and slag fragments, ash, cinders, brick fragments, crushed concrete, slightly dense and dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 34.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, some shale and slag fragments, ash, cinders, brick fragments, crushed concrete, slightly dense and dry |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 45.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, some shale and slag fragments, ash, cinders, brick fragments, crushed concrete, slightly dense and dry |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | 0 | ND<br>ND<br>ND | DPT-14/16-16.5 | | 16- 20 ft - no recovery |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | | | EOB - Refusal at 17-18 |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-15** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 17.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 17.5 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 30 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, soft, loose, and dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 31.2 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, soft, loose, and dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 43.2 | ND<br>ND<br>ND<br>ND<br>ND<br>18-20<br>18-20<br>ND | DPT-15/10-11 | | 8 - 10 ft - FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, soft, loose, and dry<br><br>10 - 11 ft - FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, soft, loose, and dry, with very thick tar, strong odors.<br>11 - 11.6 ft - FILL; dark brown silt with sand, gravel, cinders, moist to wet |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 34.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 12 - 12.7 ft - FILL; dark brown silt with sand, gravel, and cinders, moist to wet<br>12.7 - 14.9 ft - FILL; brick, stones, sand, gravel, slag, shale, ash, cinders, dense and dry |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | 48 | ND<br>ND<br>ND | DPT-15/17-17.5 | | 16 - 17 ft - FILL; brick, stones, sand, gravel, slag, shale, ash, cinders, dense and dry<br>17 - 17.5 ft - dark brown and gray SILT with clay, moderately dense, no odor, moist to slightly wet |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | | | EOB - Refusal at 17.5 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-16** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 10.2 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 45.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 1 ft - light tan soil<br>1 - 3.8 ft - FILL; black, fine to coarse sand and gravel, slag, cinders, shale, stones, loose, soft, and dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 46.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand and gravel, slag, cinders, shale, stones, brick, shale slag layers, loose, soft, and dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 48 | 20.6<br>20.6<br>20.6<br>76<br>76<br>ND<br>ND<br>ND | DPT-16/9.5-10 | | 8 - 9.6 ft -FILL; black, fine to coarse sand and gravel, slag, cinders, shale, stones, brick, shale slag layers, loose, soft, and dry<br>9.6 - 10.2 ft -FILL; black, fine to coarse sand and gravel, slag, cinders, shale, stones, brick, shale and slag layers, more silt, loose, soft, and dry |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| | | | | | | EOB - Refusal at 10.2 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-17** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 16.0 ft. bgs | DRILLER: **ADT** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 19.3 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 1 ft - light tan soil to silt, sand, little gravel<br>1 - 3 ft - black, fine to coarse sand, gravel, silt, loose, soft, and dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 30 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | black, fine to coarse sand, gravel, silt, loose, soft, and dry |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 38.4 | 20.6<br>20.6<br>20.6<br>76<br>76<br>ND<br>ND<br>ND | | | black, fine to coarse sand, gravel, silt, moderately dense, dry |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 42 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | black, fine to coarse sand, gravel, silt, moderately dense, dry |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-17/18.5-19 | | black, fine to coarse sand, gravel, a little more silt, moderately dense, moist to slightly wet |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | | | EOB - Refusal at 19.3 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-18** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 18 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 45.6 | ND<br>ND<br>63<br>63<br>63<br>63<br>180<br>180 | DPT-18/3.5-4 | | 0 - 0.8 ft - topsoil<br>0.8 - 3.8 ft - FILL; black, fine to coarse sand, gravel, silt, slag or shale cinders, little ash |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 30 | 17<br>17<br>7-8<br>7-8<br>1.4<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, silt, slag or shale cinders, little ash |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 33.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 8 - 10 ft - FILL; black, fine to coarse sand, gravel, silt, slag or shale cinders, little ash<br><br>10 - 11.4 ft - FILL; dark black silt embedded with tar-like material, very dense, hard, very elestic, sticky, odor, wet<br>11.4 - 11.8 ft - FILL; dark gray and dark brown silt with little clay, trace, very fine to fine sand, moist to a little wet |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; dark black silt embedded with tar-like material |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | 24 | 14- 20<br>14-20<br>ND<br>ND<br>ND<br>ND<br>ND | | | 16 - 17 ft - FILL; dark black silt embedded with tar-like material<br>17 - 17.5 ft - dark brown and gray SILT, dense, no odor |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | ND | | | EOB - Refusal at 17 - 18 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-19** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/08/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 17.1 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 46.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 0.5 ft - topsoil<br>0.5 - 3.9 ft - FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, dry, soft and loose |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | 32.4 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, dry, soft and loose |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | 33.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, slag and shale fragments, ash, cinders, dry, soft and loose |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | 48 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 12 - 13.3 ft - slough from above<br><br>13.3 - 16 ft - layered FILL; yellow granular material, red brick, and fill |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | DPT-19/15.5-16 | | |
| 17 | | 13.2 | 14-20<br>14-20<br>ND | | | layered FILL; yellow granular material, red brick |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | | | EOB - Refusal at 17.1 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-20** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" x 5' | **DEPTH TO WATER:** 16.5 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 28.1 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 39.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 1 ft - top soil<br>1 - 3.3 ft - FILL; fine to coarse sand with shale and slag fragments and pulverized dark brown, very fine to fine sand, silt, moderately dense, dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 51.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; fine to coarse sand with shale and slag fragments and pulverized dark brown, very fine to fine sand, silt, moderately dense, dry |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>53.7<br>ND<br>ND<br>ND<br>ND | DPT-20/12-12.5 | | FILL; fine to coarse sand with shale and slag fragments and pulverized dark brown, very fine to fine sand, silt, moderately dense, dry<br><br>14 - 15 ft - moist horizon |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 15 - 16.5 ft - FILL; fine to coarse sand with shale and slag fragments and pulverized dark brown, very fine to fine sand, silt, moderately dense, moist at 16 ft<br><br>16.5 - 18 ft - FILL dark brown, fine to coarse sand, fine to medium gravel, little slag and crushed stone, moist |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-20** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" x 5' | **DEPTH TO WATER:** 16.5 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 28.1 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 21 | | 18 | ND | | | fine to coarse GRAVEL, little sand, trace silt, moist to very moist |
| 22 | | | ND | | | |
| 23 | | | ND | | | |
| 24 | | | ND | | | |
| 25 | | | ND | | | |
| 26 | | 21.6 | ND | | | 25 - 26.1 ft - fine to coarse GRAVEL, little sand, trace silt, saturated<br>26.1 - 26.8 ft - weathered, fragmented SHALE, saturated |
| 27 | | | ND | | | |
| 28 | | | ND | | | |
| 29 | | | ND | | | |
| 30 | | | ND | | | |
| | | | | | | EOB - Refusal at 28.1 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-21** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 17.5 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 29.8 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 54 | ND<br>ND<br>17<br>17<br>20<br>20<br>200<br>200<br>24-30<br>ND | DPT-21/3-3.5 | | 0 - 0.5 ft - top soil<br>0.5 - 3.5 ft - FILL; dark brown and black, fine to coarse sand, gravel, fragmented and pulverized shale<br>3.5 - 4.5 ft - FILL; more dark brown, fine sand and silt, moderately dense, dry |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 36 | 21<br>21<br>8<br>8<br>28<br>28<br>ND<br>ND<br>ND<br>ND | | | FILL; dark brown and black, fine to coarse sand and silt, gravel, fragmented and pulverized shale, moderately dense, dry |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | 33.6 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; dark brown and black, fine to coarse sand and silt, gravel, fragmented and pulverized shale, moderately dense, dry |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | 24 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; dark brown and black, fine to coarse sand and silt, gravel, fragmented and pulverized shale, moderately dense, slightly moist at 17 - 17.5 ft |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-21** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 17.5 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 29.8 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 21 | | 30 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-21/21.5-22 | | FILL; dark brown and black, fine to coarse sand and silt, gravel, fragmented and pulverized shale, moderately dense<br>Wet at 21.5 ft |
| 26 | | 26.4 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 25 - 26 ft - FILL, dark brown, medium to coarse sand, fine gravel, little trace silt, trace clay, saturated<br>26 - 27.2 ft - FILL; dark brown gravel to dark gray silt with clay, little trace gravel, dense, wet |
| | | | | | | EOB - Refusal at 29.8 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-22** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 30 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 46.8 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 1 ft - FILL; light brown silt, fine sand, dry<br>1 - 3.9 ft - FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 18 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt, loose |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | 33.6 | 4<br>4<br>28<br>28<br>50<br>50<br>ND<br>ND<br>ND<br>ND | DPT-22/13.5-14 | | 10 - 11 ft - FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt, loose<br>11 - 11.5 ft - FILL; yellow, porous, loose material<br>11.5 - 15 ft - FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt, loose |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | 38.4 | 128<br>128<br>48<br>48<br>250<br>250<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to medium sand, with pulverized , shale, slag and shale fragments, cinders, ash, gravel, silt, dense, moist<br><br>17 - 18 ft - petroluem-like odors |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-22** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 30 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 21 | | 48 | ND | | | 20 - 23.5 ft - FILL; black, fine to medium sand, with pulverized, shale, slag,and shale fragments, cinders, ash, gravel, silt, dense, saturated |
| 22 | | | ND | | | |
| 23 | | | ND | | | 23.5 - 24 ft - dark gray SILT, trace, very fine sand, trace organics |
| 24 | | | ND | | | |
| 25 | | | ND | | | |
| 26 | | 42 | ND | | | 25 - 26 ft - medium to coarse SAND, fine gravel, saturated<br>26 - 28.5 ft - dark gray SILT, saturated, some bedding, sub rounded gravel, little to trace gravel |
| 27 | | | ND | | | |
| 28 | | | ND | | | |
| 29 | | | ND | | | |
| 30 | | | ND | | | |
| | | | | | | EOB 30.0 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-23** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 14.9 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 42 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-23/2.5-3 | | 0 - 0.8 ft - top soil<br>0.8 - 3.5 ft - FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt, loose |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 24 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt, loose |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | 42 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to medium sand, with pulverized shale, slag and shale fragments, cinders, ash, gravel, silt, loose |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | 14 ft - SHALE fragments |
| 15 | | | | | | |
| | | | | | | EOB - Refusal at 14.9 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-24** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 12.3 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 24 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 0.5 ft - top soil<br>0.5 - 5 ft - FILL; brown, medium sand, some sub rounded gravel, dry grade bottom 3" to fill, black, medium sand, slag, brick |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 18 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-24/9-10 | | FILL; black, medium sand, slag, brick and coal tar-like odors |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | 27.6 | ND<br>ND<br>ND<br>ND<br>ND | | | 10 - 11 ft - FILL; black, medium sand, slag, brick and coal tar-like odors<br>11 - 12.3 ft - FILL; light gray to gray pulverized, concerete or concrete dust |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| | | | | | | EOB - Refusal at 12.3 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-25** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 15.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 25 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 31.2 | ND | | | 0 - 0.5 ft - top soil<br>0.5 - 2.6 ft - FILL; black, medium sand, slag, brick |
| 2 | | | ND | | | |
| 3 | | | ND | | | |
| 4 | | | ND | | | |
| 5 | | | ND | | | |
| 6 | | 24 | ND | | | 5 - 5.6 - FILL; black, medium sand, slag, brick<br>5.6 - 7 ft - FILL; coarse gravel with shale and slag fragments, coal tar-like odors, saturated |
| 7 | | | ND | | | |
| 8 | | | ND | | | |
| 9 | | | ND | | | |
| 10 | | | ND | | | |
| 11 | | 36 | ND | | | FILL; sand, gravel, ash, coal slag, shale fragments, some odors, dense, dry to slightly moist |
| 12 | | | ND | | | |
| 13 | | | ND | | | |
| 14 | | | ND | | | |
| 15 | | | ND | | | |
| 16 | | 48 | ND | | | FILL; black, fine to coarse sand with fine gravel, some silt, trace clay, pulverized slag and shale fragments, little ash, cinders, no odors, wet |
| 17 | | | ND | | | |
| 18 | | | ND | | | |
| 19 | | | ND | | | |
| 20 | | | ND | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-25** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 15.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 25 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| | | | ND | | | 20 - 23 ft - FILL; fine to coarse sand, fine gravel, little slag, shale, |
| 21 | | | ND | | | ash, cinders, fill, saturated |
| | | 42 | ND | | | 21 - 23 ft - slight odors |
| 22 | | | ND | | | |
| | | | ND | DPT-25/22-23 | | |
| 23 | | | ND | | | 23 - 23.5 ft - gray SILT |
| | | | ND | | | |
| 24 | | | ND | | | |
| | | | ND | | | |
| 25 | | | ND | | | |
| | | | | | | EOB 25.0 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-26** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 18 .0 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 0 - 1 ft - top soil<br>1 - 3 ft - FILL; black, fine to coarse sand with fine gravel, some silt, trace clay, pulverized slag and shale fragments, little ash, cinders |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | 60 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | FILL; black, fine to coarse sand with fine gravel, some silt trace clay, pulverized slag and shale fragments, little ash, cinders |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | 26.4 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | | | 10 - 11 ft - FILL; black, fine to coarse sand with fine gravel, some silt, trace clay, pulverized slag and shale fragments, little ash, cinders, wet<br>11 - 12.2 ft - gray SILT with fine to coarse sand and fine gravel, dense, dry |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | 42 | ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND<br>ND | DPT-26/17-17.5 | | 15 - 17.5 ft - gray SILT with fine to coarse sand and fine gravel, dense, slightly wet<br>17.5 - 18 ft - dark gray and black silt, trace gravel, very fine to fine sand, petroleum-like odors |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| | | | | | | EOB - Refusal at 18.0 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-27** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 18.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 25.0 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 48 | ND<br>ND<br>ND | | | 0 - 1 ft - top soil<br>1 - 4 ft - FILL; black stained, fine to coarse sand with gravel, pulverized and crushed shale and slag, ash, cinders, dense, dry |
| 2 | | | ND<br>ND<br>ND | | | |
| 3 | | | ND<br>ND<br>ND | | | |
| 4 | | | ND<br>ND<br>ND | | | |
| 5 | | | ND | | | |
| 6 | | 48 | ND<br>ND<br>ND | | | 5 - 7.5 ft - FILL; black stained fine to coarse sand with gravel, pulverized and crushed shale and slag, ash, cinders, dense, dry |
| 7 | | | ND<br>75-200<br>75-200 | | | 7.5 - 9 ft - FILL; tar-like material embedded on slit and fine to medium fine sand, very dense, viscous |
| 8 | | | 75-200<br>75-200<br>75-200 | | | |
| 9 | | | 75-200<br>75-200<br>75-200 | | | |
| 10 | | | 75-200 | | | |
| 11 | | 36 | ND<br>ND<br>ND | | | 10 - 10.5 ft - FILL; sand with some tar like material, moist to wet<br>10.5 - 13 ft - FILL; sand, gravel, silt, brick, crushed stone, pulverized slag or shale |
| 12 | | | ND<br>ND<br>ND | DPT-27/12-13 | | |
| 13 | | | ND<br>ND<br>ND | | | |
| 14 | | | ND<br>ND<br>ND | | | |
| 15 | | | ND | | | |
| 16 | | 30 | ND<br>ND<br>ND | | | FILL; black, fine to coarse sand, gravel, cinders, moderately dense, dry |
| 17 | | | ND<br>ND<br>ND | | | |
| 18 | | | ND<br>ND<br>ND | | | |
| 19 | | | ND<br>ND<br>ND | | | |
| 20 | | | ND | | | |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-27** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** 18.0 ft. bgs | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 25.0 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| | | | ND | | | 20 - 23.2 ft - FILL; black, fine to coarse sand, gravel, cinders, moderately dense, wet at 22 ft |
| 21 | | | ND | | | |
| | | | ND | | | |
| 22 | | | ND | | | |
| | | 54 | ND | DPT-27/22-22.5 | | 23.2 - 24.5 ft - gray SILT, wet, slight odors |
| 23 | | | ND | | | |
| | | | ND | | | |
| 24 | | | ND | | | |
| | | | ND | | | |
| 25 | | | ND | | | |
| | | | | | | EOB 25.0 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-28** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 15.0 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 48 | ND | | | 0 - 0.5 ft - FIILL; brown, medium sand<br>0.5 - 4 ft - FILL; black, medium sand, brick, ash, slag, dry |
| 2 | | | ND | | | |
| 3 | | | ND | | | |
| 4 | | | ND | | | |
| 5 | | | ND | | | |
| 6 | | 42 | 23-157 | | | FILL; black, medium sand, brick, ash, slag, dry, coal tar-like staining in matrix with reworked silt |
| 7 | | | 23-157 | | | |
| 8 | | | 23-157 | | | |
| 9 | | | 23-157 | | | |
| 10 | | | 23-157 | | | 9 - 10 ft - FILL; light brown, medium sand, ash, and bricks, moist |
| 11 | | 36 | ND | | | FILL; black, medium sand, brick, ash, slag |
| 12 | | | ND | | | |
| 13 | | | ND | | | |
| 14 | | | ND | | | |
| 15 | | | ND | | | |
| | | | | | | EOB 15.0 ft. bgs |

| TRC Environmental Corporation<br>57 E. Willow Street, Millburn, NJ 07041 (973) 564-6006 | SOIL BORING LOG | BORING NUMBER<br>**DPT-29** |
|---|---|---|
| **PROJECT NAME:** Chevron Troy | **LOCATION:** Troy, New York | |
| **PROJECT NO.:** 194098 | **CONTRACTOR:** Advanced Drilling Technology | DATE DRILLED: **05/10/13** |
| **SAMPLER TYPE/DIA.:** Macrocore/2" | **DEPTH TO WATER:** NA | DRILLER: **ADP** |
| **BORING METHOD:** Direct Push | **TOTAL DEPTH DRILLED:** 15.0 ft. bgs | LOGGED BY: **R. Totino** |

| DEPTH FROM SURFACE (FEET) | BLOW COUNT PER 6 IN. | RECOVERY (INCHES) | PID (ppm) | SAMPLE DESIGNATION | UNIFIED | LITHOLOGIC CLASSIFICATION AND COMMENTS |
|---|---|---|---|---|---|---|
| 0 | | | | | | |
| 1 | | 36 | ND<br>ND<br>ND<br>ND | DPT-29/1-2 | | 0 - 0.5 ft - top soil<br>0.5 - 3 ft - FILL; black, medium sand, some subrounded gravel, trace brick ash and cinder, dry |
| 2 | | | ND<br>ND | | | |
| 3 | | | ND<br>ND | | | |
| 4 | | | ND<br>ND | | | |
| 5 | | | ND<br>ND | | | |
| 6 | | 60 | 6-10<br>6-10<br>5-7.5 | DPT-29/6-7 | | 5 - 9 ft - FILL; dark brown, medium sand and silt, trace brick |
| 7 | | | 5-7.5<br>0-2.5 | | | |
| 8 | | | 0-2.5<br>2.5-10 | | | |
| 9 | | | 2.5-10<br>27 | | | 9 - 10 ft - FILL; black, tar-like stained fill, stringy |
| 10 | | | 27 | | | |
| 11 | | 36 | ND<br>ND<br>ND | | | FILL; brick, ash, cinder, dry |
| 12 | | | ND<br>ND | | | |
| 13 | | | ND<br>ND | | | |
| 14 | | | ND<br>ND | | | |
| 15 | | | ND<br>ND | | | |
| | | | | | | EOB 15.0 ft. bgs |

# APPENDIX B

## Community Air Monitoring Program (CAMP) Instrument Data

# Test 011

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/06/2013 |
| Instrument S/N | 8533113005 | Start Time | 08:50:07 |
| | | Stop Date | 05/06/2013 |
| | | Stop Time | 16:00:07 |
| | | Total Time | 0:07:10:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/06/2013 | 08:55:07 | 0.020 | 0.022 | 0.022 | 0.024 | 0.025 |
| 2 | 05/06/2013 | 09:00:07 | 0.018 | 0.020 | 0.020 | 0.021 | 0.021 |
| 3 | 05/06/2013 | 09:05:07 | 0.022 | 0.023 | 0.024 | 0.025 | 0.025 |
| 4 | 05/06/2013 | 09:10:07 | 0.016 | 0.018 | 0.018 | 0.019 | 0.019 |
| 5 | 05/06/2013 | 09:15:07 | 0.017 | 0.018 | 0.019 | 0.019 | 0.019 |
| 6 | 05/06/2013 | 09:20:07 | 0.017 | 0.018 | 0.019 | 0.019 | 0.020 |
| 7 | 05/06/2013 | 09:25:07 | 0.018 | 0.020 | 0.021 | 0.021 | 0.021 |
| 8 | 05/06/2013 | 09:30:07 | 0.020 | 0.021 | 0.022 | 0.023 | 0.023 |
| 9 | 05/06/2013 | 09:35:07 | 0.016 | 0.018 | 0.018 | 0.019 | 0.019 |
| 10 | 05/06/2013 | 09:40:07 | 0.015 | 0.016 | 0.017 | 0.017 | 0.017 |
| 11 | 05/06/2013 | 09:45:07 | 0.016 | 0.017 | 0.018 | 0.018 | 0.018 |
| 12 | 05/06/2013 | 09:50:07 | 0.018 | 0.019 | 0.020 | 0.021 | 0.021 |
| 13 | 05/06/2013 | 09:55:07 | 0.017 | 0.019 | 0.019 | 0.020 | 0.020 |
| 14 | 05/06/2013 | 10:00:07 | 0.015 | 0.016 | 0.017 | 0.018 | 0.018 |
| 15 | 05/06/2013 | 10:05:07 | 0.016 | 0.017 | 0.018 | 0.019 | 0.019 |
| 16 | 05/06/2013 | 10:10:07 | 0.020 | 0.021 | 0.022 | 0.024 | 0.025 |
| 17 | 05/06/2013 | 10:15:07 | 0.016 | 0.018 | 0.018 | 0.019 | 0.019 |
| 18 | 05/06/2013 | 10:20:07 | 0.015 | 0.016 | 0.017 | 0.018 | 0.018 |
| 19 | 05/06/2013 | 10:25:07 | 0.015 | 0.016 | 0.016 | 0.018 | 0.018 |
| 20 | 05/06/2013 | 10:30:07 | 0.014 | 0.016 | 0.016 | 0.018 | 0.018 |
| 21 | 05/06/2013 | 10:35:07 | 0.014 | 0.015 | 0.016 | 0.017 | 0.017 |
| 22 | 05/06/2013 | 10:40:07 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 23 | 05/06/2013 | 10:45:07 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 24 | 05/06/2013 | 10:50:07 | 0.014 | 0.015 | 0.016 | 0.017 | 0.017 |
| 25 | 05/06/2013 | 10:55:07 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 26 | 05/06/2013 | 11:00:07 | 0.015 | 0.016 | 0.017 | 0.018 | 0.018 |
| 27 | 05/06/2013 | 11:05:07 | 0.014 | 0.015 | 0.016 | 0.017 | 0.017 |
| 28 | 05/06/2013 | 11:10:07 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 29 | 05/06/2013 | 11:15:07 | 0.013 | 0.014 | 0.015 | 0.015 | 0.015 |
| 30 | 05/06/2013 | 11:20:07 | 0.013 | 0.015 | 0.015 | 0.016 | 0.016 |
| 31 | 05/06/2013 | 11:25:07 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 32 | 05/06/2013 | 11:30:07 | 0.014 | 0.015 | 0.016 | 0.016 | 0.017 |
| 33 | 05/06/2013 | 11:35:07 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 34 | 05/06/2013 | 11:40:07 | 0.013 | 0.014 | 0.015 | 0.016 | 0.016 |
| 35 | 05/06/2013 | 11:45:07 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 36 | 05/06/2013 | 11:50:07 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 37 | 05/06/2013 | 11:55:07 | 0.013 | 0.014 | 0.015 | 0.016 | 0.017 |
| 38 | 05/06/2013 | 12:00:07 | 0.012 | 0.013 | 0.014 | 0.014 | 0.014 |
| 39 | 05/06/2013 | 12:05:07 | 0.012 | 0.013 | 0.014 | 0.014 | 0.014 |
| 40 | 05/06/2013 | 12:10:07 | 0.012 | 0.013 | 0.014 | 0.014 | 0.014 |
| 41 | 05/06/2013 | 12:15:07 | 0.012 | 0.013 | 0.014 | 0.015 | 0.015 |
| 42 | 05/06/2013 | 12:20:07 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 43 | 05/06/2013 | 12:25:07 | 0.012 | 0.013 | 0.014 | 0.014 | 0.014 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/06/2013 | 12:30:07 | 0.015 | 0.016 | 0.017 | 0.021 | 0.022 |
| 45 | 05/06/2013 | 12:35:07 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 46 | 05/06/2013 | 12:40:07 | 0.012 | 0.013 | 0.014 | 0.014 | 0.014 |
| 47 | 05/06/2013 | 12:45:07 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 48 | 05/06/2013 | 12:50:07 | 0.012 | 0.013 | 0.014 | 0.014 | 0.015 |
| 49 | 05/06/2013 | 12:55:07 | 0.011 | 0.012 | 0.013 | 0.013 | 0.013 |
| 50 | 05/06/2013 | 13:00:07 | 0.011 | 0.012 | 0.012 | 0.013 | 0.013 |
| 51 | 05/06/2013 | 13:05:07 | 0.012 | 0.013 | 0.013 | 0.013 | 0.013 |
| 52 | 05/06/2013 | 13:10:07 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 53 | 05/06/2013 | 13:15:07 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 54 | 05/06/2013 | 13:20:07 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 55 | 05/06/2013 | 13:25:07 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 56 | 05/06/2013 | 13:30:07 | 0.011 | 0.012 | 0.012 | 0.013 | 0.013 |
| 57 | 05/06/2013 | 13:35:07 | 0.011 | 0.012 | 0.013 | 0.014 | 0.014 |
| 58 | 05/06/2013 | 13:40:07 | 0.011 | 0.012 | 0.012 | 0.012 | 0.013 |
| 59 | 05/06/2013 | 13:45:07 | 0.010 | 0.011 | 0.012 | 0.012 | 0.012 |
| 60 | 05/06/2013 | 13:50:07 | 0.010 | 0.011 | 0.012 | 0.012 | 0.012 |
| 61 | 05/06/2013 | 13:55:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 62 | 05/06/2013 | 14:00:07 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 |
| 63 | 05/06/2013 | 14:05:07 | 0.010 | 0.011 | 0.011 | 0.011 | 0.011 |
| 64 | 05/06/2013 | 14:10:07 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| 65 | 05/06/2013 | 14:15:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 66 | 05/06/2013 | 14:20:07 | 0.011 | 0.011 | 0.012 | 0.012 | 0.013 |
| 67 | 05/06/2013 | 14:25:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 68 | 05/06/2013 | 14:30:07 | 0.010 | 0.010 | 0.011 | 0.012 | 0.012 |
| 69 | 05/06/2013 | 14:35:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 70 | 05/06/2013 | 14:40:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 71 | 05/06/2013 | 14:45:07 | 0.011 | 0.011 | 0.012 | 0.012 | 0.013 |
| 72 | 05/06/2013 | 14:50:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 73 | 05/06/2013 | 14:55:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 74 | 05/06/2013 | 15:00:07 | 0.010 | 0.011 | 0.012 | 0.012 | 0.012 |
| 75 | 05/06/2013 | 15:05:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 76 | 05/06/2013 | 15:10:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 77 | 05/06/2013 | 15:15:07 | 0.010 | 0.011 | 0.011 | 0.011 | 0.012 |
| 78 | 05/06/2013 | 15:20:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 79 | 05/06/2013 | 15:25:07 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |
| 80 | 05/06/2013 | 15:30:07 | 0.009 | 0.010 | 0.011 | 0.011 | 0.011 |
| 81 | 05/06/2013 | 15:35:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 82 | 05/06/2013 | 15:40:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 83 | 05/06/2013 | 15:45:07 | 0.010 | 0.011 | 0.011 | 0.011 | 0.011 |
| 84 | 05/06/2013 | 15:50:07 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 |
| 85 | 05/06/2013 | 15:55:07 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 86 | 05/06/2013 | 16:00:07 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |

# Test 012

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/07/2013 |
| Instrument S/N | 8533113005 | Start Time | 08:03:58 |
| | | Stop Date | 05/07/2013 |
| | | Stop Time | 12:18:58 |
| | | Total Time | 0:04:15:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/07/2013 | 08:08:58 | 0.017 | 0.019 | 0.020 | 0.023 | 0.023 |
| 2 | 05/07/2013 | 08:13:58 | 0.014 | 0.015 | 0.016 | 0.018 | 0.018 |
| 3 | 05/07/2013 | 08:18:58 | 0.014 | 0.016 | 0.016 | 0.017 | 0.017 |
| 4 | 05/07/2013 | 08:23:58 | 0.015 | 0.016 | 0.017 | 0.018 | 0.019 |
| 5 | 05/07/2013 | 08:28:58 | 0.013 | 0.014 | 0.015 | 0.016 | 0.016 |
| 6 | 05/07/2013 | 08:33:58 | 0.012 | 0.013 | 0.014 | 0.015 | 0.015 |
| 7 | 05/07/2013 | 08:38:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 8 | 05/07/2013 | 08:43:58 | 0.013 | 0.014 | 0.015 | 0.016 | 0.016 |
| 9 | 05/07/2013 | 08:48:58 | 0.014 | 0.015 | 0.016 | 0.018 | 0.018 |
| 10 | 05/07/2013 | 08:53:58 | 0.013 | 0.014 | 0.014 | 0.016 | 0.016 |
| 11 | 05/07/2013 | 08:58:58 | 0.012 | 0.013 | 0.014 | 0.016 | 0.016 |
| 12 | 05/07/2013 | 09:03:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.015 |
| 13 | 05/07/2013 | 09:08:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.016 |
| 14 | 05/07/2013 | 09:13:58 | 0.013 | 0.014 | 0.015 | 0.016 | 0.017 |
| 15 | 05/07/2013 | 09:18:58 | 0.013 | 0.014 | 0.014 | 0.016 | 0.016 |
| 16 | 05/07/2013 | 09:23:58 | 0.013 | 0.013 | 0.014 | 0.015 | 0.016 |
| 17 | 05/07/2013 | 09:28:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 18 | 05/07/2013 | 09:33:58 | 0.012 | 0.013 | 0.014 | 0.014 | 0.014 |
| 19 | 05/07/2013 | 09:38:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 20 | 05/07/2013 | 09:43:58 | 0.012 | 0.013 | 0.014 | 0.014 | 0.015 |
| 21 | 05/07/2013 | 09:48:58 | 0.012 | 0.013 | 0.013 | 0.015 | 0.015 |
| 22 | 05/07/2013 | 09:53:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 23 | 05/07/2013 | 09:58:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 24 | 05/07/2013 | 10:03:58 | 0.011 | 0.012 | 0.012 | 0.013 | 0.014 |
| 25 | 05/07/2013 | 10:08:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 26 | 05/07/2013 | 10:13:58 | 0.011 | 0.012 | 0.012 | 0.013 | 0.013 |
| 27 | 05/07/2013 | 10:18:58 | 0.012 | 0.012 | 0.013 | 0.014 | 0.014 |
| 28 | 05/07/2013 | 10:23:58 | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 |
| 29 | 05/07/2013 | 10:28:58 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| 30 | 05/07/2013 | 10:33:58 | 0.011 | 0.012 | 0.012 | 0.013 | 0.013 |
| 31 | 05/07/2013 | 10:38:58 | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 |
| 32 | 05/07/2013 | 10:43:58 | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 |
| 33 | 05/07/2013 | 10:48:58 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| 34 | 05/07/2013 | 10:53:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 35 | 05/07/2013 | 10:58:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 36 | 05/07/2013 | 11:03:58 | 0.013 | 0.014 | 0.014 | 0.014 | 0.014 |
| 37 | 05/07/2013 | 11:08:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 38 | 05/07/2013 | 11:13:58 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 39 | 05/07/2013 | 11:18:58 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 40 | 05/07/2013 | 11:23:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 41 | 05/07/2013 | 11:28:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 42 | 05/07/2013 | 11:33:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 43 | 05/07/2013 | 11:38:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/07/2013 | 11:43:58 | 0.013 | 0.014 | 0.014 | 0.014 | 0.015 |
| 45 | 05/07/2013 | 11:48:58 | 0.013 | 0.014 | 0.014 | 0.014 | 0.014 |
| 46 | 05/07/2013 | 11:53:58 | 0.013 | 0.013 | 0.014 | 0.015 | 0.015 |
| 47 | 05/07/2013 | 11:58:58 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 48 | 05/07/2013 | 12:03:58 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 49 | 05/07/2013 | 12:08:58 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 50 | 05/07/2013 | 12:13:58 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 51 | 05/07/2013 | 12:18:58 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |

# Test 013

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/07/2013 |
| Instrument S/N | 8533113005 | Start Time | 12:23:55 |
| | | Stop Date | 05/07/2013 |
| | | Stop Time | 13:53:55 |
| | | Total Time | 0:01:30:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/07/2013 | 12:28:55 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| 2 | 05/07/2013 | 12:33:55 | 0.014 | 0.014 | 0.015 | 0.016 | 0.016 |
| 3 | 05/07/2013 | 12:38:55 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 4 | 05/07/2013 | 12:43:55 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| 5 | 05/07/2013 | 12:48:55 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 6 | 05/07/2013 | 12:53:55 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 7 | 05/07/2013 | 12:58:55 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 8 | 05/07/2013 | 13:03:55 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 9 | 05/07/2013 | 13:08:55 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 10 | 05/07/2013 | 13:13:55 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 11 | 05/07/2013 | 13:18:55 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 12 | 05/07/2013 | 13:23:55 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 13 | 05/07/2013 | 13:28:55 | 0.014 | 0.014 | 0.015 | 0.015 | 0.015 |
| 14 | 05/07/2013 | 13:33:55 | 0.014 | 0.014 | 0.015 | 0.015 | 0.015 |
| 15 | 05/07/2013 | 13:38:55 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 16 | 05/07/2013 | 13:43:55 | 0.014 | 0.014 | 0.015 | 0.016 | 0.016 |
| 17 | 05/07/2013 | 13:48:55 | 0.015 | 0.015 | 0.016 | 0.016 | 0.016 |
| 18 | 05/07/2013 | 13:53:55 | 0.018 | 0.019 | 0.020 | 0.026 | 0.030 |

# Test 014

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/07/2013 |
| Instrument S/N | 8533113005 | Start Time | 13:58:29 |
| | | Stop Date | 05/07/2013 |
| | | Stop Time | 15:53:29 |
| | | Total Time | 0:01:55:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/07/2013 | 14:03:29 | 0.014 | 0.014 | 0.015 | 0.016 | 0.016 |
| 2 | 05/07/2013 | 14:08:29 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 3 | 05/07/2013 | 14:13:29 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 4 | 05/07/2013 | 14:18:29 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 5 | 05/07/2013 | 14:23:29 | 0.014 | 0.014 | 0.015 | 0.016 | 0.016 |
| 6 | 05/07/2013 | 14:28:29 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 7 | 05/07/2013 | 14:33:29 | 0.014 | 0.014 | 0.014 | 0.016 | 0.016 |
| 8 | 05/07/2013 | 14:38:29 | 0.017 | 0.017 | 0.017 | 0.018 | 0.018 |
| 9 | 05/07/2013 | 14:43:29 | 0.016 | 0.016 | 0.016 | 0.017 | 0.017 |
| 10 | 05/07/2013 | 14:48:29 | 0.014 | 0.015 | 0.015 | 0.016 | 0.016 |
| 11 | 05/07/2013 | 14:53:29 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 12 | 05/07/2013 | 14:58:29 | 0.014 | 0.014 | 0.014 | 0.015 | 0.015 |
| 13 | 05/07/2013 | 15:03:29 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 14 | 05/07/2013 | 15:08:29 | 0.013 | 0.013 | 0.014 | 0.014 | 0.015 |
| 15 | 05/07/2013 | 15:13:29 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| 16 | 05/07/2013 | 15:18:29 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 17 | 05/07/2013 | 15:23:29 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 18 | 05/07/2013 | 15:28:29 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| 19 | 05/07/2013 | 15:33:29 | 0.012 | 0.013 | 0.013 | 0.013 | 0.014 |
| 20 | 05/07/2013 | 15:38:29 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 21 | 05/07/2013 | 15:43:29 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 22 | 05/07/2013 | 15:48:29 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |
| 23 | 05/07/2013 | 15:53:29 | 0.012 | 0.013 | 0.013 | 0.014 | 0.014 |

# Test 015

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/08/2013 |
| Instrument S/N | 8533113005 | Start Time | 07:58:13 |
| | | Stop Date | 05/08/2013 |
| | | Stop Time | 15:33:13 |
| | | Total Time | 0:07:35:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/08/2013 | 08:03:13 | 0.011 | 0.012 | 0.013 | 0.015 | 0.015 |
| 2 | 05/08/2013 | 08:08:13 | 0.010 | 0.011 | 0.012 | 0.014 | 0.014 |
| 3 | 05/08/2013 | 08:13:13 | 0.011 | 0.011 | 0.012 | 0.014 | 0.014 |
| 4 | 05/08/2013 | 08:18:13 | 0.011 | 0.012 | 0.013 | 0.015 | 0.015 |
| 5 | 05/08/2013 | 08:23:13 | 0.015 | 0.016 | 0.017 | 0.020 | 0.020 |
| 6 | 05/08/2013 | 08:28:13 | 0.011 | 0.012 | 0.013 | 0.016 | 0.016 |
| 7 | 05/08/2013 | 08:33:13 | 0.012 | 0.013 | 0.014 | 0.016 | 0.016 |
| 8 | 05/08/2013 | 08:38:13 | 0.012 | 0.013 | 0.014 | 0.017 | 0.017 |
| 9 | 05/08/2013 | 08:43:13 | 0.012 | 0.012 | 0.014 | 0.016 | 0.016 |
| 10 | 05/08/2013 | 08:48:13 | 0.012 | 0.013 | 0.014 | 0.016 | 0.017 |
| 11 | 05/08/2013 | 08:53:13 | 0.015 | 0.016 | 0.017 | 0.020 | 0.020 |
| 12 | 05/08/2013 | 08:58:13 | 0.012 | 0.013 | 0.015 | 0.017 | 0.017 |
| 13 | 05/08/2013 | 09:03:13 | 0.010 | 0.011 | 0.012 | 0.014 | 0.014 |
| 14 | 05/08/2013 | 09:08:13 | 0.013 | 0.014 | 0.015 | 0.017 | 0.017 |
| 15 | 05/08/2013 | 09:13:13 | 0.011 | 0.012 | 0.013 | 0.016 | 0.016 |
| 16 | 05/08/2013 | 09:18:13 | 0.010 | 0.011 | 0.012 | 0.013 | 0.014 |
| 17 | 05/08/2013 | 09:23:13 | 0.009 | 0.010 | 0.011 | 0.012 | 0.012 |
| 18 | 05/08/2013 | 09:28:13 | 0.008 | 0.009 | 0.010 | 0.011 | 0.011 |
| 19 | 05/08/2013 | 09:33:13 | 0.009 | 0.010 | 0.010 | 0.012 | 0.012 |
| 20 | 05/08/2013 | 09:38:13 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 21 | 05/08/2013 | 09:43:13 | 0.009 | 0.009 | 0.010 | 0.011 | 0.011 |
| 22 | 05/08/2013 | 09:48:13 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 23 | 05/08/2013 | 09:53:13 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 24 | 05/08/2013 | 09:58:13 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 25 | 05/08/2013 | 10:03:13 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 26 | 05/08/2013 | 10:08:13 | 0.010 | 0.010 | 0.011 | 0.012 | 0.012 |
| 27 | 05/08/2013 | 10:13:13 | 0.009 | 0.010 | 0.011 | 0.012 | 0.012 |
| 28 | 05/08/2013 | 10:18:13 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 29 | 05/08/2013 | 10:23:13 | 0.010 | 0.011 | 0.011 | 0.012 | 0.013 |
| 30 | 05/08/2013 | 10:28:13 | 0.010 | 0.011 | 0.012 | 0.013 | 0.013 |
| 31 | 05/08/2013 | 10:33:13 | 0.011 | 0.012 | 0.012 | 0.014 | 0.014 |
| 32 | 05/08/2013 | 10:38:13 | 0.011 | 0.012 | 0.012 | 0.014 | 0.014 |
| 33 | 05/08/2013 | 10:43:13 | 0.011 | 0.011 | 0.012 | 0.013 | 0.013 |
| 34 | 05/08/2013 | 10:48:13 | 0.011 | 0.011 | 0.012 | 0.013 | 0.013 |
| 35 | 05/08/2013 | 10:53:13 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 36 | 05/08/2013 | 10:58:13 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 37 | 05/08/2013 | 11:03:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 38 | 05/08/2013 | 11:08:13 | 0.007 | 0.007 | 0.008 | 0.008 | 0.008 |
| 39 | 05/08/2013 | 11:13:13 | 0.007 | 0.007 | 0.008 | 0.008 | 0.008 |
| 40 | 05/08/2013 | 11:18:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 41 | 05/08/2013 | 11:23:13 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 42 | 05/08/2013 | 11:28:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 43 | 05/08/2013 | 11:33:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/08/2013 | 11:38:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 45 | 05/08/2013 | 11:43:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.009 |
| 46 | 05/08/2013 | 11:48:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.009 |
| 47 | 05/08/2013 | 11:53:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 48 | 05/08/2013 | 11:58:13 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 49 | 05/08/2013 | 12:03:13 | 0.008 | 0.008 | 0.008 | 0.009 | 0.010 |
| 50 | 05/08/2013 | 12:08:13 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 51 | 05/08/2013 | 12:13:13 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 52 | 05/08/2013 | 12:18:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 53 | 05/08/2013 | 12:23:13 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 54 | 05/08/2013 | 12:28:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 55 | 05/08/2013 | 12:33:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 56 | 05/08/2013 | 12:38:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 57 | 05/08/2013 | 12:43:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 58 | 05/08/2013 | 12:48:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 59 | 05/08/2013 | 12:53:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 60 | 05/08/2013 | 12:58:13 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 |
| 61 | 05/08/2013 | 13:03:13 | 0.009 | 0.009 | 0.009 | 0.010 | 0.010 |
| 62 | 05/08/2013 | 13:08:13 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 63 | 05/08/2013 | 13:13:13 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 64 | 05/08/2013 | 13:18:13 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 65 | 05/08/2013 | 13:23:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 66 | 05/08/2013 | 13:28:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 67 | 05/08/2013 | 13:33:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 68 | 05/08/2013 | 13:38:13 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 |
| 69 | 05/08/2013 | 13:43:13 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 |
| 70 | 05/08/2013 | 13:48:13 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 71 | 05/08/2013 | 13:53:13 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 72 | 05/08/2013 | 13:58:13 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 |
| 73 | 05/08/2013 | 14:03:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 74 | 05/08/2013 | 14:08:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 75 | 05/08/2013 | 14:13:13 | 0.007 | 0.008 | 0.008 | 0.009 | 0.009 |
| 76 | 05/08/2013 | 14:18:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 77 | 05/08/2013 | 14:23:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 78 | 05/08/2013 | 14:28:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 79 | 05/08/2013 | 14:33:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 80 | 05/08/2013 | 14:38:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.009 |
| 81 | 05/08/2013 | 14:43:13 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 82 | 05/08/2013 | 14:48:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 83 | 05/08/2013 | 14:53:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 84 | 05/08/2013 | 14:58:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 85 | 05/08/2013 | 15:03:13 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 86 | 05/08/2013 | 15:08:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 87 | 05/08/2013 | 15:13:13 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 88 | 05/08/2013 | 15:18:13 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 89 | 05/08/2013 | 15:23:13 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 90 | 05/08/2013 | 15:28:13 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |
| 91 | 05/08/2013 | 15:33:13 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |

# Test 016

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/10/2013 |
| Instrument S/N | 8533113005 | Start Time | 08:03:49 |
| | | Stop Date | 05/10/2013 |
| | | Stop Time | 15:48:49 |
| | | Total Time | 0:07:45:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/10/2013 | 08:08:49 | 0.029 | 0.029 | 0.030 | 0.031 | 0.031 |
| 2 | 05/10/2013 | 08:13:49 | 0.026 | 0.027 | 0.027 | 0.027 | 0.027 |
| 3 | 05/10/2013 | 08:18:49 | 0.024 | 0.025 | 0.025 | 0.025 | 0.025 |
| 4 | 05/10/2013 | 08:23:49 | 0.023 | 0.023 | 0.024 | 0.024 | 0.024 |
| 5 | 05/10/2013 | 08:28:49 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 |
| 6 | 05/10/2013 | 08:33:49 | 0.021 | 0.021 | 0.021 | 0.022 | 0.022 |
| 7 | 05/10/2013 | 08:38:49 | 0.019 | 0.019 | 0.020 | 0.020 | 0.020 |
| 8 | 05/10/2013 | 08:43:49 | 0.018 | 0.018 | 0.018 | 0.018 | 0.019 |
| 9 | 05/10/2013 | 08:48:49 | 0.016 | 0.016 | 0.016 | 0.017 | 0.017 |
| 10 | 05/10/2013 | 08:53:49 | 0.014 | 0.014 | 0.015 | 0.015 | 0.015 |
| 11 | 05/10/2013 | 08:58:49 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 12 | 05/10/2013 | 09:03:49 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| 13 | 05/10/2013 | 09:08:49 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| 14 | 05/10/2013 | 09:13:49 | 0.014 | 0.014 | 0.014 | 0.014 | 0.014 |
| 15 | 05/10/2013 | 09:18:49 | 0.013 | 0.013 | 0.013 | 0.013 | 0.013 |
| 16 | 05/10/2013 | 09:23:49 | 0.013 | 0.013 | 0.014 | 0.014 | 0.014 |
| 17 | 05/10/2013 | 09:28:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 18 | 05/10/2013 | 09:33:49 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| 19 | 05/10/2013 | 09:38:49 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| 20 | 05/10/2013 | 09:43:49 | 0.011 | 0.012 | 0.012 | 0.012 | 0.012 |
| 21 | 05/10/2013 | 09:48:49 | 0.012 | 0.012 | 0.012 | 0.013 | 0.013 |
| 22 | 05/10/2013 | 09:53:49 | 0.011 | 0.012 | 0.012 | 0.012 | 0.012 |
| 23 | 05/10/2013 | 09:58:49 | 0.012 | 0.012 | 0.012 | 0.013 | 0.013 |
| 24 | 05/10/2013 | 10:03:49 | 0.011 | 0.012 | 0.012 | 0.012 | 0.012 |
| 25 | 05/10/2013 | 10:08:49 | 0.012 | 0.012 | 0.012 | 0.013 | 0.013 |
| 26 | 05/10/2013 | 10:13:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 27 | 05/10/2013 | 10:18:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 28 | 05/10/2013 | 10:23:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 29 | 05/10/2013 | 10:28:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 30 | 05/10/2013 | 10:33:49 | 0.012 | 0.012 | 0.012 | 0.013 | 0.013 |
| 31 | 05/10/2013 | 10:38:49 | 0.012 | 0.012 | 0.013 | 0.013 | 0.013 |
| 32 | 05/10/2013 | 10:43:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 33 | 05/10/2013 | 10:48:49 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| 34 | 05/10/2013 | 10:53:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 35 | 05/10/2013 | 10:58:49 | 0.011 | 0.011 | 0.011 | 0.012 | 0.012 |
| 36 | 05/10/2013 | 11:03:49 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| 37 | 05/10/2013 | 11:08:49 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 |
| 38 | 05/10/2013 | 11:13:49 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 |
| 39 | 05/10/2013 | 11:18:49 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |
| 40 | 05/10/2013 | 11:23:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.010 |
| 41 | 05/10/2013 | 11:28:49 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 42 | 05/10/2013 | 11:33:49 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 43 | 05/10/2013 | 11:38:49 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/10/2013 | 11:43:49 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 45 | 05/10/2013 | 11:48:49 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 46 | 05/10/2013 | 11:53:49 | 0.008 | 0.008 | 0.008 | 0.009 | 0.009 |
| 47 | 05/10/2013 | 11:58:49 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 |
| 48 | 05/10/2013 | 12:03:49 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 49 | 05/10/2013 | 12:08:49 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| 50 | 05/10/2013 | 12:13:49 | 0.006 | 0.006 | 0.006 | 0.007 | 0.007 |
| 51 | 05/10/2013 | 12:18:49 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| 52 | 05/10/2013 | 12:23:49 | 0.007 | 0.008 | 0.008 | 0.008 | 0.008 |
| 53 | 05/10/2013 | 12:28:49 | 0.007 | 0.007 | 0.007 | 0.007 | 0.008 |
| 54 | 05/10/2013 | 12:33:49 | 0.006 | 0.007 | 0.007 | 0.007 | 0.007 |
| 55 | 05/10/2013 | 12:38:49 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| 56 | 05/10/2013 | 12:43:49 | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 |
| 57 | 05/10/2013 | 12:48:49 | 0.007 | 0.007 | 0.008 | 0.008 | 0.008 |
| 58 | 05/10/2013 | 12:53:49 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 |
| 59 | 05/10/2013 | 12:58:49 | 0.008 | 0.008 | 0.009 | 0.009 | 0.009 |
| 60 | 05/10/2013 | 13:03:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 61 | 05/10/2013 | 13:08:49 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |
| 62 | 05/10/2013 | 13:13:49 | 0.010 | 0.010 | 0.010 | 0.010 | 0.011 |
| 63 | 05/10/2013 | 13:18:49 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 |
| 64 | 05/10/2013 | 13:23:49 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 |
| 65 | 05/10/2013 | 13:28:49 | 0.010 | 0.010 | 0.010 | 0.011 | 0.011 |
| 66 | 05/10/2013 | 13:33:49 | 0.010 | 0.010 | 0.010 | 0.010 | 0.011 |
| 67 | 05/10/2013 | 13:38:49 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| 68 | 05/10/2013 | 13:43:49 | 0.021 | 0.022 | 0.026 | 0.039 | 0.040 |
| 69 | 05/10/2013 | 13:48:49 | 0.010 | 0.011 | 0.011 | 0.013 | 0.013 |
| 70 | 05/10/2013 | 13:53:49 | 0.010 | 0.011 | 0.011 | 0.012 | 0.012 |
| 71 | 05/10/2013 | 13:58:49 | 0.009 | 0.009 | 0.009 | 0.010 | 0.010 |
| 72 | 05/10/2013 | 14:03:49 | 0.009 | 0.009 | 0.009 | 0.010 | 0.010 |
| 73 | 05/10/2013 | 14:08:49 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 74 | 05/10/2013 | 14:13:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 75 | 05/10/2013 | 14:18:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 76 | 05/10/2013 | 14:23:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 77 | 05/10/2013 | 14:28:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 78 | 05/10/2013 | 14:33:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 79 | 05/10/2013 | 14:38:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 80 | 05/10/2013 | 14:43:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 81 | 05/10/2013 | 14:48:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 82 | 05/10/2013 | 14:53:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.010 |
| 83 | 05/10/2013 | 14:58:49 | 0.009 | 0.009 | 0.009 | 0.010 | 0.010 |
| 84 | 05/10/2013 | 15:03:49 | 0.009 | 0.010 | 0.010 | 0.010 | 0.010 |
| 85 | 05/10/2013 | 15:08:49 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 86 | 05/10/2013 | 15:13:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 87 | 05/10/2013 | 15:18:49 | 0.009 | 0.009 | 0.010 | 0.010 | 0.010 |
| 88 | 05/10/2013 | 15:23:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 89 | 05/10/2013 | 15:28:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.010 |
| 90 | 05/10/2013 | 15:33:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 91 | 05/10/2013 | 15:38:49 | 0.009 | 0.009 | 0.009 | 0.010 | 0.010 |
| 92 | 05/10/2013 | 15:43:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |
| 93 | 05/10/2013 | 15:48:49 | 0.009 | 0.009 | 0.009 | 0.009 | 0.009 |

# Test 001

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/06/2013 |
| Instrument S/N | 8533102102 | Start Time | 08:42:39 |
| | | Stop Date | 05/06/2013 |
| | | Stop Time | 15:52:39 |
| | | Total Time | 0:07:10:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/06/2013 | 08:47:39 | 0.014 | 0.015 | 0.015 | 0.016 | 0.017 |
| 2 | 05/06/2013 | 08:52:39 | 0.013 | 0.014 | 0.014 | 0.015 | 0.015 |
| 3 | 05/06/2013 | 08:57:39 | 0.013 | 0.014 | 0.014 | 0.014 | 0.015 |
| 4 | 05/06/2013 | 09:02:39 | 0.013 | 0.013 | 0.014 | 0.014 | 0.015 |
| 5 | 05/06/2013 | 09:07:39 | 0.012 | 0.013 | 0.013 | 0.013 | 0.014 |
| 6 | 05/06/2013 | 09:12:39 | 0.011 | 0.012 | 0.012 | 0.013 | 0.013 |
| 7 | 05/06/2013 | 09:17:39 | 0.011 | 0.012 | 0.012 | 0.012 | 0.013 |
| 8 | 05/06/2013 | 09:22:39 | 0.011 | 0.011 | 0.012 | 0.012 | 0.012 |
| 9 | 05/06/2013 | 09:27:39 | 0.010 | 0.010 | 0.011 | 0.011 | 0.011 |
| 10 | 05/06/2013 | 09:32:39 | 0.009 | 0.010 | 0.010 | 0.011 | 0.011 |
| 11 | 05/06/2013 | 09:37:39 | 0.009 | 0.009 | 0.010 | 0.010 | 0.011 |
| 12 | 05/06/2013 | 09:42:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 |
| 13 | 05/06/2013 | 09:47:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.010 |
| 14 | 05/06/2013 | 09:52:39 | 0.008 | 0.008 | 0.009 | 0.009 | 0.010 |
| 15 | 05/06/2013 | 09:57:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.009 |
| 16 | 05/06/2013 | 10:02:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.009 |
| 17 | 05/06/2013 | 10:07:39 | 0.007 | 0.008 | 0.008 | 0.008 | 0.009 |
| 18 | 05/06/2013 | 10:12:39 | 0.007 | 0.007 | 0.007 | 0.008 | 0.008 |
| 19 | 05/06/2013 | 10:17:39 | 0.006 | 0.007 | 0.007 | 0.008 | 0.008 |
| 20 | 05/06/2013 | 10:22:39 | 0.006 | 0.007 | 0.007 | 0.008 | 0.008 |
| 21 | 05/06/2013 | 10:27:39 | 0.007 | 0.007 | 0.008 | 0.008 | 0.009 |
| 22 | 05/06/2013 | 10:32:39 | 0.006 | 0.007 | 0.007 | 0.007 | 0.008 |
| 23 | 05/06/2013 | 10:37:39 | 0.006 | 0.007 | 0.007 | 0.007 | 0.008 |
| 24 | 05/06/2013 | 10:42:39 | 0.006 | 0.007 | 0.007 | 0.008 | 0.008 |
| 25 | 05/06/2013 | 10:47:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.010 |
| 26 | 05/06/2013 | 10:52:39 | 0.007 | 0.008 | 0.009 | 0.009 | 0.010 |
| 27 | 05/06/2013 | 10:57:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.010 |
| 28 | 05/06/2013 | 11:02:39 | 0.008 | 0.008 | 0.008 | 0.009 | 0.010 |
| 29 | 05/06/2013 | 11:07:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.009 |
| 30 | 05/06/2013 | 11:12:39 | 0.008 | 0.008 | 0.009 | 0.010 | 0.010 |
| 31 | 05/06/2013 | 11:17:39 | 0.008 | 0.008 | 0.009 | 0.010 | 0.011 |
| 32 | 05/06/2013 | 11:22:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.011 |
| 33 | 05/06/2013 | 11:27:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.011 |
| 34 | 05/06/2013 | 11:32:39 | 0.008 | 0.009 | 0.009 | 0.011 | 0.011 |
| 35 | 05/06/2013 | 11:37:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.011 |
| 36 | 05/06/2013 | 11:42:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.011 |
| 37 | 05/06/2013 | 11:47:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.011 |
| 38 | 05/06/2013 | 11:52:39 | 0.008 | 0.009 | 0.009 | 0.011 | 0.012 |
| 39 | 05/06/2013 | 11:57:39 | 0.008 | 0.008 | 0.008 | 0.009 | 0.010 |
| 40 | 05/06/2013 | 12:02:39 | 0.008 | 0.009 | 0.009 | 0.010 | 0.011 |
| 41 | 05/06/2013 | 12:07:39 | 0.008 | 0.008 | 0.009 | 0.009 | 0.010 |
| 42 | 05/06/2013 | 12:12:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.010 |
| 43 | 05/06/2013 | 12:17:39 | 0.008 | 0.008 | 0.008 | 0.010 | 0.010 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/06/2013 | 12:22:39 | 0.007 | 0.008 | 0.008 | 0.010 | 0.010 |
| 45 | 05/06/2013 | 12:27:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.010 |
| 46 | 05/06/2013 | 12:32:39 | 0.007 | 0.007 | 0.008 | 0.008 | 0.009 |
| 47 | 05/06/2013 | 12:37:39 | 0.007 | 0.008 | 0.008 | 0.009 | 0.010 |
| 48 | 05/06/2013 | 12:42:39 | 0.007 | 0.007 | 0.007 | 0.009 | 0.009 |
| 49 | 05/06/2013 | 12:47:39 | 0.007 | 0.007 | 0.007 | 0.008 | 0.009 |
| 50 | 05/06/2013 | 12:52:39 | 0.008 | 0.009 | 0.009 | 0.012 | 0.013 |
| 51 | 05/06/2013 | 12:57:39 | 0.006 | 0.006 | 0.007 | 0.008 | 0.008 |
| 52 | 05/06/2013 | 13:02:39 | 0.006 | 0.006 | 0.007 | 0.008 | 0.008 |
| 53 | 05/06/2013 | 13:07:39 | 0.006 | 0.006 | 0.007 | 0.007 | 0.008 |
| 54 | 05/06/2013 | 13:12:39 | 0.005 | 0.006 | 0.006 | 0.007 | 0.007 |
| 55 | 05/06/2013 | 13:17:39 | 0.005 | 0.005 | 0.006 | 0.007 | 0.007 |
| 56 | 05/06/2013 | 13:22:39 | 0.005 | 0.005 | 0.005 | 0.006 | 0.006 |
| 57 | 05/06/2013 | 13:27:39 | 0.005 | 0.005 | 0.005 | 0.006 | 0.007 |
| 58 | 05/06/2013 | 13:32:39 | 0.004 | 0.005 | 0.005 | 0.006 | 0.006 |
| 59 | 05/06/2013 | 13:37:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 60 | 05/06/2013 | 13:42:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.006 |
| 61 | 05/06/2013 | 13:47:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 62 | 05/06/2013 | 13:52:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 63 | 05/06/2013 | 13:57:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 64 | 05/06/2013 | 14:02:39 | 0.003 | 0.003 | 0.004 | 0.004 | 0.005 |
| 65 | 05/06/2013 | 14:07:39 | 0.003 | 0.004 | 0.004 | 0.004 | 0.005 |
| 66 | 05/06/2013 | 14:12:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 67 | 05/06/2013 | 14:17:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 68 | 05/06/2013 | 14:22:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 69 | 05/06/2013 | 14:27:39 | 0.006 | 0.006 | 0.007 | 0.008 | 0.011 |
| 70 | 05/06/2013 | 14:32:39 | 0.004 | 0.004 | 0.005 | 0.005 | 0.006 |
| 71 | 05/06/2013 | 14:37:39 | 0.004 | 0.005 | 0.005 | 0.006 | 0.006 |
| 72 | 05/06/2013 | 14:42:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 73 | 05/06/2013 | 14:47:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 74 | 05/06/2013 | 14:52:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 75 | 05/06/2013 | 14:57:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 76 | 05/06/2013 | 15:02:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.006 |
| 77 | 05/06/2013 | 15:07:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 78 | 05/06/2013 | 15:12:39 | 0.004 | 0.004 | 0.005 | 0.005 | 0.005 |
| 79 | 05/06/2013 | 15:17:39 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 80 | 05/06/2013 | 15:22:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 81 | 05/06/2013 | 15:27:39 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 82 | 05/06/2013 | 15:32:39 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 83 | 05/06/2013 | 15:37:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 84 | 05/06/2013 | 15:42:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 85 | 05/06/2013 | 15:47:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 86 | 05/06/2013 | 15:52:39 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |

# Test 002

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/07/2013 |
| Instrument S/N | 8533102102 | Start Time | 07:54:02 |
| | | Stop Date | 05/07/2013 |
| | | Stop Time | 15:24:02 |
| | | Total Time | 0:07:30:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/07/2013 | 07:59:02 | 0.008 | 0.009 | 0.011 | 0.017 | 0.025 |
| 2 | 05/07/2013 | 08:04:02 | 0.006 | 0.007 | 0.009 | 0.013 | 0.015 |
| 3 | 05/07/2013 | 08:09:02 | 0.003 | 0.004 | 0.005 | 0.007 | 0.008 |
| 4 | 05/07/2013 | 08:14:02 | 0.002 | 0.003 | 0.004 | 0.005 | 0.006 |
| 5 | 05/07/2013 | 08:19:02 | 0.003 | 0.003 | 0.004 | 0.005 | 0.006 |
| 6 | 05/07/2013 | 08:24:02 | 0.002 | 0.003 | 0.003 | 0.004 | 0.005 |
| 7 | 05/07/2013 | 08:29:02 | 0.001 | 0.001 | 0.002 | 0.003 | 0.003 |
| 8 | 05/07/2013 | 08:34:02 | 0.001 | 0.001 | 0.001 | 0.003 | 0.003 |
| 9 | 05/07/2013 | 08:39:02 | 0.000 | 0.001 | 0.001 | 0.002 | 0.003 |
| 10 | 05/07/2013 | 08:44:02 | 0.001 | 0.002 | 0.002 | 0.003 | 0.005 |
| 11 | 05/07/2013 | 08:49:02 | 0.001 | 0.001 | 0.002 | 0.004 | 0.005 |
| 12 | 05/07/2013 | 08:54:02 | 0.000 | 0.001 | 0.001 | 0.003 | 0.004 |
| 13 | 05/07/2013 | 08:59:02 | 0.000 | 0.000 | 0.001 | 0.002 | 0.003 |
| 14 | 05/07/2013 | 09:04:02 | 0.001 | 0.001 | 0.001 | 0.002 | 0.004 |
| 15 | 05/07/2013 | 09:09:02 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 |
| 16 | 05/07/2013 | 09:14:02 | 0.000 | 0.000 | 0.000 | 0.002 | 0.002 |
| 17 | 05/07/2013 | 09:19:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| 18 | 05/07/2013 | 09:24:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 19 | 05/07/2013 | 09:29:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| 20 | 05/07/2013 | 09:34:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| 21 | 05/07/2013 | 09:39:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 22 | 05/07/2013 | 09:44:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| 23 | 05/07/2013 | 09:49:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| 24 | 05/07/2013 | 09:54:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.002 |
| 25 | 05/07/2013 | 09:59:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 26 | 05/07/2013 | 10:04:02 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 27 | 05/07/2013 | 10:09:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 28 | 05/07/2013 | 10:14:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29 | 05/07/2013 | 10:19:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 30 | 05/07/2013 | 10:24:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 31 | 05/07/2013 | 10:29:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 32 | 05/07/2013 | 10:34:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 33 | 05/07/2013 | 10:39:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 34 | 05/07/2013 | 10:44:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 35 | 05/07/2013 | 10:49:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 36 | 05/07/2013 | 10:54:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 37 | 05/07/2013 | 10:59:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 38 | 05/07/2013 | 11:04:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 39 | 05/07/2013 | 11:09:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 40 | 05/07/2013 | 11:14:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 41 | 05/07/2013 | 11:19:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 42 | 05/07/2013 | 11:24:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 43 | 05/07/2013 | 11:29:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/07/2013 | 11:34:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 45 | 05/07/2013 | 11:39:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 46 | 05/07/2013 | 11:44:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 47 | 05/07/2013 | 11:49:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 48 | 05/07/2013 | 11:54:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 49 | 05/07/2013 | 11:59:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 50 | 05/07/2013 | 12:04:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 51 | 05/07/2013 | 12:09:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 52 | 05/07/2013 | 12:14:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 53 | 05/07/2013 | 12:19:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 54 | 05/07/2013 | 12:24:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 55 | 05/07/2013 | 12:29:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 56 | 05/07/2013 | 12:34:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 57 | 05/07/2013 | 12:39:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 58 | 05/07/2013 | 12:44:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 59 | 05/07/2013 | 12:49:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 60 | 05/07/2013 | 12:54:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 61 | 05/07/2013 | 12:59:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 62 | 05/07/2013 | 13:04:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 63 | 05/07/2013 | 13:09:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 64 | 05/07/2013 | 13:14:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 65 | 05/07/2013 | 13:19:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 66 | 05/07/2013 | 13:24:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 67 | 05/07/2013 | 13:29:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 68 | 05/07/2013 | 13:34:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 69 | 05/07/2013 | 13:39:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 70 | 05/07/2013 | 13:44:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 71 | 05/07/2013 | 13:49:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 72 | 05/07/2013 | 13:54:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 73 | 05/07/2013 | 13:59:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 74 | 05/07/2013 | 14:04:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 75 | 05/07/2013 | 14:09:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 76 | 05/07/2013 | 14:14:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 77 | 05/07/2013 | 14:19:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 78 | 05/07/2013 | 14:24:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 79 | 05/07/2013 | 14:29:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 80 | 05/07/2013 | 14:34:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 81 | 05/07/2013 | 14:39:02 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 82 | 05/07/2013 | 14:44:02 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 83 | 05/07/2013 | 14:49:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 84 | 05/07/2013 | 14:54:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 85 | 05/07/2013 | 14:59:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 86 | 05/07/2013 | 15:04:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 87 | 05/07/2013 | 15:09:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 88 | 05/07/2013 | 15:14:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 89 | 05/07/2013 | 15:19:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 90 | 05/07/2013 | 15:24:02 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

# Test 003

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/08/2013 |
| Instrument S/N | 8533102102 | Start Time | 07:50:30 |
| | | Stop Date | 05/08/2013 |
| | | Stop Time | 15:35:30 |
| | | Total Time | 0:07:45:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/08/2013 | 07:55:30 | 0.009 | 0.010 | 0.010 | 0.012 | 0.013 |
| 2 | 05/08/2013 | 08:00:30 | 0.012 | 0.013 | 0.015 | 0.020 | 0.022 |
| 3 | 05/08/2013 | 08:05:30 | 0.012 | 0.013 | 0.014 | 0.019 | 0.021 |
| 4 | 05/08/2013 | 08:10:30 | 0.012 | 0.013 | 0.014 | 0.017 | 0.018 |
| 5 | 05/08/2013 | 08:15:30 | 0.016 | 0.017 | 0.019 | 0.029 | 0.033 |
| 6 | 05/08/2013 | 08:20:30 | 0.012 | 0.013 | 0.014 | 0.017 | 0.019 |
| 7 | 05/08/2013 | 08:25:30 | 0.014 | 0.015 | 0.017 | 0.022 | 0.024 |
| 8 | 05/08/2013 | 08:30:30 | 0.013 | 0.013 | 0.015 | 0.018 | 0.021 |
| 9 | 05/08/2013 | 08:35:30 | 0.010 | 0.011 | 0.011 | 0.014 | 0.015 |
| 10 | 05/08/2013 | 08:40:30 | 0.011 | 0.012 | 0.012 | 0.015 | 0.017 |
| 11 | 05/08/2013 | 08:45:30 | 0.012 | 0.013 | 0.014 | 0.017 | 0.019 |
| 12 | 05/08/2013 | 08:50:30 | 0.014 | 0.015 | 0.016 | 0.019 | 0.021 |
| 13 | 05/08/2013 | 08:55:30 | 0.012 | 0.013 | 0.014 | 0.018 | 0.019 |
| 14 | 05/08/2013 | 09:00:30 | 0.010 | 0.011 | 0.011 | 0.013 | 0.015 |
| 15 | 05/08/2013 | 09:05:30 | 0.009 | 0.009 | 0.010 | 0.011 | 0.012 |
| 16 | 05/08/2013 | 09:10:30 | 0.020 | 0.022 | 0.026 | 0.046 | 0.054 |
| 17 | 05/08/2013 | 09:15:30 | 0.009 | 0.010 | 0.011 | 0.013 | 0.015 |
| 18 | 05/08/2013 | 09:20:30 | 0.008 | 0.009 | 0.009 | 0.011 | 0.013 |
| 19 | 05/08/2013 | 09:25:30 | 0.007 | 0.008 | 0.008 | 0.010 | 0.010 |
| 20 | 05/08/2013 | 09:30:30 | 0.007 | 0.008 | 0.008 | 0.010 | 0.011 |
| 21 | 05/08/2013 | 09:35:30 | 0.007 | 0.007 | 0.008 | 0.009 | 0.010 |
| 22 | 05/08/2013 | 09:40:30 | 0.006 | 0.007 | 0.007 | 0.009 | 0.009 |
| 23 | 05/08/2013 | 09:45:30 | 0.006 | 0.006 | 0.007 | 0.008 | 0.009 |
| 24 | 05/08/2013 | 09:50:30 | 0.006 | 0.006 | 0.007 | 0.008 | 0.009 |
| 25 | 05/08/2013 | 09:55:30 | 0.006 | 0.006 | 0.007 | 0.008 | 0.009 |
| 26 | 05/08/2013 | 10:00:30 | 0.006 | 0.007 | 0.007 | 0.009 | 0.010 |
| 27 | 05/08/2013 | 10:05:30 | 0.007 | 0.007 | 0.007 | 0.009 | 0.010 |
| 28 | 05/08/2013 | 10:10:30 | 0.006 | 0.007 | 0.007 | 0.009 | 0.010 |
| 29 | 05/08/2013 | 10:15:30 | 0.005 | 0.006 | 0.006 | 0.007 | 0.008 |
| 30 | 05/08/2013 | 10:20:30 | 0.006 | 0.006 | 0.007 | 0.008 | 0.009 |
| 31 | 05/08/2013 | 10:25:30 | 0.006 | 0.006 | 0.007 | 0.008 | 0.009 |
| 32 | 05/08/2013 | 10:30:30 | 0.006 | 0.006 | 0.006 | 0.008 | 0.009 |
| 33 | 05/08/2013 | 10:35:30 | 0.006 | 0.007 | 0.007 | 0.009 | 0.010 |
| 34 | 05/08/2013 | 10:40:30 | 0.006 | 0.007 | 0.007 | 0.008 | 0.010 |
| 35 | 05/08/2013 | 10:45:30 | 0.005 | 0.006 | 0.006 | 0.008 | 0.008 |
| 36 | 05/08/2013 | 10:50:30 | 0.006 | 0.007 | 0.007 | 0.008 | 0.009 |
| 37 | 05/08/2013 | 10:55:30 | 0.006 | 0.006 | 0.006 | 0.007 | 0.008 |
| 38 | 05/08/2013 | 11:00:30 | 0.005 | 0.005 | 0.006 | 0.007 | 0.008 |
| 39 | 05/08/2013 | 11:05:30 | 0.003 | 0.003 | 0.003 | 0.004 | 0.005 |
| 40 | 05/08/2013 | 11:10:30 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 |
| 41 | 05/08/2013 | 11:15:30 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 42 | 05/08/2013 | 11:20:30 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 43 | 05/08/2013 | 11:25:30 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 44 | 05/08/2013 | 11:30:30 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 45 | 05/08/2013 | 11:35:30 | 0.001 | 0.002 | 0.002 | 0.002 | 0.003 |
| 46 | 05/08/2013 | 11:40:30 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 |
| 47 | 05/08/2013 | 11:45:30 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 48 | 05/08/2013 | 11:50:30 | 0.001 | 0.002 | 0.002 | 0.003 | 0.003 |
| 49 | 05/08/2013 | 11:55:30 | 0.002 | 0.003 | 0.003 | 0.005 | 0.006 |
| 50 | 05/08/2013 | 12:00:30 | 0.004 | 0.004 | 0.005 | 0.008 | 0.009 |
| 51 | 05/08/2013 | 12:05:30 | 0.003 | 0.003 | 0.004 | 0.005 | 0.007 |
| 52 | 05/08/2013 | 12:10:30 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 53 | 05/08/2013 | 12:15:30 | 0.002 | 0.002 | 0.003 | 0.003 | 0.004 |
| 54 | 05/08/2013 | 12:20:30 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 |
| 55 | 05/08/2013 | 12:25:30 | 0.002 | 0.002 | 0.003 | 0.003 | 0.003 |
| 56 | 05/08/2013 | 12:30:30 | 0.002 | 0.003 | 0.003 | 0.003 | 0.004 |
| 57 | 05/08/2013 | 12:35:30 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 |
| 58 | 05/08/2013 | 12:40:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.006 |
| 59 | 05/08/2013 | 12:45:30 | 0.004 | 0.004 | 0.005 | 0.007 | 0.008 |
| 60 | 05/08/2013 | 12:50:30 | 0.002 | 0.003 | 0.003 | 0.004 | 0.004 |
| 61 | 05/08/2013 | 12:55:30 | 0.002 | 0.003 | 0.003 | 0.004 | 0.004 |
| 62 | 05/08/2013 | 13:00:30 | 0.002 | 0.003 | 0.003 | 0.003 | 0.004 |
| 63 | 05/08/2013 | 13:05:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 64 | 05/08/2013 | 13:10:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 65 | 05/08/2013 | 13:15:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 66 | 05/08/2013 | 13:20:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 67 | 05/08/2013 | 13:25:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 68 | 05/08/2013 | 13:30:30 | 0.003 | 0.004 | 0.004 | 0.004 | 0.005 |
| 69 | 05/08/2013 | 13:35:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 70 | 05/08/2013 | 13:40:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 71 | 05/08/2013 | 13:45:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.006 |
| 72 | 05/08/2013 | 13:50:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 73 | 05/08/2013 | 13:55:30 | 0.004 | 0.004 | 0.004 | 0.005 | 0.006 |
| 74 | 05/08/2013 | 14:00:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.005 |
| 75 | 05/08/2013 | 14:05:30 | 0.004 | 0.004 | 0.005 | 0.006 | 0.008 |
| 76 | 05/08/2013 | 14:10:30 | 0.003 | 0.004 | 0.004 | 0.005 | 0.006 |
| 77 | 05/08/2013 | 14:15:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 78 | 05/08/2013 | 14:20:30 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 |
| 79 | 05/08/2013 | 14:25:30 | 0.003 | 0.003 | 0.003 | 0.004 | 0.004 |
| 80 | 05/08/2013 | 14:30:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 81 | 05/08/2013 | 14:35:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 82 | 05/08/2013 | 14:40:30 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 |
| 83 | 05/08/2013 | 14:45:30 | 0.003 | 0.004 | 0.004 | 0.004 | 0.004 |
| 84 | 05/08/2013 | 14:50:30 | 0.003 | 0.004 | 0.004 | 0.004 | 0.004 |
| 85 | 05/08/2013 | 14:55:30 | 0.004 | 0.004 | 0.004 | 0.005 | 0.006 |
| 86 | 05/08/2013 | 15:00:30 | 0.026 | 0.030 | 0.037 | 0.069 | 0.081 |
| 87 | 05/08/2013 | 15:05:30 | 0.004 | 0.004 | 0.005 | 0.005 | 0.006 |
| 88 | 05/08/2013 | 15:10:30 | 0.004 | 0.005 | 0.005 | 0.006 | 0.007 |
| 89 | 05/08/2013 | 15:15:30 | 0.006 | 0.007 | 0.008 | 0.012 | 0.014 |
| 90 | 05/08/2013 | 15:20:30 | 0.007 | 0.007 | 0.008 | 0.012 | 0.014 |
| 91 | 05/08/2013 | 15:25:30 | 0.005 | 0.006 | 0.006 | 0.008 | 0.009 |
| 92 | 05/08/2013 | 15:30:30 | 0.005 | 0.006 | 0.007 | 0.009 | 0.010 |
| 93 | 05/08/2013 | 15:35:30 | 0.005 | 0.006 | 0.006 | 0.008 | 0.009 |

# Test 004

ERROR: FLOW,

| Instrument | | Data Properties | |
|---|---|---|---|
| Model | DustTrak DRX | Start Date | 05/10/2013 |
| Instrument S/N | 8533102102 | Start Time | 07:56:23 |
| | | Stop Date | 05/10/2013 |
| | | Stop Time | 14:56:23 |
| | | Total Time | 0:07:00:00 |
| | | Logging Interval | 300 seconds |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 1 | 05/10/2013 | 08:01:23 | 0.016 | 0.016 | 0.016 | 0.016 | 0.016 |
| 2 | 05/10/2013 | 08:06:23 | 0.016 | 0.016 | 0.017 | 0.017 | 0.017 |
| 3 | 05/10/2013 | 08:11:23 | 0.013 | 0.013 | 0.013 | 0.014 | 0.014 |
| 4 | 05/10/2013 | 08:16:23 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 |
| 5 | 05/10/2013 | 08:21:23 | 0.011 | 0.011 | 0.012 | 0.012 | 0.013 |
| 6 | 05/10/2013 | 08:26:23 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| 7 | 05/10/2013 | 08:31:23 | 0.011 | 0.011 | 0.011 | 0.011 | 0.011 |
| 8 | 05/10/2013 | 08:36:23 | 0.010 | 0.010 | 0.010 | 0.010 | 0.010 |
| 9 | 05/10/2013 | 08:41:23 | 0.008 | 0.009 | 0.009 | 0.009 | 0.009 |
| 10 | 05/10/2013 | 08:46:23 | 0.008 | 0.008 | 0.008 | 0.008 | 0.008 |
| 11 | 05/10/2013 | 08:51:23 | 0.007 | 0.007 | 0.008 | 0.008 | 0.008 |
| 12 | 05/10/2013 | 08:56:23 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| 13 | 05/10/2013 | 09:01:23 | 0.005 | 0.005 | 0.005 | 0.006 | 0.006 |
| 14 | 05/10/2013 | 09:06:23 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| 15 | 05/10/2013 | 09:11:23 | 0.005 | 0.005 | 0.005 | 0.006 | 0.006 |
| 16 | 05/10/2013 | 09:16:23 | 0.005 | 0.005 | 0.006 | 0.006 | 0.006 |
| 17 | 05/10/2013 | 09:21:23 | 0.005 | 0.005 | 0.006 | 0.006 | 0.006 |
| 18 | 05/10/2013 | 09:26:23 | 0.004 | 0.004 | 0.004 | 0.004 | 0.005 |
| 19 | 05/10/2013 | 09:31:23 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| 20 | 05/10/2013 | 09:36:23 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| 21 | 05/10/2013 | 09:41:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 22 | 05/10/2013 | 09:46:23 | 0.004 | 0.004 | 0.005 | 0.005 | 0.005 |
| 23 | 05/10/2013 | 09:51:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 24 | 05/10/2013 | 09:56:23 | 0.004 | 0.005 | 0.005 | 0.005 | 0.005 |
| 25 | 05/10/2013 | 10:01:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 26 | 05/10/2013 | 10:06:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 27 | 05/10/2013 | 10:11:23 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| 28 | 05/10/2013 | 10:16:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 29 | 05/10/2013 | 10:21:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 30 | 05/10/2013 | 10:26:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 31 | 05/10/2013 | 10:31:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 32 | 05/10/2013 | 10:36:23 | 0.004 | 0.004 | 0.004 | 0.005 | 0.005 |
| 33 | 05/10/2013 | 10:41:23 | 0.003 | 0.004 | 0.004 | 0.004 | 0.004 |
| 34 | 05/10/2013 | 10:46:23 | 0.003 | 0.004 | 0.004 | 0.004 | 0.004 |
| 35 | 05/10/2013 | 10:51:23 | 0.002 | 0.002 | 0.002 | 0.002 | 0.003 |
| 36 | 05/10/2013 | 10:56:23 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 37 | 05/10/2013 | 11:01:23 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| 38 | 05/10/2013 | 11:06:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 39 | 05/10/2013 | 11:11:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 40 | 05/10/2013 | 11:16:23 | 0.001 | 0.001 | 0.002 | 0.002 | 0.002 |
| 41 | 05/10/2013 | 11:21:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 42 | 05/10/2013 | 11:26:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |

| Test Data | | | | | | | |
|---|---|---|---|---|---|---|---|
| Data Point | Date | Time | PM1 mg/m^3 | PM2.5 mg/m^3 | RESP mg/m^3 | PM10 mg/m^3 | TOTAL mg/m^3 |
| 43 | 05/10/2013 | 11:31:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 44 | 05/10/2013 | 11:36:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 45 | 05/10/2013 | 11:41:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 46 | 05/10/2013 | 11:46:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 |
| 47 | 05/10/2013 | 11:51:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 48 | 05/10/2013 | 11:56:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 49 | 05/10/2013 | 12:01:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 50 | 05/10/2013 | 12:06:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 51 | 05/10/2013 | 12:11:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 52 | 05/10/2013 | 12:16:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 53 | 05/10/2013 | 12:21:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 54 | 05/10/2013 | 12:26:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 55 | 05/10/2013 | 12:31:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 56 | 05/10/2013 | 12:36:23 | 0.002 | 0.002 | 0.002 | 0.003 | 0.003 |
| 57 | 05/10/2013 | 12:41:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 58 | 05/10/2013 | 12:46:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 59 | 05/10/2013 | 12:51:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 60 | 05/10/2013 | 12:56:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 61 | 05/10/2013 | 13:01:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 62 | 05/10/2013 | 13:06:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 63 | 05/10/2013 | 13:11:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 64 | 05/10/2013 | 13:16:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 65 | 05/10/2013 | 13:21:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 66 | 05/10/2013 | 13:26:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 67 | 05/10/2013 | 13:31:23 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |
| 68 | 05/10/2013 | 13:36:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 69 | 05/10/2013 | 13:41:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 |
| 70 | 05/10/2013 | 13:46:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 71 | 05/10/2013 | 13:51:23 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 |
| 72 | 05/10/2013 | 13:56:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 73 | 05/10/2013 | 14:01:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 74 | 05/10/2013 | 14:06:23 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 75 | 05/10/2013 | 14:11:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 76 | 05/10/2013 | 14:16:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 77 | 05/10/2013 | 14:21:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 78 | 05/10/2013 | 14:26:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 79 | 05/10/2013 | 14:31:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 80 | 05/10/2013 | 14:36:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 81 | 05/10/2013 | 14:41:23 | 0.000 | 0.000 | 0.000 | 0.001 | 0.001 |
| 82 | 05/10/2013 | 14:46:23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 |
| 83 | 05/10/2013 | 14:51:23 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 |
| 84 | 05/10/2013 | 14:56:23 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 |

# APPENDIX C

## Data Usability Summary Report (DUSR), July 17, 2013

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July 17, 2013

Mr. Richard S. Totino
Project Manager
TRC Environmental Corporation
10 Maxwell Drive, Suite 200
Clifton Park, New York 12065

Re: Data Validation Report
Chevron Troy Site
May 2013 Soil Sampling Event

Dear Mr. Totino:

The abbreviated data usability summary report (DUSR) and data validation summaries are attached to this letter for the Chevron Troy site, May 2013 sampling event. The data for TestAmerica Buffalo SDG number 480-37943-1 were acceptable, with minor issues that are identified in the DUSR and validation summaries. The data pack did not contain data that were unusable (R).

A list of data validation acronyms and qualifiers is attached to assist you in interpreting the data validation reviews. If you have any questions concerning the work performed, please contact me at (518) 348-6995. Thank you for providing us an opportunity with TRC Environmental Corporation.

Sincerely,
Alpha Geoscience

Donald Anné

Donald Anné
Senior Chemist

DCA:dca
attachments

Z:\projects\2013\13600 - 13620\13613-Chevron\chevron-131.ltr.wpd

## Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

| | | |
|---|---|---|
| U | = | Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank. |
| R | = | Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result. |
| N | = | Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts. |
| J | = | Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method. |
| UJ | = | Not detected, quantitation limit may be inaccurate or imprecise. |

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

# Data Validation Acronyms

| | |
|---|---|
| AA | Atomic absorption, flame technique |
| BHC | Hexachlorocyclohexane |
| BFB | Bromofluorobenzene |
| CCB | Continuing calibration blank |
| CCC | Calibration check compound |
| CCV | Continuing calibration verification |
| CN | Cyanide |
| CRDL | Contract required detection limit |
| CRQL | Contract required quantitation limit |
| CVAA | Atomic adsorption, cold vapor technique |
| DCAA | 2,4-Dichlophenylacetic acid |
| DCB | Decachlorobiphenyl |
| DFTPP | Decafluorotriphenyl phosphine |
| ECD | Electron capture detector |
| FAA | Atomic absorption, furnace technique |
| FID | Flame ionization detector |
| FNP | 1-Fluoronaphthalene |
| GC | Gas chromatography |
| GC/MS | Gas chromatography/mass spectrometry |
| GPC | Gel permeation chromatography |
| ICB | Initial calibration blank |
| ICP | Inductively coupled plasma-atomic emission spectrometer |
| ICV | Initial calibration verification |
| IDL | Instrument detection limit |
| IS | Internal standard |
| LCS | Laboratory control sample |
| LCS/LCSD | Laboratory control sample/laboratory control sample duplicate |
| MSA | Method of standard additions |
| MS/MSD | Matrix spike/matrix spike duplicate |
| PID | Photo ionization detector |
| PCB | Polychlorinated biphenyl |
| PCDD | Polychlorinated dibenzodioxins |
| PCDF | Polychlorinated dibenzofurans |
| QA | Quality assurance |
| QC | Quality control |
| RF | Response factor |
| RPD | Relative percent difference |
| RRF | Relative response factor |
| RRF(number) | Relative response factor at concentration of the number following |
| RT | Retention time |
| RRT | Relative retention time |
| SDG | Sample delivery group |
| SPCC | System performance check compound |
| TCX | Tetrachloro-m-xylene |
| %D | Percent difference |
| %R | Percent recovery |
| %RSD | Percent relative standard deviation |

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**Data Usability Summary Report for**
**TestAmerica Buffalo, Job No: 480-37943-1**

**33 Soil Samples and 1 Field Duplicate**
**Collected May 6-10, 2013**

Prepared by: Donald Anné
July 17, 2013

---

The data packages contain the documentation required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contained the results for 13 soil samples and 1 field duplicate analyzed for volatiles, and 33 soil samples and 1 field duplicate analyzed semi-volatiles.

The overall performances of the analyses are acceptable. TestAmerica Buffalo did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were flagged:

- Positive volatile results for methylene chloride were flagged as "not detected" (U) for samples DPT-15 (10.0-11.0), DPT-16 (9.5-10.0), and DPT-24 (9.0-10.0) because the level reported in the samples were not significantly greater than (more than 10 times) the highest associated blank level.

- The semi-volatile results for naphthalene in samples DPT-16 (9.5-10.0) and DPT-18 (3.5-4.0) were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The result for naphthalene marked "E" in the undiluted samples were qualified as estimated (J).

- The semi-volatile results for fluoranthene and phenanthrene in sample DPT-24 (9.0-10.0) were quantitated using data that were extrapolated beyond the highest calibration standard and flagged "E" by the laboratory. The result for fluoranthene and phenanthrene marked "E" in the undiluted sample were qualified as estimated (J).



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- Positive semi-volatile results for benzo(g,h,i)perylene were flagged as "estimated" (J) in the following samples because the %D for benzo(g,h,i)perylene was above the allowable maximum in the associated continuing calibration.

| | | |
|---|---|---|
| DPT-21 (21.5-22.0) | DPT-15 (10.0-11.0) | DPT-15 (17.0-17.5) |
| DPT-16 (9.5-10.0) | DPT-17 (18.5-19.0) | DPT-18 (3.5-4.0) |
| DPT-19 (15.5-16.0) | DPT-23 (2.5-3.0) | DPT-24 (9.0-10.0) |
| DPT-25 (22.0-23.0) | DPT-26 (17.0-17.5) | DPT-29 (1.0-2.0) |

All data are considered usable with estimated (J) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

ALPHA GEOSCIENCE

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**QA/QC Review of Method 8260B Volatiles Data**
**for TestAmerica Buffalo, Job No: 480-37943-1**

**13 Soil Samples and 1 Field Duplicate**
**Collected May 6-10, 2013**

Prepared by: Donald Anné
July 17, 2013

---

Holding Times: Samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The SPCCs and CCCs were within control limits for method 8260B.

The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for bromomethane and chloroethane were above the allowable maximum (25%) on 05-11-13 (F7859.D). The %Ds for bromomethane and chloroethane were above the allowable maximum (25%) on 05-13-13 (F7883.D). The %Ds for bromomethane and chloroethane were above the allowable maximum (25%) on 05-14-13 (F7910.D). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: Method blank MB 480-119364/2-A contained a trace of methylene chloride (24.2 ug/kg). Positive results for methylene chloride that are less than ten times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the soil samples.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences (RPDs) for spiked compounds were below the allowable maximum, but 20 of 26 percent recoveries (%Rs) were



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below QC limits for soil MS/MSD sample DPT-10 (4.0-4.5). One of thirteen RPDs for spiked compounds was above the allowable maximum and 24 of 26 %Rs were below QC limits for soil MS/MSD sample SPT-29 (1.0-2.0). The RPDs for spiked compounds were below the allowable maximum, but 16 of 26 %Rs were below QC limits for batch soil MS/MSD sample 480-38156-D-10-B. No action is taken on MS/MSD data alone to qualify or reject an entire set of samples.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for the following aqueous and soil samples.

| | | |
|---|---|---|
| LCS 480-117898/1-A | LCS 480-118093/4 | LCS 480-118255/4 |
| LCS 480-118414/4 | LCS 480-119364/1-A | LCS 480-119655/6 |

Field Duplicates: The analyses of soil field duplicate pair DPT-29 (6.0-7.0)/FD051013 reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds and surrogates were within GC quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

# APPENDIX D

## Laboratory Data Packages (on Compact Disk)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-37943-1
Client Project/Site: Troy Chevron Asphalt Terminal - 194098

For:
TRC Solutions, Inc.
10 Maxwell Drive
Suite 200
Clifton Park, New York 12065

Attn: Mr. Richard Totino

Melissa Deyo

*Authorized for release by:*
*5/28/2013 1:41:59 PM*

Melissa Deyo, Project Manager I
melissa.deyo@testamericainc.com

# Table of Contents

## Qualifiers

### GC/MS VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F | MS or MSD exceeds the control limits |
| B | Compound was found in the blank and sample. |
| X | Surrogate is outside control limits |
| F | RPD of the MS and MSD exceeds the control limits |

### GC/MS VOA TICs

| Qualifier | Qualifier Description |
|---|---|
| J | Indicates an Estimated Value for TICs |
| N | Presumptive evidence of material. |
| T | Result is  a tentatively identified compound (TIC) and an estimated value. |
| E | Result exceeded calibration range. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| F | MS or MSD exceeds the control limits |
| X | Surrogate is outside control limits |
| E | Result exceeded calibration range. |
| F | RPD of the MS and MSD exceeds the control limits |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Job ID: 480-37943-1

### Laboratory: TestAmerica Buffalo

**Narrative**

**Job Narrative**
**480-37943-1**

**Receipt**
The samples were received on 5/9/2013 1:30 AM and 5/11/2013 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.7º C and 4.4º C.

Except:

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): FD051013 (480-38154-19). It did not have time or date of sample collection on the bottle.

**GC/MS VOA**
Method 8260B: The following samples were diluted due to the abundance of target and/or non-target analytes: DPT-02 (4.5-5.0) (480-37943-2), DPT-15(10.0-11.0) (480-38154-4), DPT-16(9.5-10.0) (480-38154-6), DPT-18(3.5-4.0) (480-38154-8) and DPT-24(9.0-10.0) (480-38154-12). Elevated reporting limits (RLs) are provided.

Method 8260B: Surrogate and internal standard (IS) recoveries for the following MS/MSD were outside control limits: SPT-29(1.0-2.0) (480-38154-17 MS) and SPT-29(1.0-2.0) (480-38154-17 MSD). Evidence of matrix interference was present. This matrix was affecting the IS recoveries and; therefore, affecting the surrogate recoveries; re-analysis was performed with similar results.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 118093 were outside control limits for several compounds. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 118414 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260B: The method blank for batch 119378 contained the analyte Methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for batch 119655 were outside control limits for several compounds. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

**GC/MS Semi VOA**
Method 8270C: The following samples were diluted due to the nature of the sample matrix and / or the abundance of target analytes: DPT-02 (4.5-5.0) (480-37943-2), DPT-15(10.0-11.0) (480-38154-4), DPT-16(9.5-10.0) (480-38154-6), DPT-16(9.5-10.0) (480-38154-6 DL), DPT-18(3.5-4.0) (480-38154-8 DL), DPT-24(9.0-10.0) (480-38154-12) and DPT-24(9.0-10.0) (480-38154-12 DL). As such, surrogate recoveries are not representative and elevated reporting limits (RLs) are provided.

Method 8270C: The following samples were diluted due to the nature of the sample matrix: DPT-12 (3.5-4.0) (480-37943-11), DPT-13 (7.5-8.0) (480-37943-12), DPT-15(17.0-17.5) (480-38154-5), DPT-18(3.5-4.0) (480-38154-8), DPT-22(13.5-14.0) (480-38154-10), DPT-25(22.0-23.0) (480-38154-13), DPT-27(12.0-13.0) (480-38154-15), SPT-29(1.0-2.0) (480-38154-17), SPT-29(1.0-2.0) (480-38154-17 MS) and SPT-29(1.0-2.0) (480-38154-17 MSD). Elevated reporting limits (RLs) are provided.

Method 8270C: The following samples contained one base surrogate outside acceptance limits: DPT-22(13.5-14.0) (480-38154-10) and DPT-27(12.0-13.0) (480-38154-15). The laboratory's SOP allows one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

Method 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 117993 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 8270C: The following compounds were outside control limits in the continuing calibration verification (CCV) associated with analytical batch 480-119772: Benzo[g,h,i]perylene. This compound is not classified as Calibration Check Compounds (CCCs) in the

## Job ID: 480-37943-1 (Continued)

### Laboratory: TestAmerica Buffalo (Continued)

reference method, and the laboratory defaults to in-house and/or project-specific criteria for evaluation. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for four analytes to be outside limits; therefore, the data have been reported.

Method 8270C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 118555 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8270C: Two compounds were outside control limits in the continuing calibration verification (CCV) associated with batch 119996. These compounds are not classified as Calibration Check Compounds (CCCs) in the reference method. Due to the large number of analytes contained in the CCV, the laboratory's SOP allows for four analytes to be outside limits; therefore, the data has been reported.

No other analytical or quality issues were noted.

**Organic Prep**

Method 3550B: Due to the sample matrix, the following samples could not be concentrated to the final method required volume: DPT-02 (4.5-5.0) (480-37943-2), DPT-15(10.0-11.0) (480-38154-4), DPT-16(9.5-10.0) (480-38154-6) and DPT-24(9.0-10.0) (480-38154-12). The reporting limits (RLs) are elevated proportionately.

Method 3550B: A significant amount of liquid was present in the following sample: DPT-21(3.0-3.5) (480-38154-2). This sample was decanted prior to preparation.

No other analytical or quality issues were noted.

# Detection Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-01 (13-5-14.0) — Lab Sample ID: 480-37943-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.0 | J | 190 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 32 | J | 190 | 1.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 7.8 | J | 190 | 2.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 32 | J | 190 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 1300 | | 190 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 32 | J | 190 | 4.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-02 (4.5-5.0) — Lab Sample ID: 480-37943-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 6600 | | 2800 | 140 | ug/Kg | 20 | ☼ | 8260B | Total/NA |
| Ethylbenzene | 880 | J | 2800 | 820 | ug/Kg | 20 | ☼ | 8260B | Total/NA |
| Toluene | 12000 | | 2800 | 760 | ug/Kg | 20 | ☼ | 8260B | Total/NA |
| Xylenes, Total | 33000 | | 5700 | 480 | ug/Kg | 20 | ☼ | 8260B | Total/NA |
| Acenaphthene | 58000 | J | 380000 | 4500 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 500000 | | 380000 | 3100 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Anthracene | 880000 | | 380000 | 9700 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 970000 | | 380000 | 6500 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 550000 | | 380000 | 9100 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 830000 | | 380000 | 7400 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 310000 | J | 380000 | 4600 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 310000 | J | 380000 | 4200 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Chrysene | 720000 | | 380000 | 3800 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 340000 | J | 380000 | 4500 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Fluoranthene | 1900000 | | 380000 | 5500 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Fluorene | 1000000 | | 380000 | 8700 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 500000 | | 380000 | 10000 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Naphthalene | 2300000 | | 380000 | 6300 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Phenanthrene | 3000000 | | 380000 | 8000 | ug/Kg | 400 | ☼ | 8270C | Total/NA |
| Pyrene | 1400000 | | 380000 | 2500 | ug/Kg | 400 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-03 (14.5-15.0) — Lab Sample ID: 480-37943-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 7.2 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 30 | J | 200 | 1.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 64 | J | 200 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 350 | | 200 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 220 | | 200 | 4.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 430 | | 200 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 150 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 150 | J | 200 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 370 | | 200 | 1.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 170 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 490 | | 200 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 22 | J | 200 | 4.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 240 | | 200 | 5.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 190 | J | 200 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 270 | | 200 | 4.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 400 | | 200 | 1.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-05 (2.5-3.0) — Lab Sample ID: 480-37943-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | 25 | J | 190 | 1.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 9.5 | J | 190 | 4.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 67 | J | 190 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 91 | J | 190 | 4.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 200 | | 190 | 3.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 110 | J | 190 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 48 | J | 190 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 55 | J | 190 | 1.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 160 | J | 190 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 57 | J | 190 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 210 | | 190 | 5.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 22 | J | 190 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 44 | J | 190 | 4.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 42 | J | 190 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-05 (22.5-23.0) — Lab Sample ID: 480-37943-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | 0.49 | J | 5.3 | 0.37 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Xylenes, Total | 1.7 | J | 11 | 0.90 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Benz(a)anthracene | 23 | J | 180 | 3.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 19 | J | 180 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 120 | J | 180 | 3.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 28 | J | 180 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 13 | J | 180 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 44 | J | 180 | 1.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 130 | J | 180 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 24 | J | 180 | 2.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 140 | J | 180 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 20 | J | 180 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 23 | J | 180 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-07 (11.0-11.5) — Lab Sample ID: 480-37943-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | 5.8 | J | 200 | 2.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 11 | J | 200 | 4.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-08 (3.5-4.0) — Lab Sample ID: 480-37943-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 5.8 | J | 29 | 4.8 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Trichloroethene | 2.0 | J | 5.8 | 1.3 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzo(b)fluoranthene | 99 | J | 200 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 3.7 | J | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 63 | J | 200 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 11 | J | 200 | 4.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-09 (22.5-23.0) — Lab Sample ID: 480-37943-8

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-09 (22.5-23.0) (Continued)

Lab Sample ID: 480-37943-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 7.2 | J | 180 | 4.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 26 | J | 180 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 19 | J | 180 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 120 | J | 180 | 3.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 17 | J | 180 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 12 | J | 180 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 52 | J | 180 | 1.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 43 | J | 180 | 2.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 130 | J | 180 | 5.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 21 | J | 180 | 3.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 51 | J | 180 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 33 | J | 180 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-10 (4.0-4.5)

Lab Sample ID: 480-37943-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acetone | 9.4 | J | 27 | 4.6 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Toluene | 0.51 | J | 5.4 | 0.41 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthylene | 18 | J | 180 | 1.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 26 | J | 180 | 4.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 150 | J | 180 | 3.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 130 | J | 180 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 250 | | 180 | 3.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 100 | J | 180 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 72 | J | 180 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 170 | J | 180 | 1.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 140 | J | 180 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 180 | | 180 | 2.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 9.4 | J | 180 | 4.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 190 | | 180 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 28 | J | 180 | 3.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 110 | J | 180 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 170 | J | 180 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-11 (23.0-23.5)

Lab Sample ID: 480-37943-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 28 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 22 | J | 200 | 1.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 200 | | 200 | 5.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 520 | | 200 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 410 | | 200 | 4.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 510 | | 200 | 3.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 220 | | 200 | 2.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 180 | J | 200 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 470 | | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 190 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 800 | | 200 | 2.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 60 | J | 200 | 4.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 290 | | 200 | 5.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-11 (23.0-23.5) (Continued) — Lab Sample ID: 480-37943-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 54 | J | 200 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 340 | | 200 | 4.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 760 | | 200 | 1.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-12 (3.5-4.0) — Lab Sample ID: 480-37943-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | 130 | J | 900 | 7.3 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Anthracene | 170 | J | 900 | 23 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 940 | | 900 | 15 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 650 | J | 900 | 22 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 1300 | | 900 | 17 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 380 | J | 900 | 11 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 490 | J | 900 | 9.8 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Chrysene | 950 | | 900 | 8.9 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 720 | J | 900 | 11 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluoranthene | 1700 | | 900 | 13 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluorene | 110 | J | 900 | 21 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 920 | | 900 | 25 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Phenanthrene | 1200 | | 900 | 19 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Pyrene | 1300 | | 900 | 5.8 | ug/Kg | 5 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-13 (7.5-8.0) — Lab Sample ID: 480-37943-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 33 | J | 1000 | 12 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 220 | J | 1000 | 8.1 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Anthracene | 260 | J | 1000 | 25 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 1400 | | 1000 | 17 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 1100 | | 1000 | 24 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 2000 | | 1000 | 19 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 710 | J | 1000 | 12 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 620 | J | 1000 | 11 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Chrysene | 1400 | | 1000 | 9.9 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 850 | J | 1000 | 12 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluoranthene | 2200 | | 1000 | 14 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluorene | 77 | J | 1000 | 23 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 1200 | | 1000 | 28 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Naphthalene | 150 | J | 1000 | 17 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Phenanthrene | 1700 | | 1000 | 21 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Pyrene | 1600 | | 1000 | 6.4 | ug/Kg | 5 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-13 (15.0-15.5) — Lab Sample ID: 480-37943-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.7 | J | 220 | 2.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 79 | J | 220 | 1.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 170 | J | 220 | 5.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 600 | | 220 | 3.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 390 | | 220 | 5.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-13 (15.0-15.5) (Continued) — Lab Sample ID: 480-37943-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzo(b)fluoranthene | 500 | | 220 | 4.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 180 | J | 220 | 2.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 280 | | 220 | 2.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 480 | | 220 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 200 | J | 220 | 2.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 950 | | 220 | 3.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 85 | J | 220 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 300 | | 220 | 6.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 22 | J | 220 | 3.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 740 | | 220 | 4.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 750 | | 220 | 1.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-14 (6.0-6.5) — Lab Sample ID: 480-37943-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | 19 | J | 180 | 1.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 15 | J | 180 | 4.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 120 | J | 180 | 3.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 58 | J | 180 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 180 | | 180 | 3.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 51 | J | 180 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 38 | J | 180 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 110 | J | 180 | 1.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 140 | J | 180 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 210 | | 180 | 2.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 150 | J | 180 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 70 | J | 180 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 170 | J | 180 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-14 (16.0-16.5) — Lab Sample ID: 480-37943-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | 7.0 | J | 190 | 4.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-20(12.0-12.5) — Lab Sample ID: 480-38154-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 16 | J | 29 | 2.1 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acetone | 72 | | 29 | 4.9 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzene | 0.56 | J | 5.8 | 0.29 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Ethylbenzene | 0.96 | J | 5.8 | 0.40 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Toluene | 1.6 | J | 5.8 | 0.44 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthene | 2.7 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 17 | J | 200 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 4.7 | J | 200 | 4.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 110 | J | 200 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 14 | J | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 6.7 | J | 200 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 55 | J | 200 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 20 | J | 200 | 4.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-21(3.0-3.5) — Lab Sample ID: 480-38154-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 19 | J | 29 | 2.1 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acetone | 67 | | 29 | 4.9 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Benzene | 2.6 | J | 5.8 | 0.28 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Ethylbenzene | 2.9 | J | 5.8 | 0.40 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Toluene | 7.5 | | 5.8 | 0.44 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Xylenes, Total | 4.5 | J | 12 | 0.97 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthene | 15 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 14 | J | 200 | 1.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 5.8 | J | 200 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 5.0 | J | 200 | 4.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 110 | J | 200 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 3.3 | J | 200 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 14 | J | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 8.1 | J | 200 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 36 | J | 200 | 4.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 2200 | | 200 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 33 | J | 200 | 4.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 6.4 | J | 200 | 1.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-21(21.5-22.0) — Lab Sample ID: 480-38154-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 23 | J | 240 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 43 | J | 240 | 1.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 15 | J | 240 | 6.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 17 | J | 240 | 5.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 140 | J | 240 | 4.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 15 | J | 240 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 19 | J | 240 | 2.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 54 | J | 240 | 2.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 30 | J | 240 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 110 | J | 240 | 5.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 170 | J | 240 | 6.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 5800 | | 240 | 3.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 120 | J | 240 | 5.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 25 | J | 240 | 1.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-15(10.0-11.0) — Lab Sample ID: 480-38154-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 13000 | | 4800 | 1800 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| 1,4-Dichlorobenzene | 780 | J | 4800 | 670 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Methylene Chloride | 1000 | J B | 4800 | 940 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Acenaphthene | 65000 | J | 160000 | 1900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 380000 | | 160000 | 1300 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Anthracene | 580000 | | 160000 | 4100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 680000 | | 160000 | 2800 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 490000 | | 160000 | 3900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 730000 | | 160000 | 3100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 170000 | | 160000 | 1900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-15(10.0-11.0) (Continued) — Lab Sample ID: 480-38154-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzo(k)fluoranthene | 260000 | | 160000 | 1800 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Chrysene | 560000 | | 160000 | 1600 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 160000 | | 160000 | 1900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluoranthene | 1500000 | | 160000 | 2300 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluorene | 880000 | | 160000 | 3700 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 240000 | | 160000 | 4400 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Naphthalene | 1900000 | | 160000 | 2700 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Phenanthrene | 2400000 | | 160000 | 3400 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Pyrene | 930000 | | 160000 | 1000 | ug/Kg | 50 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-15(17.0-17.5) — Lab Sample ID: 480-38154-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 32 | J | 1200 | 14 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Anthracene | 160 | J | 1200 | 30 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 740 | J | 1200 | 20 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 700 | J | 1200 | 28 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 1200 | | 1200 | 23 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 270 | J | 1200 | 14 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 460 | J | 1200 | 13 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Chrysene | 620 | J | 1200 | 12 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluoranthene | 1100 | J | 1200 | 17 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 970 | J | 1200 | 32 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Naphthalene | 1700 | | 1200 | 19 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Phenanthrene | 480 | J | 1200 | 24 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Pyrene | 950 | J | 1200 | 7.5 | ug/Kg | 5 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-16(9.5-10.0) — Lab Sample ID: 480-38154-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 2900 | J | 5400 | 2000 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Benzene | 9000 | | 5400 | 260 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Ethylbenzene | 1700 | J | 5400 | 1600 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Methylene Chloride | 1100 | J B | 5400 | 1100 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Toluene | 19000 | | 5400 | 1400 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Xylenes, Total | 46000 | | 11000 | 910 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Acenaphthene | 120000 | J | 160000 | 1900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 270000 | | 160000 | 1300 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Anthracene | 1000000 | | 160000 | 4100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 1300000 | | 160000 | 2700 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 840000 | | 160000 | 3800 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 1200000 | | 160000 | 3100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 290000 | | 160000 | 1900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 560000 | | 160000 | 1700 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Chrysene | 1100000 | | 160000 | 1600 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 210000 | | 160000 | 1900 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluoranthene | 2900000 | | 160000 | 2300 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluorene | 1300000 | | 160000 | 3700 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 360000 | | 160000 | 4400 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Naphthalene | 6200000 | E | 160000 | 2600 | ug/Kg | 50 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-16(9.5-10.0) (Continued)

## Lab Sample ID: 480-38154-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | 4800000 | | 160000 | 3300 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Pyrene | 1700000 | | 160000 | 1000 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Acenaphthene - DL | 110000 | J | 800000 | 9300 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Acenaphthylene - DL | 240000 | J | 800000 | 6500 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Anthracene - DL | 990000 | | 800000 | 20000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene - DL | 1400000 | | 800000 | 14000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene - DL | 730000 | J | 800000 | 19000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene - DL | 1500000 | | 800000 | 15000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene - DL | 500000 | J | 800000 | 9500 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene - DL | 540000 | J | 800000 | 8700 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Chrysene - DL | 1300000 | | 800000 | 7900 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene - DL | 670000 | J | 800000 | 9300 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Fluoranthene - DL | 3100000 | | 800000 | 12000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Fluorene - DL | 1300000 | | 800000 | 18000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene - DL | 900000 | | 800000 | 22000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Naphthalene - DL | 6800000 | | 800000 | 13000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Phenanthrene - DL | 5200000 | | 800000 | 17000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Pyrene - DL | 2200000 | | 800000 | 5100 | ug/Kg | 250 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-17(18.5-19.0)

## Lab Sample ID: 480-38154-7

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 36 | J | 210 | 2.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 16 | J | 210 | 1.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 63 | J | 210 | 5.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 180 | J | 210 | 3.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 160 | J | 210 | 5.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 330 | | 210 | 4.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 83 | J | 210 | 2.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 96 | J | 210 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 190 | J | 210 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 170 | J | 210 | 2.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 360 | | 210 | 3.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 37 | J | 210 | 4.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 200 | J | 210 | 5.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 100 | J | 210 | 3.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 410 | | 210 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 280 | | 210 | 1.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-18(3.5-4.0)

## Lab Sample ID: 480-38154-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 120 | J | 1900 | 48 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 220 | J | 1900 | 33 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 110 | J | 1900 | 45 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 1300 | J | 1900 | 37 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 97 | J | 1900 | 23 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 180 | J | 1900 | 21 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Chrysene | 420 | J | 1900 | 19 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Fluoranthene | 520 | J | 1900 | 27 | ug/Kg | 10 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-18(3.5-4.0) (Continued) — Lab Sample ID: 480-38154-8

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-c,d)pyrene | 1300 | J | 1900 | 52 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Naphthalene | 75000 | E | 1900 | 31 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Phenanthrene | 530 | J | 1900 | 40 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Pyrene | 300 | J | 1900 | 12 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Chrysene - DL | 450 | J | 9500 | 94 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluoranthene - DL | 550 | J | 9500 | 140 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Naphthalene - DL | 82000 | | 9500 | 160 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Phenanthrene - DL | 530 | J | 9500 | 200 | ug/Kg | 50 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-19(15.5-16.0) — Lab Sample ID: 480-38154-9

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Anthracene | 8.3 | J | 190 | 4.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 30 | J | 190 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 27 | J | 190 | 4.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 140 | J | 190 | 3.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 14 | J | 190 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 18 | J | 190 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 56 | J | 190 | 1.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 40 | J | 190 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 8.1 | J | 190 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 140 | J | 190 | 5.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 250 | | 190 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 73 | J | 190 | 4.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 29 | J | 190 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-22(13.5-14.0) — Lab Sample ID: 480-38154-10

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| 2-Butanone (MEK) | 63 | J | 320 | 23 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acetone | 380 | | 320 | 53 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Ethylbenzene | 10 | J | 63 | 4.4 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Toluene | 44 | J | 63 | 4.8 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Xylenes, Total | 14 | J | 130 | 11 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Benz(a)anthracene | 160 | J | 1100 | 19 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 110 | J | 1100 | 26 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 660 | J | 1100 | 21 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 120 | J | 1100 | 13 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 75 | J | 1100 | 12 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Chrysene | 170 | J | 1100 | 11 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluoranthene | 130 | J | 1100 | 16 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 800 | J | 1100 | 30 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Phenanthrene | 91 | J | 1100 | 23 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Pyrene | 140 | J | 1100 | 7.1 | ug/Kg | 5 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-23(2.5-3.0) — Lab Sample ID: 480-38154-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 20 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 34 | J | 200 | 5.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-23(2.5-3.0) (Continued)

## Lab Sample ID: 480-38154-11

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benz(a)anthracene | 370 | | 200 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 720 | | 200 | 4.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 890 | | 200 | 3.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 490 | | 200 | 2.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 420 | | 200 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 350 | | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 240 | | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 290 | | 200 | 2.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 8.3 | J | 200 | 4.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 490 | | 200 | 5.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 150 | J | 200 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 140 | J | 200 | 4.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 260 | | 200 | 1.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-24(9.0-10.0)

## Lab Sample ID: 480-38154-12

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Methylene Chloride | 1200 | J B | 5600 | 1100 | ug/Kg | 40 | ☼ | 8260B | Total/NA |
| Acenaphthene | 66000 | J | 96000 | 1100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 210000 | | 96000 | 780 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Anthracene | 930000 | | 96000 | 2400 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 2100000 | | 96000 | 1600 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 1600000 | | 96000 | 2300 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 2200000 | | 96000 | 1800 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 480000 | | 96000 | 1100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 1000000 | | 96000 | 1000 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Chrysene | 1700000 | | 96000 | 950 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 210000 | | 96000 | 1100 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluoranthene | 3500000 | E | 96000 | 1400 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Fluorene | 860000 | | 96000 | 2200 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 490000 | | 96000 | 2600 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Naphthalene | 2100000 | | 96000 | 1600 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Phenanthrene | 3700000 | E | 96000 | 2000 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Pyrene | 2100000 | | 96000 | 610 | ug/Kg | 50 | ☼ | 8270C | Total/NA |
| Acenaphthene - DL | 69000 | J | 480000 | 5600 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Acenaphthylene - DL | 190000 | J | 480000 | 3900 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Anthracene - DL | 960000 | | 480000 | 12000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene - DL | 2400000 | | 480000 | 8200 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene - DL | 1600000 | | 480000 | 11000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene - DL | 1900000 | | 480000 | 9200 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene - DL | 880000 | | 480000 | 5700 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene - DL | 1100000 | | 480000 | 5200 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Chrysene - DL | 2000000 | | 480000 | 4700 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene - DL | 530000 | | 480000 | 5600 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Fluoranthene - DL | 3700000 | | 480000 | 6900 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Fluorene - DL | 910000 | | 480000 | 11000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene - DL | 1000000 | | 480000 | 13000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Naphthalene - DL | 2300000 | | 480000 | 7900 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Phenanthrene - DL | 4000000 | | 480000 | 10000 | ug/Kg | 250 | ☼ | 8270C | Total/NA |
| Pyrene - DL | 2700000 | | 480000 | 3100 | ug/Kg | 250 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-25(22.0-23.0) — Lab Sample ID: 480-38154-13

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 750 | J | 2800 | 32 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 350 | J | 2800 | 22 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Anthracene | 4300 | | 2800 | 70 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 8000 | | 2800 | 47 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 5700 | | 2800 | 66 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 8500 | | 2800 | 53 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 2000 | J | 2800 | 33 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 3700 | | 2800 | 30 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Chrysene | 6400 | | 2800 | 27 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 2400 | J | 2800 | 32 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Fluoranthene | 17000 | | 2800 | 40 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Fluorene | 6000 | | 2800 | 63 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 3400 | | 2800 | 76 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Naphthalene | 8100 | | 2800 | 46 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Phenanthrene | 22000 | | 2800 | 58 | ug/Kg | 10 | ☼ | 8270C | Total/NA |
| Pyrene | 11000 | | 2800 | 18 | ug/Kg | 10 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-26(17.0-17.5) — Lab Sample ID: 480-38154-14

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 290 | | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 80 | J | 200 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 69 | J | 200 | 4.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 200 | | 200 | 3.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 31 | J | 200 | 2.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 47 | J | 200 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 100 | J | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 150 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 180 | J | 200 | 2.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 160 | J | 200 | 5.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 120 | J | 200 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 310 | | 200 | 4.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 160 | J | 200 | 1.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-27(12.0-13.0) — Lab Sample ID: 480-38154-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 140 | J | 4000 | 47 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 1200 | J | 4000 | 32 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Anthracene | 7800 | | 4000 | 100 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 20000 | | 4000 | 68 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 15000 | | 4000 | 95 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 20000 | | 4000 | 77 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 13000 | | 4000 | 48 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 9800 | | 4000 | 44 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Chrysene | 18000 | | 4000 | 40 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 4800 | | 4000 | 47 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Fluoranthene | 44000 | | 4000 | 57 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Fluorene | 820 | J | 4000 | 91 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 12000 | | 4000 | 110 | ug/Kg | 20 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-27(12.0-13.0) (Continued) — Lab Sample ID: 480-38154-15

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene | 1300 | J | 4000 | 66 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Phenanthrene | 33000 | | 4000 | 83 | ug/Kg | 20 | ☼ | 8270C | Total/NA |
| Pyrene | 33000 | | 4000 | 26 | ug/Kg | 20 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-27(22.0-22.5) — Lab Sample ID: 480-38154-16

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 17 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Acenaphthylene | 37 | J | 200 | 1.6 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 77 | J | 200 | 5.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 120 | J | 200 | 3.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 73 | J | 200 | 4.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 200 | | 200 | 3.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 50 | J | 200 | 2.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 39 | J | 200 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 140 | J | 200 | 2.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 150 | J | 200 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 230 | | 200 | 2.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 150 | J | 200 | 4.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 170 | J | 200 | 5.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 830 | | 200 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 440 | | 200 | 4.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 160 | J | 200 | 1.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: SPT-29(1.0-2.0) — Lab Sample ID: 480-38154-17

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | 1.9 | J | 5.5 | 0.84 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthylene | 350 | J | 940 | 7.6 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Anthracene | 440 | J | 940 | 24 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 2000 | | 940 | 16 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 1500 | | 940 | 22 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 2700 | | 940 | 18 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 750 | J | 940 | 11 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 860 | J | 940 | 10 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Chrysene | 1900 | | 940 | 9.3 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 830 | J | 940 | 11 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluoranthene | 3200 | | 940 | 14 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Fluorene | 160 | J | 940 | 21 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 1200 | | 940 | 26 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Naphthalene | 460 | J | 940 | 16 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Phenanthrene | 2400 | | 940 | 20 | ug/Kg | 5 | ☼ | 8270C | Total/NA |
| Pyrene | 2400 | | 940 | 6.0 | ug/Kg | 5 | ☼ | 8270C | Total/NA |

## Client Sample ID: DPT-29(6.0-7.0) — Lab Sample ID: 480-38154-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 2.6 | J | 5.6 | 0.28 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Toluene | 1.3 | J | 5.6 | 0.43 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Acenaphthene | 130 | J | 190 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: DPT-29(6.0-7.0) (Continued)

## Lab Sample ID: 480-38154-18

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthylene | 360 | | 190 | 1.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Anthracene | 760 | | 190 | 4.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benz(a)anthracene | 1700 | | 190 | 3.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(a)pyrene | 1000 | | 190 | 4.5 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(b)fluoranthene | 1400 | | 190 | 3.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(g,h,i)perylene | 480 | | 190 | 2.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 660 | | 190 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 1500 | | 190 | 1.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Dibenz(a,h)anthracene | 290 | | 190 | 2.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 3900 | | 190 | 2.7 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 1000 | | 190 | 4.3 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Indeno(1,2,3-c,d)pyrene | 560 | | 190 | 5.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 5100 | | 190 | 3.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 4700 | | 190 | 4.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 2500 | | 190 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

## Client Sample ID: FD051013

## Lab Sample ID: 480-38154-19

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Benzene | 2.2 | J | 5.8 | 0.28 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Toluene | 1.1 | J | 5.8 | 0.44 | ug/Kg | 1 | ☼ | 8260B | Total/NA |
| Anthracene | 9.8 | J | 190 | 4.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Benzo(k)fluoranthene | 2.9 | J | 190 | 2.1 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Chrysene | 7.9 | J | 190 | 1.9 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluoranthene | 21 | J | 190 | 2.8 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Fluorene | 12 | J | 190 | 4.4 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Naphthalene | 4500 | | 190 | 3.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Phenanthrene | 59 | J | 190 | 4.0 | ug/Kg | 1 | ☼ | 8270C | Total/NA |
| Pyrene | 13 | J | 190 | 1.2 | ug/Kg | 1 | ☼ | 8270C | Total/NA |

This Detection Summary does not include radiochemical test results.

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-01 (13-5-14.0)

**Lab Sample ID: 480-37943-1**

**Date Collected: 05/06/13 09:15**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 88.7**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **6.0** | **J** | 190 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| **Acenaphthylene** | **32** | **J** | 190 | 1.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Anthracene | ND | | 190 | 4.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Benz(a)anthracene | ND | | 190 | 3.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Benzo(a)pyrene | ND | | 190 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Benzo(b)fluoranthene | ND | | 190 | 3.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Benzo(g,h,i)perylene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Benzo(k)fluoranthene | ND | | 190 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Chrysene | ND | | 190 | 1.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Dibenz(a,h)anthracene | ND | | 190 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| **Fluoranthene** | **7.8** | **J** | 190 | 2.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| **Fluorene** | **32** | **J** | 190 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 190 | 5.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| **Naphthalene** | **1300** | | 190 | 3.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| **Phenanthrene** | **32** | **J** | 190 | 4.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |
| Pyrene | ND | | 190 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 11:47 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *60* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 11:47* | *1* |
| *2-Fluorobiphenyl* | *66* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 11:47* | *1* |
| *p-Terphenyl-d14* | *97* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 11:47* | *1* |

## Client Sample ID: DPT-02 (4.5-5.0)

**Lab Sample ID: 480-37943-2**

**Date Collected: 05/06/13 11:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 69.9**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 2800 | 780 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,1,2,2-Tetrachloroethane | ND | | 2800 | 460 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,1,2-Trichloroethane | ND | | 2800 | 590 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 2800 | 1400 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,1-Dichloroethane | ND | | 2800 | 870 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,1-Dichloroethene | ND | | 2800 | 980 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,2,4-Trichlorobenzene | ND | | 2800 | 1100 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,2-Dibromo-3-Chloropropane | ND | | 2800 | 1400 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,2-Dibromoethane | ND | | 2800 | 110 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,2-Dichlorobenzene | ND | | 2800 | 720 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,2-Dichloroethane | ND | | 2800 | 1200 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,2-Dichloropropane | ND | | 2800 | 460 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,3-Dichlorobenzene | ND | | 2800 | 760 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 1,4-Dichlorobenzene | ND | | 2800 | 400 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 2-Hexanone | ND | | 14000 | 5800 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 2-Butanone (MEK) | ND | | 14000 | 8400 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 14000 | 900 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Acetone | ND | | 14000 | 12000 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| **Benzene** | **6600** | | 2800 | 140 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Bromodichloromethane | ND | | 2800 | 570 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Bromoform | ND | | 2800 | 1400 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Bromomethane | ND | | 2800 | 620 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |

**Client Sample ID: DPT-02 (4.5-5.0)**
**Date Collected: 05/06/13 11:00**
**Date Received: 05/09/13 01:30**

**Lab Sample ID: 480-37943-2**
**Matrix: Solid**
**Percent Solids: 69.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 2800 | 1300 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Carbon tetrachloride | ND | | 2800 | 720 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Chlorobenzene | ND | | 2800 | 370 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Dibromochloromethane | ND | | 2800 | 1400 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Chloroethane | ND | | 2800 | 590 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Chloroform | ND | | 2800 | 1900 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Chloromethane | ND | | 2800 | 670 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| cis-1,2-Dichloroethene | ND | | 2800 | 780 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| cis-1,3-Dichloropropene | ND | | 2800 | 680 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Cyclohexane | ND | | 2800 | 630 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Dichlorodifluoromethane | ND | | 2800 | 1200 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| **Ethylbenzene** | **880** | **J** | 2800 | 820 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Isopropylbenzene | ND | | 2800 | 420 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Methyl acetate | ND | | 2800 | 1300 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Methyl tert-butyl ether | ND | | 2800 | 1100 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Methylcyclohexane | ND | | 2800 | 1300 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Methylene Chloride | ND | | 2800 | 560 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Styrene | ND | | 2800 | 680 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Tetrachloroethene | ND | | 2800 | 380 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| **Toluene** | **12000** | | 2800 | 760 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| trans-1,2-Dichloroethene | ND | | 2800 | 670 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| trans-1,3-Dichloropropene | ND | | 2800 | 140 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Trichloroethene | ND | | 2800 | 790 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Trichlorofluoromethane | ND | | 2800 | 1300 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| Vinyl chloride | ND | | 2800 | 950 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |
| **Xylenes, Total** | **33000** | | 5700 | 480 | ug/Kg | ☼ | 05/10/13 18:05 | 05/13/13 11:26 | 20 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Indene* | *210000* | *T J N* | *ug/Kg* | ☼ | *11.45* | *95-13-6* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Benzofuran, 2-methyl-* | *42000* | *T J N* | *ug/Kg* | ☼ | *12.08* | *4265-25-2* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *2-Methylindene* | *41000* | *T J N* | *ug/Kg* | ☼ | *12.58* | *2177-47-1* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Naphthalene* | *1100000* | *E* | *ug/Kg* | ☼ | *12.99* | *91-20-3* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Benzo[c]thiophene* | *77000* | *T J N* | *ug/Kg* | ☼ | *13.10* | *270-82-6* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Naphthalene, 2-methyl-* | *700000* | *T J N* | *ug/Kg* | ☼ | *13.90* | *91-57-6* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Naphthalene, 2-methyl-* | *300000* | *T J N* | *ug/Kg* | ☼ | *14.05* | *91-57-6* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Biphenyl* | *65000* | *T J N* | *ug/Kg* | ☼ | *14.47* | *92-52-4* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Naphthalene, 2,7-dimethyl-* | *98000* | *T J N* | *ug/Kg* | ☼ | *14.73* | *582-16-1* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Naphthalene, 2,3-dimethyl-* | *110000* | *T J N* | *ug/Kg* | ☼ | *14.86* | *581-40-8* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *95* | | *53 - 146* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *Toluene-d8 (Surr)* | *97* | | *50 - 149* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *49 - 148* | *05/10/13 18:05* | *05/13/13 11:26* | *20* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **58000** | **J** | 380000 | 4500 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| **Acenaphthylene** | **500000** | | 380000 | 3100 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| **Anthracene** | **880000** | | 380000 | 9700 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| **Benz(a)anthracene** | **970000** | | 380000 | 6500 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-02 (4.5-5.0)

**Lab Sample ID: 480-37943-2**

**Date Collected: 05/06/13 11:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 69.9**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene | 550000 | | 380000 | 9100 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Benzo(b)fluoranthene | 830000 | | 380000 | 7400 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Benzo(g,h,i)perylene | 310000 | J | 380000 | 4600 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Benzo(k)fluoranthene | 310000 | J | 380000 | 4200 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Chrysene | 720000 | | 380000 | 3800 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Dibenz(a,h)anthracene | 340000 | J | 380000 | 4500 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Fluoranthene | 1900000 | | 380000 | 5500 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Fluorene | 1000000 | | 380000 | 8700 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Indeno(1,2,3-c,d)pyrene | 500000 | | 380000 | 10000 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Naphthalene | 2300000 | | 380000 | 6300 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Phenanthrene | 3000000 | | 380000 | 8000 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |
| Pyrene | 1400000 | | 380000 | 2500 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:11 | 400 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *0* | *X* | *34 - 132* | *05/10/13 14:23* | *05/18/13 12:11* | *400* |
| *2-Fluorobiphenyl* | *0* | *X* | *37 - 120* | *05/10/13 14:23* | *05/18/13 12:11* | *400* |
| *p-Terphenyl-d14* | *0* | *X* | *65 - 153* | *05/10/13 14:23* | *05/18/13 12:11* | *400* |

## Client Sample ID: DPT-03 (14.5-15.0)

**Lab Sample ID: 480-37943-3**

**Date Collected: 05/06/13 11:35**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 86.0**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 7.2 | J | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Acenaphthylene | 30 | J | 200 | 1.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Anthracene | 64 | J | 200 | 5.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Benz(a)anthracene | 350 | | 200 | 3.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Benzo(a)pyrene | 220 | | 200 | 4.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Benzo(b)fluoranthene | 430 | | 200 | 3.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Benzo(g,h,i)perylene | 150 | J | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Benzo(k)fluoranthene | 150 | J | 200 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Chrysene | 370 | | 200 | 1.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Dibenz(a,h)anthracene | 170 | J | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Fluoranthene | 490 | | 200 | 2.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Fluorene | 22 | J | 200 | 4.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Indeno(1,2,3-c,d)pyrene | 240 | | 200 | 5.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Naphthalene | 190 | J | 200 | 3.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Phenanthrene | 270 | | 200 | 4.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |
| Pyrene | 400 | | 200 | 1.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:35 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *60* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 12:35* | *1* |
| *2-Fluorobiphenyl* | *66* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 12:35* | *1* |
| *p-Terphenyl-d14* | *89* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 12:35* | *1* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-05 (2.5-3.0)

**Lab Sample ID: 480-37943-4**

**Date Collected: 05/06/13 13:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 87.6**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Acenaphthylene** | **25** | **J** | 190 | 1.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Anthracene** | **9.5** | **J** | 190 | 4.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Benz(a)anthracene** | **67** | **J** | 190 | 3.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Benzo(a)pyrene** | **91** | **J** | 190 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Benzo(b)fluoranthene** | **200** | | 190 | 3.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Benzo(g,h,i)perylene** | **110** | **J** | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Benzo(k)fluoranthene** | **48** | **J** | 190 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Chrysene** | **55** | **J** | 190 | 1.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Dibenz(a,h)anthracene** | **160** | **J** | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Fluoranthene** | **57** | **J** | 190 | 2.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| Fluorene | ND | | 190 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Indeno(1,2,3-c,d)pyrene** | **210** | | 190 | 5.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Naphthalene** | **22** | **J** | 190 | 3.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Phenanthrene** | **44** | **J** | 190 | 4.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |
| **Pyrene** | **42** | **J** | 190 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 12:59 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *52* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 12:59* | *1* |
| *2-Fluorobiphenyl* | *55* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 12:59* | *1* |
| *p-Terphenyl-d14* | *72* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 12:59* | *1* |

## Client Sample ID: DPT-05 (22.5-23.0)

**Lab Sample ID: 480-37943-5**

**Date Collected: 05/06/13 13:40**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 91.8**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.3 | 0.39 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.3 | 0.86 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.3 | 0.69 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.3 | 1.2 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,1-Dichloroethane | ND | | 5.3 | 0.65 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,1-Dichloroethene | ND | | 5.3 | 0.65 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.3 | 0.32 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.3 | 2.7 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,2-Dibromoethane | ND | | 5.3 | 0.68 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.3 | 0.42 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,2-Dichloroethane | ND | | 5.3 | 0.27 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,2-Dichloropropane | ND | | 5.3 | 2.7 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.3 | 0.27 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.3 | 0.75 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 2-Hexanone | ND | | 27 | 2.7 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 2-Butanone (MEK) | ND | | 27 | 2.0 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 27 | 1.7 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Acetone | ND | | 27 | 4.5 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Benzene | ND | | 5.3 | 0.26 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Bromodichloromethane | ND | | 5.3 | 0.71 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Bromoform | ND | | 5.3 | 2.7 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Bromomethane | ND | | 5.3 | 0.48 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |

**Client Sample ID: DPT-05 (22.5-23.0)**
**Date Collected: 05/06/13 13:40**
**Date Received: 05/09/13 01:30**

**Lab Sample ID: 480-37943-5**
**Matrix: Solid**
**Percent Solids: 91.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 5.3 | 2.7 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Carbon tetrachloride | ND | | 5.3 | 0.52 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Chlorobenzene | ND | | 5.3 | 0.70 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Dibromochloromethane | ND | | 5.3 | 0.68 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Chloroethane | ND | | 5.3 | 1.2 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Chloroform | ND | | 5.3 | 0.33 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Chloromethane | ND | | 5.3 | 0.32 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.3 | 0.68 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.3 | 0.77 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Cyclohexane | ND | | 5.3 | 0.75 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Dichlorodifluoromethane | ND | | 5.3 | 0.44 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| **Ethylbenzene** | **0.49** | **J** | 5.3 | 0.37 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Isopropylbenzene | ND | | 5.3 | 0.80 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Methyl acetate | ND | | 5.3 | 0.99 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Methyl tert-butyl ether | ND | | 5.3 | 0.52 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Methylcyclohexane | ND | | 5.3 | 0.81 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Methylene Chloride | ND | | 5.3 | 2.5 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Styrene | ND | | 5.3 | 0.27 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Tetrachloroethene | ND | | 5.3 | 0.72 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Toluene | ND | | 5.3 | 0.40 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.3 | 0.55 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.3 | 2.3 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Trichloroethene | ND | | 5.3 | 1.2 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Trichlorofluoromethane | ND | | 5.3 | 0.50 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| Vinyl chloride | ND | | 5.3 | 0.65 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |
| **Xylenes, Total** | **1.7** | **J** | 11 | 0.90 | ug/Kg | ☼ | 05/20/13 15:35 | 05/20/13 23:42 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Disiloxane, hexamethyl-* | *5.4* | *T J N* | *ug/Kg* | ☼ | *5.06* | *107-46-0* | *05/20/13 15:35* | *05/20/13 23:42* | *1* |
| *1,2,4-Trimethylbenzene* | *1.1* | *J* | *ug/Kg* | ☼ | *10.32* | *95-63-6* | *05/20/13 15:35* | *05/20/13 23:42* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *64 - 126* | *05/20/13 15:35* | *05/20/13 23:42* | *1* |
| *Toluene-d8 (Surr)* | *98* | | *71 - 125* | *05/20/13 15:35* | *05/20/13 23:42* | *1* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *72 - 126* | *05/20/13 15:35* | *05/20/13 23:42* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| Acenaphthylene | ND | | 180 | 1.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| Anthracene | ND | | 180 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Benz(a)anthracene** | **23** | **J** | 180 | 3.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Benzo(a)pyrene** | **19** | **J** | 180 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Benzo(b)fluoranthene** | **120** | **J** | 180 | 3.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Benzo(g,h,i)perylene** | **28** | **J** | 180 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Benzo(k)fluoranthene** | **13** | **J** | 180 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Chrysene** | **44** | **J** | 180 | 1.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Dibenz(a,h)anthracene** | **130** | **J** | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| **Fluoranthene** | **24** | **J** | 180 | 2.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| Fluorene | ND | | 180 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-05 (22.5-23.0)

**Lab Sample ID: 480-37943-5**
**Date Collected: 05/06/13 13:40**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 91.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-c,d)pyrene | 140 | J | 180 | 5.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| Naphthalene | ND | | 180 | 3.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| Phenanthrene | 20 | J | 180 | 3.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |
| Pyrene | 23 | J | 180 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *64* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 13:24* | *1* |
| *2-Fluorobiphenyl* | *70* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 13:24* | *1* |
| *p-Terphenyl-d14* | *98* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 13:24* | *1* |

## Client Sample ID: DPT-07 (11.0-11.5)

**Lab Sample ID: 480-37943-6**
**Date Collected: 05/07/13 09:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 84.1**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 200 | 2.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Acenaphthylene | ND | | 200 | 1.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Anthracene | ND | | 200 | 5.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Benz(a)anthracene | ND | | 200 | 3.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Benzo(a)pyrene | ND | | 200 | 4.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Benzo(b)fluoranthene | ND | | 200 | 3.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Benzo(g,h,i)perylene | ND | | 200 | 2.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Benzo(k)fluoranthene | ND | | 200 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Chrysene | ND | | 200 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Dibenz(a,h)anthracene | ND | | 200 | 2.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Fluoranthene | 5.8 | J | 200 | 2.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Fluorene | ND | | 200 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 200 | 5.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Naphthalene | ND | | 200 | 3.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Phenanthrene | 11 | J | 200 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |
| Pyrene | ND | | 200 | 1.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 13:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *59* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 13:48* | *1* |
| *2-Fluorobiphenyl* | *66* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 13:48* | *1* |
| *p-Terphenyl-d14* | *86* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 13:48* | *1* |

## Client Sample ID: DPT-08 (3.5-4.0)

**Lab Sample ID: 480-37943-7**
**Date Collected: 05/07/13 10:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 85.0**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.8 | 0.42 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.8 | 0.93 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.8 | 0.75 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,1-Dichloroethane | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,1-Dichloroethene | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-08 (3.5-4.0)**
**Date Collected: 05/07/13 10:30**
**Date Received: 05/09/13 01:30**

**Lab Sample ID: 480-37943-7**
**Matrix: Solid**
**Percent Solids: 85.0**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,2-Dibromoethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.8 | 0.45 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,2-Dichloroethane | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,2-Dichloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.8 | 0.30 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 2-Hexanone | ND | | 29 | 2.9 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 2-Butanone (MEK) | ND | | 29 | 2.1 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 29 | 1.9 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| **Acetone** | **5.8** | **J** | 29 | 4.8 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Benzene | ND | | 5.8 | 0.28 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Bromodichloromethane | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Bromoform | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Bromomethane | ND | | 5.8 | 0.52 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Carbon disulfide | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Carbon tetrachloride | ND | | 5.8 | 0.56 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Chlorobenzene | ND | | 5.8 | 0.76 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Dibromochloromethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Chloroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Chloroform | ND | | 5.8 | 0.36 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Chloromethane | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.8 | 0.83 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Cyclohexane | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Dichlorodifluoromethane | ND | | 5.8 | 0.48 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Ethylbenzene | ND | | 5.8 | 0.40 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Isopropylbenzene | ND | | 5.8 | 0.87 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Methyl acetate | ND | | 5.8 | 1.1 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Methyl tert-butyl ether | ND | | 5.8 | 0.57 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Methylcyclohexane | ND | | 5.8 | 0.87 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Methylene Chloride | ND | | 5.8 | 2.6 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Styrene | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Tetrachloroethene | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Toluene | ND | | 5.8 | 0.44 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.8 | 0.59 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.8 | 2.5 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| **Trichloroethene** | **2.0** | **J** | 5.8 | 1.3 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Trichlorofluoromethane | ND | | 5.8 | 0.54 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Vinyl chloride | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |
| Xylenes, Total | ND | | 12 | 0.97 | ug/Kg | ☼ | 05/20/13 15:35 | 05/21/13 00:08 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *05/20/13 15:35* | *05/21/13 00:08* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *100* | | *64 - 126* | *05/20/13 15:35* | *05/21/13 00:08* | *1* |
| *Toluene-d8 (Surr)* | *99* | | *71 - 125* | *05/20/13 15:35* | *05/21/13 00:08* | *1* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *72 - 126* | *05/20/13 15:35* | *05/21/13 00:08* | *1* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-08 (3.5-4.0)

**Lab Sample ID: 480-37943-7**
**Date Collected: 05/07/13 10:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 85.0**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Acenaphthylene | ND | | 200 | 1.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Anthracene | ND | | 200 | 5.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Benz(a)anthracene | ND | | 200 | 3.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Benzo(a)pyrene | ND | | 200 | 4.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| **Benzo(b)fluoranthene** | **99** | **J** | 200 | 3.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Benzo(g,h,i)perylene | ND | | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Benzo(k)fluoranthene | ND | | 200 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| **Chrysene** | **3.7** | **J** | 200 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Dibenz(a,h)anthracene | ND | | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Fluoranthene | ND | | 200 | 2.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Fluorene | ND | | 200 | 4.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 200 | 5.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| **Naphthalene** | **63** | **J** | 200 | 3.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| **Phenanthrene** | **11** | **J** | 200 | 4.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |
| Pyrene | ND | | 200 | 1.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *61* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 14:12* | *1* |
| *2-Fluorobiphenyl* | *66* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 14:12* | *1* |
| *p-Terphenyl-d14* | *87* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 14:12* | *1* |

## Client Sample ID: DPT-09 (22.5-23.0)

**Lab Sample ID: 480-37943-8**
**Date Collected: 05/07/13 11:10**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 90.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| Acenaphthylene | ND | | 180 | 1.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Anthracene** | **7.2** | **J** | 180 | 4.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Benz(a)anthracene** | **26** | **J** | 180 | 3.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Benzo(a)pyrene** | **19** | **J** | 180 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Benzo(b)fluoranthene** | **120** | **J** | 180 | 3.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Benzo(g,h,i)perylene** | **17** | **J** | 180 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Benzo(k)fluoranthene** | **12** | **J** | 180 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Chrysene** | **52** | **J** | 180 | 1.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| Dibenz(a,h)anthracene | ND | | 180 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Fluoranthene** | **43** | **J** | 180 | 2.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| Fluorene | ND | | 180 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Indeno(1,2,3-c,d)pyrene** | **130** | **J** | 180 | 5.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Naphthalene** | **21** | **J** | 180 | 3.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Phenanthrene** | **51** | **J** | 180 | 3.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |
| **Pyrene** | **33** | **J** | 180 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 14:36 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *67* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 14:36* | *1* |
| *2-Fluorobiphenyl* | *73* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 14:36* | *1* |
| *p-Terphenyl-d14* | *98* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 14:36* | *1* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-10 (4.0-4.5)**
**Date Collected: 05/07/13 13:30**
**Date Received: 05/09/13 01:30**

**Lab Sample ID: 480-37943-9**
**Matrix: Solid**
**Percent Solids: 91.8**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.4 | 0.39 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.4 | 0.88 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.4 | 0.71 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.4 | 1.2 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,1-Dichloroethane | ND | | 5.4 | 0.66 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,1-Dichloroethene | ND | | 5.4 | 0.66 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.4 | 0.33 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.4 | 2.7 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,2-Dibromoethane | ND | | 5.4 | 0.70 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.4 | 0.42 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,2-Dichloroethane | ND | | 5.4 | 0.27 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,2-Dichloropropane | ND | | 5.4 | 2.7 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.4 | 0.28 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.4 | 0.76 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 2-Hexanone | ND | | 27 | 2.7 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 2-Butanone (MEK) | ND | | 27 | 2.0 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 27 | 1.8 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| **Acetone** | **9.4** | **J** | 27 | 4.6 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Benzene | ND | | 5.4 | 0.27 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Bromodichloromethane | ND | | 5.4 | 0.73 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Bromoform | ND | | 5.4 | 2.7 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Bromomethane | ND | | 5.4 | 0.49 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Carbon disulfide | ND | | 5.4 | 2.7 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Carbon tetrachloride | ND | | 5.4 | 0.53 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Chlorobenzene | ND | | 5.4 | 0.72 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Dibromochloromethane | ND | | 5.4 | 0.69 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Chloroethane | ND | | 5.4 | 1.2 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Chloroform | ND | | 5.4 | 0.34 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Chloromethane | ND | | 5.4 | 0.33 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.4 | 0.69 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.4 | 0.78 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Cyclohexane | ND | | 5.4 | 0.76 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Dichlorodifluoromethane | ND | | 5.4 | 0.45 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Ethylbenzene | ND | | 5.4 | 0.37 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Isopropylbenzene | ND | | 5.4 | 0.82 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Methyl acetate | ND | | 5.4 | 1.0 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Methyl tert-butyl ether | ND | | 5.4 | 0.53 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Methylcyclohexane | ND | | 5.4 | 0.82 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Methylene Chloride | ND | | 5.4 | 2.5 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Styrene | ND | | 5.4 | 0.27 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Tetrachloroethene | ND | | 5.4 | 0.73 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| **Toluene** | **0.51** | **J** | 5.4 | 0.41 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.4 | 0.56 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.4 | 2.4 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Trichloroethene | ND | | 5.4 | 1.2 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Trichlorofluoromethane | ND | | 5.4 | 0.51 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Vinyl chloride | ND | | 5.4 | 0.66 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Xylenes, Total | ND | | 11 | 0.91 | ug/Kg | ☼ | 05/11/13 12:54 | 05/11/13 19:10 | 1 |

## Client Sample ID: DPT-10 (4.0-4.5)

**Lab Sample ID: 480-37943-9**

**Date Collected: 05/07/13 13:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 91.8**

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tentatively Identified Compound | None | | ug/Kg | ☼ | | | 05/11/13 12:54 | 05/11/13 19:10 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 64 - 126 | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| Toluene-d8 (Surr) | 103 | | 71 - 125 | 05/11/13 12:54 | 05/11/13 19:10 | 1 |
| 4-Bromofluorobenzene (Surr) | 95 | | 72 - 126 | 05/11/13 12:54 | 05/11/13 19:10 | 1 |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Acenaphthylene | 18 | J | 180 | 1.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Anthracene | 26 | J | 180 | 4.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Benz(a)anthracene | 150 | J | 180 | 3.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Benzo(a)pyrene | 130 | J | 180 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Benzo(b)fluoranthene | 250 | | 180 | 3.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Benzo(g,h,i)perylene | 100 | J | 180 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Benzo(k)fluoranthene | 72 | J | 180 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Chrysene | 170 | J | 180 | 1.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Dibenz(a,h)anthracene | 140 | J | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Fluoranthene | 180 | | 180 | 2.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Fluorene | 9.4 | J | 180 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Indeno(1,2,3-c,d)pyrene | 190 | | 180 | 5.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Naphthalene | 28 | J | 180 | 3.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Phenanthrene | 110 | J | 180 | 3.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| Pyrene | 170 | J | 180 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:00 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 62 | | 34 - 132 | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| 2-Fluorobiphenyl | 69 | | 37 - 120 | 05/10/13 14:23 | 05/18/13 15:00 | 1 |
| p-Terphenyl-d14 | 90 | | 65 - 153 | 05/10/13 14:23 | 05/18/13 15:00 | 1 |

## Client Sample ID: DPT-11 (23.0-23.5)

**Lab Sample ID: 480-37943-10**

**Date Collected: 05/07/13 15:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 82.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 28 | J | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Acenaphthylene | 22 | J | 200 | 1.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Anthracene | 200 | | 200 | 5.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Benz(a)anthracene | 520 | | 200 | 3.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Benzo(a)pyrene | 410 | | 200 | 4.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Benzo(b)fluoranthene | 510 | | 200 | 3.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Benzo(g,h,i)perylene | 220 | | 200 | 2.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Benzo(k)fluoranthene | 180 | J | 200 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Chrysene | 470 | | 200 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Dibenz(a,h)anthracene | 190 | J | 200 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Fluoranthene | 800 | | 200 | 2.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Fluorene | 60 | J | 200 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Indeno(1,2,3-c,d)pyrene | 290 | | 200 | 5.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Naphthalene | 54 | J | 200 | 3.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |

## Client Sample ID: DPT-11 (23.0-23.5)

**Lab Sample ID: 480-37943-10**
**Date Collected: 05/07/13 15:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 82.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | 340 | | 200 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |
| Pyrene | 760 | | 200 | 1.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:24 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *63* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 15:24* | *1* |
| *2-Fluorobiphenyl* | *69* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 15:24* | *1* |
| *p-Terphenyl-d14* | *94* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 15:24* | *1* |

## Client Sample ID: DPT-12 (3.5-4.0)

**Lab Sample ID: 480-37943-11**
**Date Collected: 05/08/13 08:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 91.6**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 900 | 11 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Acenaphthylene | 130 | J | 900 | 7.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Anthracene | 170 | J | 900 | 23 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Benz(a)anthracene | 940 | | 900 | 15 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Benzo(a)pyrene | 650 | J | 900 | 22 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Benzo(b)fluoranthene | 1300 | | 900 | 17 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Benzo(g,h,i)perylene | 380 | J | 900 | 11 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Benzo(k)fluoranthene | 490 | J | 900 | 9.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Chrysene | 950 | | 900 | 8.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Dibenz(a,h)anthracene | 720 | J | 900 | 11 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Fluoranthene | 1700 | | 900 | 13 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Fluorene | 110 | J | 900 | 21 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Indeno(1,2,3-c,d)pyrene | 920 | | 900 | 25 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Naphthalene | ND | | 900 | 15 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Phenanthrene | 1200 | | 900 | 19 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |
| Pyrene | 1300 | | 900 | 5.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 15:48 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *61* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 15:48* | *5* |
| *2-Fluorobiphenyl* | *67* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 15:48* | *5* |
| *p-Terphenyl-d14* | *77* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 15:48* | *5* |

## Client Sample ID: DPT-13 (7.5-8.0)

**Lab Sample ID: 480-37943-12**
**Date Collected: 05/08/13 09:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 83.3**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 33 | J | 1000 | 12 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Acenaphthylene | 220 | J | 1000 | 8.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Anthracene | 260 | J | 1000 | 25 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Benz(a)anthracene | 1400 | | 1000 | 17 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Benzo(a)pyrene | 1100 | | 1000 | 24 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Benzo(b)fluoranthene | 2000 | | 1000 | 19 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Benzo(g,h,i)perylene | 710 | J | 1000 | 12 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Benzo(k)fluoranthene | 620 | J | 1000 | 11 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-13 (7.5-8.0)

**Lab Sample ID: 480-37943-12**
**Date Collected: 05/08/13 09:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 83.3**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chrysene | 1400 | | 1000 | 9.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Dibenz(a,h)anthracene | 850 | J | 1000 | 12 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Fluoranthene | 2200 | | 1000 | 14 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Fluorene | 77 | J | 1000 | 23 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Indeno(1,2,3-c,d)pyrene | 1200 | | 1000 | 28 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Naphthalene | 150 | J | 1000 | 17 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Phenanthrene | 1700 | | 1000 | 21 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |
| Pyrene | 1600 | | 1000 | 6.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:13 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *65* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 16:13* | *5* |
| *2-Fluorobiphenyl* | *74* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 16:13* | *5* |
| *p-Terphenyl-d14* | *86* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 16:13* | *5* |

## Client Sample ID: DPT-13 (15.0-15.5)

**Lab Sample ID: 480-37943-13**
**Date Collected: 05/08/13 09:15**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 76.9**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.7 | J | 220 | 2.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Acenaphthylene | 79 | J | 220 | 1.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Anthracene | 170 | J | 220 | 5.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Benz(a)anthracene | 600 | | 220 | 3.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Benzo(a)pyrene | 390 | | 220 | 5.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Benzo(b)fluoranthene | 500 | | 220 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Benzo(g,h,i)perylene | 180 | J | 220 | 2.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Benzo(k)fluoranthene | 280 | | 220 | 2.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Chrysene | 480 | | 220 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Dibenz(a,h)anthracene | 200 | J | 220 | 2.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Fluoranthene | 950 | | 220 | 3.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Fluorene | 85 | J | 220 | 5.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Indeno(1,2,3-c,d)pyrene | 300 | | 220 | 6.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Naphthalene | 22 | J | 220 | 3.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Phenanthrene | 740 | | 220 | 4.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |
| Pyrene | 750 | | 220 | 1.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 16:37 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *60* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 16:37* | *1* |
| *2-Fluorobiphenyl* | *66* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 16:37* | *1* |
| *p-Terphenyl-d14* | *87* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 16:37* | *1* |

## Client Sample ID: DPT-14 (6.0-6.5)

**Lab Sample ID: 480-37943-14**
**Date Collected: 05/08/13 11:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 92.7**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| Acenaphthylene | 19 | J | 180 | 1.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |

## Client Sample ID: DPT-14 (6.0-6.5)

**Lab Sample ID: 480-37943-14**

**Date Collected: 05/08/13 11:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 92.7**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Anthracene** | **15** | **J** | 180 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Benz(a)anthracene** | **120** | **J** | 180 | 3.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Benzo(a)pyrene** | **58** | **J** | 180 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Benzo(b)fluoranthene** | **180** | | 180 | 3.5 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Benzo(g,h,i)perylene** | **51** | **J** | 180 | 2.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Benzo(k)fluoranthene** | **38** | **J** | 180 | 2.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Chrysene** | **110** | **J** | 180 | 1.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Dibenz(a,h)anthracene** | **140** | **J** | 180 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Fluoranthene** | **210** | | 180 | 2.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| Fluorene | ND | | 180 | 4.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Indeno(1,2,3-c,d)pyrene** | **150** | **J** | 180 | 5.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| Naphthalene | ND | | 180 | 3.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Phenanthrene** | **70** | **J** | 180 | 3.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |
| **Pyrene** | **170** | **J** | 180 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:01 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *51* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 17:01* | *1* |
| *2-Fluorobiphenyl* | *57* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 17:01* | *1* |
| *p-Terphenyl-d14* | *74* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 17:01* | *1* |

## Client Sample ID: DPT-14 (16.0-16.5)

**Lab Sample ID: 480-37943-15**

**Date Collected: 05/08/13 11:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 87.3**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Acenaphthylene | ND | | 190 | 1.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Anthracene | ND | | 190 | 4.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Benz(a)anthracene | ND | | 190 | 3.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Benzo(a)pyrene | ND | | 190 | 4.6 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Benzo(b)fluoranthene | ND | | 190 | 3.7 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Benzo(g,h,i)perylene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Benzo(k)fluoranthene | ND | | 190 | 2.1 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Chrysene | ND | | 190 | 1.9 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Dibenz(a,h)anthracene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Fluoranthene | ND | | 190 | 2.8 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Fluorene | ND | | 190 | 4.4 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 190 | 5.3 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Naphthalene | ND | | 190 | 3.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| **Phenanthrene** | **7.0** | **J** | 190 | 4.0 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |
| Pyrene | ND | | 190 | 1.2 | ug/Kg | ☼ | 05/10/13 14:23 | 05/18/13 17:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *53* | | *34 - 132* | *05/10/13 14:23* | *05/18/13 17:25* | *1* |
| *2-Fluorobiphenyl* | *58* | | *37 - 120* | *05/10/13 14:23* | *05/18/13 17:25* | *1* |
| *p-Terphenyl-d14* | *71* | | *65 - 153* | *05/10/13 14:23* | *05/18/13 17:25* | *1* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-20(12.0-12.5)**
**Date Collected: 05/10/13 08:30**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-1**
**Matrix: Solid**
**Percent Solids: 85.6**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.8 | 0.42 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.8 | 0.94 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.8 | 0.76 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,1-Dichloroethane | ND | | 5.8 | 0.71 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,1-Dichloroethene | ND | | 5.8 | 0.71 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,2-Dibromoethane | ND | | 5.8 | 0.75 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.8 | 0.45 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,2-Dichloroethane | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,2-Dichloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.8 | 0.30 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 2-Hexanone | ND | | 29 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| **2-Butanone (MEK)** | **16** | **J** | 29 | 2.1 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 29 | 1.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| **Acetone** | **72** | | 29 | 4.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| **Benzene** | **0.56** | **J** | 5.8 | 0.29 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Bromodichloromethane | ND | | 5.8 | 0.78 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Bromoform | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Bromomethane | ND | | 5.8 | 0.52 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Carbon disulfide | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Carbon tetrachloride | ND | | 5.8 | 0.56 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Chlorobenzene | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Dibromochloromethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Chloroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Chloroform | ND | | 5.8 | 0.36 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Chloromethane | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.8 | 0.84 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Cyclohexane | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Dichlorodifluoromethane | ND | | 5.8 | 0.48 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| **Ethylbenzene** | **0.96** | **J** | 5.8 | 0.40 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Isopropylbenzene | ND | | 5.8 | 0.88 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Methyl acetate | ND | | 5.8 | 1.1 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Methyl tert-butyl ether | ND | | 5.8 | 0.57 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Methylcyclohexane | ND | | 5.8 | 0.88 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Methylene Chloride | ND | | 5.8 | 2.7 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Styrene | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Tetrachloroethene | ND | | 5.8 | 0.78 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| **Toluene** | **1.6** | **J** | 5.8 | 0.44 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.8 | 0.60 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.8 | 2.6 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Trichloroethene | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Trichlorofluoromethane | ND | | 5.8 | 0.55 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Vinyl chloride | ND | | 5.8 | 0.71 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Xylenes, Total | ND | | 12 | 0.98 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:30 | 1 |

## Client Sample ID: DPT-20(12.0-12.5)

**Lab Sample ID: 480-38154-1**

**Date Collected: 05/10/13 08:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.6**

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1-Butene | 23 | T J N | ug/Kg | ☼ | 2.29 | 106-98-9 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Butane, 2-methyl- | 12 | T J N | ug/Kg | ☼ | 2.69 | 78-78-4 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Pentane | 33 | T J N | ug/Kg | ☼ | 2.86 | 109-66-0 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Cyclopropane, 1,2-dimethyl-, trans- | 14 | T J N | ug/Kg | ☼ | 2.97 | 2402-6-4 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 2-Pentene, (Z)- | 10 | T J N | ug/Kg | ☼ | 3.07 | 627-20-3 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Pentane, 3-methylene- | 11 | T J N | ug/Kg | ☼ | 3.52 | 760-21-4 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 1-Pentene, 2-methyl- | 15 | T J N | ug/Kg | ☼ | 3.90 | 763-29-1 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 3-Hexene, (E)- | 13 | T J N | ug/Kg | ☼ | 4.09 | 13269-52-8 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Isobutyl alcohol | 96 | J | ug/Kg | ☼ | 5.06 | 78-83-1 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 112 | | 64 - 126 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| Toluene-d8 (Surr) | 106 | | 71 - 125 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |
| 4-Bromofluorobenzene (Surr) | 102 | | 72 - 126 | 05/14/13 09:16 | 05/14/13 11:30 | 1 |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **2.7** | **J** | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Acenaphthylene | ND | | 200 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Anthracene | ND | | 200 | 5.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Benz(a)anthracene** | **17** | **J** | 200 | 3.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Benzo(a)pyrene** | **4.7** | **J** | 200 | 4.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Benzo(b)fluoranthene** | **110** | **J** | 200 | 3.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Benzo(g,h,i)perylene | ND | | 200 | 2.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Benzo(k)fluoranthene | ND | | 200 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Chrysene** | **14** | **J** | 200 | 2.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Dibenz(a,h)anthracene | ND | | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Fluoranthene** | **6.7** | **J** | 200 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Fluorene | ND | | 200 | 4.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 200 | 5.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Naphthalene** | **55** | **J** | 200 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| **Phenanthrene** | **20** | **J** | 200 | 4.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| Pyrene | ND | | 200 | 1.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:08 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 80 | | 34 - 132 | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| 2-Fluorobiphenyl | 88 | | 37 - 120 | 05/14/13 14:43 | 05/21/13 16:08 | 1 |
| p-Terphenyl-d14 | 96 | | 65 - 153 | 05/14/13 14:43 | 05/21/13 16:08 | 1 |

## Client Sample ID: DPT-21(3.0-3.5)

**Lab Sample ID: 480-38154-2**

**Date Collected: 05/10/13 09:20**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.4**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.8 | 0.42 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.8 | 0.93 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.8 | 0.75 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,1-Dichloroethane | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,1-Dichloroethene | ND | | 5.8 | 0.71 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-21(3.0-3.5)**
**Date Collected: 05/10/13 09:20**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-2**
**Matrix: Solid**
**Percent Solids: 85.4**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,2-Dibromoethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.8 | 0.45 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,2-Dichloroethane | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,2-Dichloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.8 | 0.30 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 2-Hexanone | ND | | 29 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| **2-Butanone (MEK)** | **19** | **J** | 29 | 2.1 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 29 | 1.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| **Acetone** | **67** | | 29 | 4.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| **Benzene** | **2.6** | **J** | 5.8 | 0.28 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Bromodichloromethane | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Bromoform | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Bromomethane | ND | | 5.8 | 0.52 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Carbon disulfide | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Carbon tetrachloride | ND | | 5.8 | 0.56 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Chlorobenzene | ND | | 5.8 | 0.76 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Dibromochloromethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Chloroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Chloroform | ND | | 5.8 | 0.36 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Chloromethane | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.8 | 0.83 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Cyclohexane | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Dichlorodifluoromethane | ND | | 5.8 | 0.48 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| **Ethylbenzene** | **2.9** | **J** | 5.8 | 0.40 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Isopropylbenzene | ND | | 5.8 | 0.87 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Methyl acetate | ND | | 5.8 | 1.1 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Methyl tert-butyl ether | ND | | 5.8 | 0.57 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Methylcyclohexane | ND | | 5.8 | 0.88 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Methylene Chloride | ND | | 5.8 | 2.7 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Styrene | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Tetrachloroethene | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| **Toluene** | **7.5** | | 5.8 | 0.44 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.8 | 0.59 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.8 | 2.5 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Trichloroethene | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Trichlorofluoromethane | ND | | 5.8 | 0.55 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Vinyl chloride | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| **Xylenes, Total** | **4.5** | **J** | 12 | 0.97 | ug/Kg | ☼ | 05/14/13 09:16 | 05/14/13 11:56 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Butane* | *17* | *T J N* | *ug/Kg* | ☼ | *2.29* | *106-97-8* | *05/14/13 09:16* | *05/14/13 11:56* | *1* |
| *Butane, 2-methyl-* | *21* | *T J N* | *ug/Kg* | ☼ | *2.70* | *78-78-4* | *05/14/13 09:16* | *05/14/13 11:56* | *1* |
| *Pentane* | *38* | *T J N* | *ug/Kg* | ☼ | *2.87* | *109-66-0* | *05/14/13 09:16* | *05/14/13 11:56* | *1* |
| *Pentane, 2-methyl-* | *36* | *T J N* | *ug/Kg* | ☼ | *3.59* | *107-83-5* | *05/14/13 09:16* | *05/14/13 11:56* | *1* |
| *Hexane* | *41* | *J* | *ug/Kg* | ☼ | *3.97* | *110-54-3* | *05/14/13 09:16* | *05/14/13 11:56* | *1* |
| *3-Hexene, (E)-* | *30* | *T J N* | *ug/Kg* | ☼ | *4.09* | *13269-52-8* | *05/14/13 09:16* | *05/14/13 11:56* | *1* |

## Client Sample ID: DPT-21(3.0-3.5)

**Lab Sample ID: 480-38154-2**

**Date Collected: 05/10/13 09:20**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.4**

### Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isobutyl alcohol | 380 | | ug/Kg | ☼ | 5.06 | 78-83-1 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| n-Butanol | 110 | J | ug/Kg | ☼ | 5.73 | 71-36-3 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 2-Nitropropane | 44 | | ug/Kg | ☼ | 6.57 | 79-46-9 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| m-Xylene & p-Xylene | 2.9 | J | ug/Kg | ☼ | 8.57 | 179601-23-1 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 64 - 126 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| Toluene-d8 (Surr) | 104 | | 71 - 125 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |
| 4-Bromofluorobenzene (Surr) | 102 | | 72 - 126 | 05/14/13 09:16 | 05/14/13 11:56 | 1 |

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **15** | **J** | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Acenaphthylene** | **14** | **J** | 200 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Anthracene** | **5.8** | **J** | 200 | 5.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| Benz(a)anthracene | ND | | 200 | 3.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Benzo(a)pyrene** | **5.0** | **J** | 200 | 4.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Benzo(b)fluoranthene** | **110** | **J** | 200 | 3.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| Benzo(g,h,i)perylene | ND | | 200 | 2.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Benzo(k)fluoranthene** | **3.3** | **J** | 200 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Chrysene** | **14** | **J** | 200 | 2.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| Dibenz(a,h)anthracene | ND | | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Fluoranthene** | **8.1** | **J** | 200 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Fluorene** | **36** | **J** | 200 | 4.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 200 | 5.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Naphthalene** | **2200** | | 200 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Phenanthrene** | **33** | **J** | 200 | 4.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| **Pyrene** | **6.4** | **J** | 200 | 1.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:32 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 74 | | 34 - 132 | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| 2-Fluorobiphenyl | 83 | | 37 - 120 | 05/14/13 14:43 | 05/21/13 16:32 | 1 |
| p-Terphenyl-d14 | 95 | | 65 - 153 | 05/14/13 14:43 | 05/21/13 16:32 | 1 |

## Client Sample ID: DPT-21(21.5-22.0)

**Lab Sample ID: 480-38154-3**

**Date Collected: 05/10/13 09:40**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 70.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **23** | **J** | 240 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Acenaphthylene** | **43** | **J** | 240 | 1.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Anthracene** | **15** | **J** | 240 | 6.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Benz(a)anthracene | ND | | 240 | 4.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Benzo(a)pyrene** | **17** | **J** | 240 | 5.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Benzo(b)fluoranthene** | **140** | **J** | 240 | 4.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Benzo(g,h,i)perylene** | **15** | **J** | 240 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Benzo(k)fluoranthene** | **19** | **J** | 240 | 2.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| **Chrysene** | **54** | **J** | 240 | 2.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Dibenz(a,h)anthracene | ND | | 240 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |

## Client Sample ID: DPT-21(21.5-22.0)

**Lab Sample ID: 480-38154-3**

**Date Collected: 05/10/13 09:40**

**Matrix: Solid**

**Date Received: 05/11/13 02:00**

**Percent Solids: 70.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Fluoranthene | 30 | J | 240 | 3.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Fluorene | 110 | J | 240 | 5.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Indeno(1,2,3-c,d)pyrene | 170 | J | 240 | 6.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Naphthalene | 5800 | | 240 | 3.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Phenanthrene | 120 | J | 240 | 5.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |
| Pyrene | 25 | J | 240 | 1.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 16:57 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *78* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 16:57* | *1* |
| *2-Fluorobiphenyl* | *87* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 16:57* | *1* |
| *p-Terphenyl-d14* | *96* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 16:57* | *1* |

## Client Sample ID: DPT-15(10.0-11.0)

**Lab Sample ID: 480-38154-4**

**Date Collected: 05/10/13 11:00**

**Matrix: Solid**

**Date Received: 05/11/13 02:00**

**Percent Solids: 83.5**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 4800 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,1,2,2-Tetrachloroethane | ND | | 4800 | 770 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,1,2-Trichloroethane | ND | | 4800 | 1000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4800 | 2400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,1-Dichloroethane | ND | | 4800 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,1-Dichloroethene | ND | | 4800 | 1600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,2,4-Trichlorobenzene | 13000 | | 4800 | 1800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4800 | 2400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,2-Dibromoethane | ND | | 4800 | 180 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,2-Dichlorobenzene | ND | | 4800 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,2-Dichloroethane | ND | | 4800 | 1900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,2-Dichloropropane | ND | | 4800 | 770 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,3-Dichlorobenzene | ND | | 4800 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 1,4-Dichlorobenzene | 780 | J | 4800 | 670 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 2-Hexanone | ND | | 24000 | 9800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 2-Butanone (MEK) | ND | | 24000 | 14000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 24000 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Acetone | ND | | 24000 | 20000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Benzene | ND | | 4800 | 230 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Bromodichloromethane | ND | | 4800 | 950 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Bromoform | ND | | 4800 | 2400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Bromomethane | ND | | 4800 | 1000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Carbon disulfide | ND | | 4800 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Carbon tetrachloride | ND | | 4800 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Chlorobenzene | ND | | 4800 | 630 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Dibromochloromethane | ND | | 4800 | 2300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Chloroethane | ND | | 4800 | 990 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Chloroform | ND | | 4800 | 3300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Chloromethane | ND | | 4800 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| cis-1,2-Dichloroethene | ND | | 4800 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| cis-1,3-Dichloropropene | ND | | 4800 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Cyclohexane | ND | | 4800 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |

**Client Sample ID: DPT-15(10.0-11.0)**
**Date Collected: 05/10/13 11:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-4**
**Matrix: Solid**
**Percent Solids: 83.5**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | ND | | 4800 | 2100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Ethylbenzene | ND | | 4800 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Isopropylbenzene | ND | | 4800 | 710 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Methyl acetate | ND | | 4800 | 2300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Methyl tert-butyl ether | ND | | 4800 | 1800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Methylcyclohexane | ND | | 4800 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| **Methylene Chloride** | **1000** | **J B** | 4800 | 940 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Styrene | ND | | 4800 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Tetrachloroethene | ND | | 4800 | 640 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Toluene | ND | | 4800 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| trans-1,2-Dichloroethene | ND | | 4800 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| trans-1,3-Dichloropropene | ND | | 4800 | 230 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Trichloroethene | ND | | 4800 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Trichlorofluoromethane | ND | | 4800 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Vinyl chloride | ND | | 4800 | 1600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |
| Xylenes, Total | ND | | 9500 | 800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:00 | 40 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *1,3,5-Trimethylbenzene* | *1400* | *J* | *ug/Kg* | ☼ | *10.28* | *108-67-8* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *1,2,4-Trimethylbenzene* | *2500* | *J* | *ug/Kg* | ☼ | *10.64* | *95-63-6* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Indene* | *30000* | *T J N* | *ug/Kg* | ☼ | *11.45* | *95-13-6* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Naphthalene* | *340000* | | *ug/Kg* | ☼ | *12.99* | *91-20-3* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Benzo[c]thiophene* | *13000* | *T J N* | *ug/Kg* | ☼ | *13.09* | *270-82-6* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *1,2,3-Trichlorobenzene* | *4700* | *J* | *ug/Kg* | ☼ | *13.19* | *87-61-6* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Benzocycloheptatriene* | *110000* | *T J N* | *ug/Kg* | ☼ | *13.89* | *264-9-5* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Naphthalene, 2-methyl-* | *47000* | *T J N* | *ug/Kg* | ☼ | *14.05* | *91-57-6* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Naphthalene, 2,6-dimethyl-* | *15000* | *T J N* | *ug/Kg* | ☼ | *14.73* | *581-42-0* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Naphthalene, 2,3-dimethyl-* | *21000* | *T J N* | *ug/Kg* | ☼ | *14.86* | *581-40-8* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *53 - 146* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *Toluene-d8 (Surr)* | *92* | | *50 - 149* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |
| *4-Bromofluorobenzene (Surr)* | *92* | | *49 - 148* | *05/17/13 17:16* | *05/18/13 05:00* | *40* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **65000** | **J** | 160000 | 1900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Acenaphthylene** | **380000** | | 160000 | 1300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Anthracene** | **580000** | | 160000 | 4100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Benz(a)anthracene** | **680000** | | 160000 | 2800 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Benzo(a)pyrene** | **490000** | | 160000 | 3900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Benzo(b)fluoranthene** | **730000** | | 160000 | 3100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Benzo(g,h,i)perylene** | **170000** | | 160000 | 1900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Benzo(k)fluoranthene** | **260000** | | 160000 | 1800 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Chrysene** | **560000** | | 160000 | 1600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Dibenz(a,h)anthracene** | **160000** | | 160000 | 1900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Fluoranthene** | **1500000** | | 160000 | 2300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Fluorene** | **880000** | | 160000 | 3700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Indeno(1,2,3-c,d)pyrene** | **240000** | | 160000 | 4400 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| **Naphthalene** | **1900000** | | 160000 | 2700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |

## Client Sample ID: DPT-15(10.0-11.0)

**Lab Sample ID: 480-38154-4**
**Date Collected: 05/10/13 11:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 83.5**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | 2400000 | | 160000 | 3400 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |
| Pyrene | 930000 | | 160000 | 1000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:21 | 50 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *0* | *X* | *34 - 132* | *05/14/13 14:43* | *05/21/13 17:21* | *50* |
| *2-Fluorobiphenyl* | *0* | *X* | *37 - 120* | *05/14/13 14:43* | *05/21/13 17:21* | *50* |
| *p-Terphenyl-d14* | *0* | *X* | *65 - 153* | *05/14/13 14:43* | *05/21/13 17:21* | *50* |

## Client Sample ID: DPT-15(17.0-17.5)

**Lab Sample ID: 480-38154-5**
**Date Collected: 05/10/13 11:10**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 72.5**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 32 | J | 1200 | 14 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Acenaphthylene | ND | | 1200 | 9.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Anthracene | 160 | J | 1200 | 30 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Benz(a)anthracene | 740 | J | 1200 | 20 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Benzo(a)pyrene | 700 | J | 1200 | 28 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Benzo(b)fluoranthene | 1200 | | 1200 | 23 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Benzo(g,h,i)perylene | 270 | J | 1200 | 14 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Benzo(k)fluoranthene | 460 | J | 1200 | 13 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Chrysene | 620 | J | 1200 | 12 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Dibenz(a,h)anthracene | ND | | 1200 | 14 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Fluoranthene | 1100 | J | 1200 | 17 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Fluorene | ND | | 1200 | 27 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Indeno(1,2,3-c,d)pyrene | 970 | J | 1200 | 32 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Naphthalene | 1700 | | 1200 | 19 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Phenanthrene | 480 | J | 1200 | 24 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |
| Pyrene | 950 | J | 1200 | 7.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 17:46 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *69* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 17:46* | *5* |
| *2-Fluorobiphenyl* | *79* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 17:46* | *5* |
| *p-Terphenyl-d14* | *81* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 17:46* | *5* |

## Client Sample ID: DPT-16(9.5-10.0)

**Lab Sample ID: 480-38154-6**
**Date Collected: 05/10/13 13:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 73.8**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5400 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,1,2,2-Tetrachloroethane | ND | | 5400 | 880 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,1,2-Trichloroethane | ND | | 5400 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5400 | 2700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,1-Dichloroethane | ND | | 5400 | 1700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,1-Dichloroethene | ND | | 5400 | 1900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,2,4-Trichlorobenzene | 2900 | J | 5400 | 2000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5400 | 2700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |

**Client Sample ID: DPT-16(9.5-10.0)**
**Date Collected: 05/10/13 13:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-6**
**Matrix: Solid**
**Percent Solids: 73.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | ND | | 5400 | 210 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,2-Dichlorobenzene | ND | | 5400 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,2-Dichloroethane | ND | | 5400 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,2-Dichloropropane | ND | | 5400 | 880 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,3-Dichlorobenzene | ND | | 5400 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 1,4-Dichlorobenzene | ND | | 5400 | 760 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 2-Hexanone | ND | | 27000 | 11000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 2-Butanone (MEK) | ND | | 27000 | 16000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 27000 | 1700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Acetone | ND | | 27000 | 22000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| **Benzene** | **9000** | | 5400 | 260 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Bromodichloromethane | ND | | 5400 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Bromoform | ND | | 5400 | 2700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Bromomethane | ND | | 5400 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Carbon disulfide | ND | | 5400 | 2500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Carbon tetrachloride | ND | | 5400 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Chlorobenzene | ND | | 5400 | 710 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Dibromochloromethane | ND | | 5400 | 2600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Chloroethane | ND | | 5400 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Chloroform | ND | | 5400 | 3700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Chloromethane | ND | | 5400 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| cis-1,2-Dichloroethene | ND | | 5400 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| cis-1,3-Dichloropropene | ND | | 5400 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Cyclohexane | ND | | 5400 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Dichlorodifluoromethane | ND | | 5400 | 2400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| **Ethylbenzene** | **1700** | **J** | 5400 | 1600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Isopropylbenzene | ND | | 5400 | 810 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Methyl acetate | ND | | 5400 | 2600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Methyl tert-butyl ether | ND | | 5400 | 2000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Methylcyclohexane | ND | | 5400 | 2500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| **Methylene Chloride** | **1100** | **J B** | 5400 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Styrene | ND | | 5400 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Tetrachloroethene | ND | | 5400 | 730 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| **Toluene** | **19000** | | 5400 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| trans-1,2-Dichloroethene | ND | | 5400 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| trans-1,3-Dichloropropene | ND | | 5400 | 260 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Trichloroethene | ND | | 5400 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Trichlorofluoromethane | ND | | 5400 | 2500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Vinyl chloride | ND | | 5400 | 1800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| **Xylenes, Total** | **46000** | | 11000 | 910 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:23 | 40 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *m-Xylene & p-Xylene* | *35000* | | *ug/Kg* | ☼ | *8.88* | *179601-23-1* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Benzene, 1-propynyl-* | *53000* | *T J N* | *ug/Kg* | ☼ | *11.45* | *673-32-5* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Benzofuran, 2-methyl-* | *68000* | *T J N* | *ug/Kg* | ☼ | *12.08* | *4265-25-2* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Naphthalene* | *2000000* | *E* | *ug/Kg* | ☼ | *12.99* | *91-20-3* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Benzo[c]thiophene* | *120000* | *T J N* | *ug/Kg* | ☼ | *13.09* | *270-82-6* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Naphthalene, 2-methyl-* | *740000* | *T J N* | *ug/Kg* | ☼ | *13.89* | *91-57-6* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Naphthalene, 1-methyl-* | *280000* | *T J N* | *ug/Kg* | ☼ | *14.05* | *90-12-0* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |
| *Biphenyl* | *51000* | *T J N* | *ug/Kg* | ☼ | *14.47* | *92-52-4* | *05/17/13 17:16* | *05/18/13 05:23* | *40* |

**Client Sample ID: DPT-16(9.5-10.0)**
**Date Collected: 05/10/13 13:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-6**
**Matrix: Solid**
**Percent Solids: 73.8**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Naphthalene, 2,7-dimethyl- | 67000 | T J N | ug/Kg | ☼ | 14.73 | 582-16-1 | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Naphthalene, 2,6-dimethyl- | 83000 | T J N | ug/Kg | ☼ | 14.86 | 581-42-0 | 05/17/13 17:16 | 05/18/13 05:23 | 40 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 104 | | 53 - 146 | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| Toluene-d8 (Surr) | 94 | | 50 - 149 | 05/17/13 17:16 | 05/18/13 05:23 | 40 |
| 4-Bromofluorobenzene (Surr) | 89 | | 49 - 148 | 05/17/13 17:16 | 05/18/13 05:23 | 40 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 120000 | J | 160000 | 1900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Acenaphthylene | 270000 | | 160000 | 1300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Anthracene | 1000000 | | 160000 | 4100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Benz(a)anthracene | 1300000 | | 160000 | 2700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Benzo(a)pyrene | 840000 | | 160000 | 3800 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Benzo(b)fluoranthene | 1200000 | | 160000 | 3100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Benzo(g,h,i)perylene | 290000 | | 160000 | 1900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Benzo(k)fluoranthene | 560000 | | 160000 | 1700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Chrysene | 1100000 | | 160000 | 1600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Dibenz(a,h)anthracene | 210000 | | 160000 | 1900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Fluoranthene | 2900000 | | 160000 | 2300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Fluorene | 1300000 | | 160000 | 3700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Indeno(1,2,3-c,d)pyrene | 360000 | | 160000 | 4400 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Naphthalene | 6200000 | E | 160000 | 2600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Phenanthrene | 4800000 | | 160000 | 3300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| Pyrene | 1700000 | | 160000 | 1000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:10 | 50 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0 | X | 34 - 132 | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| 2-Fluorobiphenyl | 0 | X | 37 - 120 | 05/14/13 14:43 | 05/21/13 18:10 | 50 |
| p-Terphenyl-d14 | 0 | X | 65 - 153 | 05/14/13 14:43 | 05/21/13 18:10 | 50 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 110000 | J | 800000 | 9300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Acenaphthylene | 240000 | J | 800000 | 6500 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Anthracene | 990000 | | 800000 | 20000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Benz(a)anthracene | 1400000 | | 800000 | 14000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Benzo(a)pyrene | 730000 | J | 800000 | 19000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Benzo(b)fluoranthene | 1500000 | | 800000 | 15000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Benzo(g,h,i)perylene | 500000 | J | 800000 | 9500 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Benzo(k)fluoranthene | 540000 | J | 800000 | 8700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Chrysene | 1300000 | | 800000 | 7900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Dibenz(a,h)anthracene | 670000 | J | 800000 | 9300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Fluoranthene | 3100000 | | 800000 | 12000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Fluorene | 1300000 | | 800000 | 18000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Indeno(1,2,3-c,d)pyrene | 900000 | | 800000 | 22000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Naphthalene | 6800000 | | 800000 | 13000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Phenanthrene | 5200000 | | 800000 | 17000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| Pyrene | 2200000 | | 800000 | 5100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 12:26 | 250 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-16(9.5-10.0)

**Lab Sample ID: 480-38154-6**

**Date Collected: 05/10/13 13:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 73.8**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0 | X | 34 - 132 | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| 2-Fluorobiphenyl | 0 | X | 37 - 120 | 05/14/13 14:43 | 05/22/13 12:26 | 250 |
| p-Terphenyl-d14 | 0 | X | 65 - 153 | 05/14/13 14:43 | 05/22/13 12:26 | 250 |

## Client Sample ID: DPT-17(18.5-19.0)

**Lab Sample ID: 480-38154-7**

**Date Collected: 05/10/13 13:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 79.7**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 36 | J | 210 | 2.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Acenaphthylene | 16 | J | 210 | 1.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Anthracene | 63 | J | 210 | 5.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Benz(a)anthracene | 180 | J | 210 | 3.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Benzo(a)pyrene | 160 | J | 210 | 5.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Benzo(b)fluoranthene | 330 | | 210 | 4.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Benzo(g,h,i)perylene | 83 | J | 210 | 2.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Benzo(k)fluoranthene | 96 | J | 210 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Chrysene | 190 | J | 210 | 2.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Dibenz(a,h)anthracene | 170 | J | 210 | 2.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Fluoranthene | 360 | | 210 | 3.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Fluorene | 37 | J | 210 | 4.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Indeno(1,2,3-c,d)pyrene | 200 | J | 210 | 5.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Naphthalene | 100 | J | 210 | 3.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Phenanthrene | 410 | | 210 | 4.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| Pyrene | 280 | | 210 | 1.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:35 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 72 | | 34 - 132 | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| 2-Fluorobiphenyl | 80 | | 37 - 120 | 05/14/13 14:43 | 05/21/13 18:35 | 1 |
| p-Terphenyl-d14 | 87 | | 65 - 153 | 05/14/13 14:43 | 05/21/13 18:35 | 1 |

## Client Sample ID: DPT-18(3.5-4.0)

**Lab Sample ID: 480-38154-8**

**Date Collected: 05/10/13 14:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.7**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 4500 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,1,2,2-Tetrachloroethane | ND | | 4500 | 730 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,1,2-Trichloroethane | ND | | 4500 | 940 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 4500 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,1-Dichloroethane | ND | | 4500 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,1-Dichloroethene | ND | | 4500 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,2,4-Trichlorobenzene | ND | | 4500 | 1700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,2-Dibromo-3-Chloropropane | ND | | 4500 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,2-Dibromoethane | ND | | 4500 | 170 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,2-Dichlorobenzene | ND | | 4500 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,2-Dichloroethane | ND | | 4500 | 1800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,2-Dichloropropane | ND | | 4500 | 730 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 1,3-Dichlorobenzene | ND | | 4500 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-18(3.5-4.0)**
**Date Collected: 05/10/13 14:30**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-8**
**Matrix: Solid**
**Percent Solids: 88.7**

**Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | ND | | 4500 | 630 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 2-Hexanone | ND | | 22000 | 9200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 2-Butanone (MEK) | ND | | 22000 | 13000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 22000 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Acetone | ND | | 22000 | 18000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Benzene | ND | | 4500 | 210 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Bromodichloromethane | ND | | 4500 | 900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Bromoform | ND | | 4500 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Bromomethane | ND | | 4500 | 980 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Carbon disulfide | ND | | 4500 | 2000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Carbon tetrachloride | ND | | 4500 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Chlorobenzene | ND | | 4500 | 590 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Dibromochloromethane | ND | | 4500 | 2200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Chloroethane | ND | | 4500 | 930 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Chloroform | ND | | 4500 | 3100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Chloromethane | ND | | 4500 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| cis-1,2-Dichloroethene | ND | | 4500 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| cis-1,3-Dichloropropene | ND | | 4500 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Cyclohexane | ND | | 4500 | 990 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Dichlorodifluoromethane | ND | | 4500 | 2000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Ethylbenzene | ND | | 4500 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Isopropylbenzene | ND | | 4500 | 670 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Methyl acetate | ND | | 4500 | 2100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Methyl tert-butyl ether | ND | | 4500 | 1700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Methylcyclohexane | ND | | 4500 | 2100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Methylene Chloride | ND | | 4500 | 890 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Styrene | ND | | 4500 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Tetrachloroethene | ND | | 4500 | 600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Toluene | ND | | 4500 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| trans-1,2-Dichloroethene | ND | | 4500 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| trans-1,3-Dichloropropene | ND | | 4500 | 210 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Trichloroethene | ND | | 4500 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Trichlorofluoromethane | ND | | 4500 | 2100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Vinyl chloride | ND | | 4500 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Xylenes, Total | ND | | 9000 | 750 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 05:45 | 40 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Naphthalene, decahydro-* | *64000* | *T J N* | *ug/Kg* | ☼ | *11.29* | *91-17-8* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *1-Tetracosanol* | *63000* | *T J N* | *ug/Kg* | ☼ | *11.56* | *506-51-4* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Naphthalene, decahydro-2-methyl-* | *58000* | *T J N* | *ug/Kg* | ☼ | *12.05* | *2958-76-1* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Naphthalene, decahydro-2,6-dimethyl-* | *77000* | *T J N* | *ug/Kg* | ☼ | *12.53* | *1618-22-0* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Cyclopentane, 1-pentyl-2-propyl-* | *70000* | *T J N* | *ug/Kg* | ☼ | *13.06* | *62199-51-3* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Tridecane* | *110000* | *T J N* | *ug/Kg* | ☼ | *13.17* | *629-50-5* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Tetradecane* | *160000* | *T J N* | *ug/Kg* | ☼ | *13.93* | *629-59-4* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Dodecane, 2-methyl-8-propyl-* | *64000* | *T J N* | *ug/Kg* | ☼ | *14.38* | *55045-7-3* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *1H-Indene, octahydro-2,2,4,4,7,7-hexamet* | *91000* | *T J N* | *ug/Kg* | ☼ | *14.63* | *54832-83-6* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |
| *Naphthalene, 2,3-dimethyl-* | *57000* | *T J N* | *ug/Kg* | ☼ | *14.72* | *581-40-8* | *05/17/13 17:16* | *05/18/13 05:45* | *40* |

**Client Sample ID: DPT-18(3.5-4.0)**
**Date Collected: 05/10/13 14:30**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-8**
**Matrix: Solid**
**Percent Solids: 88.7**

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 117 | | 53 - 146 | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| Toluene-d8 (Surr) | 94 | | 50 - 149 | 05/17/13 17:16 | 05/18/13 05:45 | 40 |
| 4-Bromofluorobenzene (Surr) | 105 | | 49 - 148 | 05/17/13 17:16 | 05/18/13 05:45 | 40 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1900 | 22 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| Acenaphthylene | ND | | 1900 | 15 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Anthracene** | **120** | **J** | 1900 | 48 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Benz(a)anthracene** | **220** | **J** | 1900 | 33 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Benzo(a)pyrene** | **110** | **J** | 1900 | 45 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Benzo(b)fluoranthene** | **1300** | **J** | 1900 | 37 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Benzo(g,h,i)perylene** | **97** | **J** | 1900 | 23 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Benzo(k)fluoranthene** | **180** | **J** | 1900 | 21 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Chrysene** | **420** | **J** | 1900 | 19 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| Dibenz(a,h)anthracene | ND | | 1900 | 22 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Fluoranthene** | **520** | **J** | 1900 | 27 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| Fluorene | ND | | 1900 | 43 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Indeno(1,2,3-c,d)pyrene** | **1300** | **J** | 1900 | 52 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Naphthalene** | **75000** | **E** | 1900 | 31 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Phenanthrene** | **530** | **J** | 1900 | 40 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| **Pyrene** | **300** | **J** | 1900 | 12 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 18:59 | 10 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 82 | | 34 - 132 | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| 2-Fluorobiphenyl | 84 | | 37 - 120 | 05/14/13 14:43 | 05/21/13 18:59 | 10 |
| p-Terphenyl-d14 | 79 | | 65 - 153 | 05/14/13 14:43 | 05/21/13 18:59 | 10 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 9500 | 110 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Acenaphthylene | ND | | 9500 | 77 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Anthracene | ND | | 9500 | 240 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Benz(a)anthracene | ND | | 9500 | 160 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Benzo(a)pyrene | ND | | 9500 | 230 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Benzo(b)fluoranthene | ND | | 9500 | 180 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Benzo(g,h,i)perylene | ND | | 9500 | 110 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Benzo(k)fluoranthene | ND | | 9500 | 100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| **Chrysene** | **450** | **J** | 9500 | 94 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Dibenz(a,h)anthracene | ND | | 9500 | 110 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| **Fluoranthene** | **550** | **J** | 9500 | 140 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Fluorene | ND | | 9500 | 220 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Indeno(1,2,3-c,d)pyrene | ND | | 9500 | 260 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| **Naphthalene** | **82000** | | 9500 | 160 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| **Phenanthrene** | **530** | **J** | 9500 | 200 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| Pyrene | ND | | 9500 | 61 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:03 | 50 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0 | X | 34 - 132 | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| 2-Fluorobiphenyl | 83 | | 37 - 120 | 05/14/13 14:43 | 05/22/13 14:03 | 50 |
| p-Terphenyl-d14 | 88 | | 65 - 153 | 05/14/13 14:43 | 05/22/13 14:03 | 50 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-19(15.5-16.0)

**Lab Sample ID: 480-38154-9**

**Date Collected: 05/10/13 15:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.3**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 190 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| Acenaphthylene | ND | | 190 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Anthracene** | **8.3** | **J** | 190 | 4.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Benz(a)anthracene** | **30** | **J** | 190 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Benzo(a)pyrene** | **27** | **J** | 190 | 4.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Benzo(b)fluoranthene** | **140** | **J** | 190 | 3.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Benzo(g,h,i)perylene** | **14** | **J** | 190 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Benzo(k)fluoranthene** | **18** | **J** | 190 | 2.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Chrysene** | **56** | **J** | 190 | 1.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| Dibenz(a,h)anthracene | ND | | 190 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Fluoranthene** | **40** | **J** | 190 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Fluorene** | **8.1** | **J** | 190 | 4.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Indeno(1,2,3-c,d)pyrene** | **140** | **J** | 190 | 5.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Naphthalene** | **250** | | 190 | 3.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Phenanthrene** | **73** | **J** | 190 | 4.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |
| **Pyrene** | **29** | **J** | 190 | 1.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 19:23 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *80* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 19:23* | *1* |
| *2-Fluorobiphenyl* | *90* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 19:23* | *1* |
| *p-Terphenyl-d14* | *96* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 19:23* | *1* |

## Client Sample ID: DPT-22(13.5-14.0)

**Lab Sample ID: 480-38154-10**

**Date Collected: 05/10/13 10:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 75.9**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 63 | 4.6 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 63 | 10 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,1,2-Trichloroethane | ND | | 63 | 8.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 63 | 14 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,1-Dichloroethane | ND | | 63 | 7.7 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,1-Dichloroethene | ND | | 63 | 7.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 63 | 3.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 63 | 32 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,2-Dibromoethane | ND | | 63 | 8.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,2-Dichlorobenzene | ND | | 63 | 5.0 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,2-Dichloroethane | ND | | 63 | 3.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,2-Dichloropropane | ND | | 63 | 32 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,3-Dichlorobenzene | ND | | 63 | 3.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 1,4-Dichlorobenzene | ND | | 63 | 8.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 2-Hexanone | ND | | 320 | 32 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| **2-Butanone (MEK)** | **63** | **J** | 320 | 23 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 320 | 21 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| **Acetone** | **380** | | 320 | 53 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Benzene | ND | | 63 | 3.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Bromodichloromethane | ND | | 63 | 8.5 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Bromoform | ND | | 63 | 32 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Bromomethane | ND | | 63 | 5.7 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-22(13.5-14.0)**
**Date Collected: 05/10/13 10:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-10**
**Matrix: Solid**
**Percent Solids: 75.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 63 | 32 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Carbon tetrachloride | ND | | 63 | 6.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Chlorobenzene | ND | | 63 | 8.4 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Dibromochloromethane | ND | | 63 | 8.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Chloroethane | ND | | 63 | 14 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Chloroform | ND | | 63 | 3.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Chloromethane | ND | | 63 | 3.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| cis-1,2-Dichloroethene | ND | | 63 | 8.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| cis-1,3-Dichloropropene | ND | | 63 | 9.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Cyclohexane | ND | | 63 | 8.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Dichlorodifluoromethane | ND | | 63 | 5.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| **Ethylbenzene** | **10** | **J** | 63 | 4.4 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Isopropylbenzene | ND | | 63 | 9.6 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Methyl acetate | ND | | 63 | 12 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Methyl tert-butyl ether | ND | | 63 | 6.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Methylcyclohexane | ND | | 63 | 9.6 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Methylene Chloride | ND | | 63 | 29 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Styrene | ND | | 63 | 3.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Tetrachloroethene | ND | | 63 | 8.5 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| **Toluene** | **44** | **J** | 63 | 4.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| trans-1,2-Dichloroethene | ND | | 63 | 6.5 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| trans-1,3-Dichloropropene | ND | | 63 | 28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Trichloroethene | ND | | 63 | 14 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Trichlorofluoromethane | ND | | 63 | 6.0 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| Vinyl chloride | ND | | 63 | 7.7 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |
| **Xylenes, Total** | **14** | **J** | 130 | 11 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 19:25 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Ethane, 1,1-difluoro-* | *2500* | *T J N* | *ug/Kg* | ☼ | *1.94* | *75-37-6* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Pentane, 2,3-dimethyl-* | *1900* | *T J N* | *ug/Kg* | ☼ | *5.01* | *565-59-3* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Hexane, 2,4-dimethyl-* | *2100* | *T J N* | *ug/Kg* | ☼ | *5.94* | *589-43-5* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Cyclopentane, 1,2,4-trimethyl-* | *1000* | *T J N* | *ug/Kg* | ☼ | *6.16* | *2815-58-9* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Cyclopentane, 1,2,3-trimethyl-, (1.alpha* | *1300* | *T J N* | *ug/Kg* | ☼ | *6.30* | *15890-40-1* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Pentane, 3-ethyl-2-methyl-* | *1000* | *T J N* | *ug/Kg* | ☼ | *6.45* | *609-26-7* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Cyclohexane, 1,1,3-trimethyl-* | *2200* | *T J N* | *ug/Kg* | ☼ | *7.79* | *3073-66-3* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Cyclohexane, 1-ethyl-2-methyl-* | *1400* | *T J N* | *ug/Kg* | ☼ | *8.89* | *3728-54-9* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Octane, 3,6-dimethyl-* | *1300* | *T J N* | *ug/Kg* | ☼ | *9.00* | *15869-94-0* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Heptane, 4-propyl-* | *1100* | *T J N* | *ug/Kg* | ☼ | *9.16* | *3178-29-8* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *111* | | *64 - 126* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *Toluene-d8 (Surr)* | *101* | | *71 - 125* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *72 - 126* | *05/13/13 10:13* | *05/13/13 19:25* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1100 | 13 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Acenaphthylene | ND | | 1100 | 8.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Anthracene | ND | | 1100 | 28 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |

## Client Sample ID: DPT-22(13.5-14.0)

**Lab Sample ID: 480-38154-10**

**Date Collected: 05/10/13 10:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 75.9**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benz(a)anthracene | 160 | J | 1100 | 19 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Benzo(a)pyrene | 110 | J | 1100 | 26 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Benzo(b)fluoranthene | 660 | J | 1100 | 21 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Benzo(g,h,i)perylene | 120 | J | 1100 | 13 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Benzo(k)fluoranthene | 75 | J | 1100 | 12 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Chrysene | 170 | J | 1100 | 11 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Dibenz(a,h)anthracene | ND | | 1100 | 13 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Fluoranthene | 130 | J | 1100 | 16 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Fluorene | ND | | 1100 | 25 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Indeno(1,2,3-c,d)pyrene | 800 | J | 1100 | 30 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Naphthalene | ND | | 1100 | 18 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Phenanthrene | 91 | J | 1100 | 23 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |
| Pyrene | 140 | J | 1100 | 7.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:28 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *36* | | *34 - 132* | *05/14/13 14:43* | *05/22/13 14:28* | *5* |
| *2-Fluorobiphenyl* | *43* | | *37 - 120* | *05/14/13 14:43* | *05/22/13 14:28* | *5* |
| *p-Terphenyl-d14* | *64* | *X* | *65 - 153* | *05/14/13 14:43* | *05/22/13 14:28* | *5* |

## Client Sample ID: DPT-23(2.5-3.0)

**Lab Sample ID: 480-38154-11**

**Date Collected: 05/10/13 11:15**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 83.8**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 20 | J | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Acenaphthylene | ND | | 200 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Anthracene | 34 | J | 200 | 5.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Benz(a)anthracene | 370 | | 200 | 3.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Benzo(a)pyrene | 720 | | 200 | 4.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Benzo(b)fluoranthene | 890 | | 200 | 3.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Benzo(g,h,i)perylene | 490 | | 200 | 2.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Benzo(k)fluoranthene | 420 | | 200 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Chrysene | 350 | | 200 | 2.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Dibenz(a,h)anthracene | 240 | | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Fluoranthene | 290 | | 200 | 2.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Fluorene | 8.3 | J | 200 | 4.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Indeno(1,2,3-c,d)pyrene | 490 | | 200 | 5.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Naphthalene | 150 | J | 200 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Phenanthrene | 140 | J | 200 | 4.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |
| Pyrene | 260 | | 200 | 1.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:12 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *70* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 20:12* | *1* |
| *2-Fluorobiphenyl* | *80* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 20:12* | *1* |
| *p-Terphenyl-d14* | *82* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 20:12* | *1* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-24(9.0-10.0)**
**Date Collected: 05/10/13 12:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-12**
**Matrix: Solid**
**Percent Solids: 70.2**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5600 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,1,2,2-Tetrachloroethane | ND | | 5600 | 900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,1,2-Trichloroethane | ND | | 5600 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5600 | 2800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,1-Dichloroethane | ND | | 5600 | 1700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,1-Dichloroethene | ND | | 5600 | 1900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,2,4-Trichlorobenzene | ND | | 5600 | 2100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5600 | 2800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,2-Dibromoethane | ND | | 5600 | 210 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,2-Dichlorobenzene | ND | | 5600 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,2-Dichloroethane | ND | | 5600 | 2300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,2-Dichloropropane | ND | | 5600 | 900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,3-Dichlorobenzene | ND | | 5600 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 1,4-Dichlorobenzene | ND | | 5600 | 780 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 2-Hexanone | ND | | 28000 | 11000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 2-Butanone (MEK) | ND | | 28000 | 17000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 28000 | 1800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Acetone | ND | | 28000 | 23000 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Benzene | ND | | 5600 | 270 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Bromodichloromethane | ND | | 5600 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Bromoform | ND | | 5600 | 2800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Bromomethane | ND | | 5600 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Carbon disulfide | ND | | 5600 | 2500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Carbon tetrachloride | ND | | 5600 | 1400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Chlorobenzene | ND | | 5600 | 740 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Dibromochloromethane | ND | | 5600 | 2700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Chloroethane | ND | | 5600 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Chloroform | ND | | 5600 | 3800 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Chloromethane | ND | | 5600 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| cis-1,2-Dichloroethene | ND | | 5600 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| cis-1,3-Dichloropropene | ND | | 5600 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Cyclohexane | ND | | 5600 | 1200 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Dichlorodifluoromethane | ND | | 5600 | 2400 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Ethylbenzene | ND | | 5600 | 1600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Isopropylbenzene | ND | | 5600 | 840 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Methyl acetate | ND | | 5600 | 2700 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Methyl tert-butyl ether | ND | | 5600 | 2100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Methylcyclohexane | ND | | 5600 | 2600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| **Methylene Chloride** | **1200** | **J B** | 5600 | 1100 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Styrene | ND | | 5600 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Tetrachloroethene | ND | | 5600 | 750 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Toluene | ND | | 5600 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| trans-1,2-Dichloroethene | ND | | 5600 | 1300 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| trans-1,3-Dichloropropene | ND | | 5600 | 270 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Trichloroethene | ND | | 5600 | 1500 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Trichlorofluoromethane | ND | | 5600 | 2600 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Vinyl chloride | ND | | 5600 | 1900 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Xylenes, Total | ND | | 11000 | 940 | ug/Kg | ☼ | 05/17/13 17:16 | 05/18/13 06:08 | 40 |

**Client Sample ID: DPT-24(9.0-10.0)**
**Date Collected: 05/10/13 12:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-12**
**Matrix: Solid**
**Percent Solids: 70.2**

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trimethylbenzene | 1800 | J | ug/Kg | ☼ | 10.64 | 95-63-6 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Dibenzofuran | 16000 | T J N | ug/Kg | ☼ | 12.08 | 132-64-9 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Naphthalene | 270000 | | ug/Kg | ☼ | 12.99 | 91-20-3 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Naphthalene, 2-methyl- | 110000 | T J N | ug/Kg | ☼ | 13.89 | 91-57-6 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Naphthalene, 2-methyl- | 49000 | T J N | ug/Kg | ☼ | 14.05 | 91-57-6 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Naphthalene, 1,6-dimethyl- | 22000 | T J N | ug/Kg | ☼ | 14.73 | 575-43-9 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Naphthalene, 2,3-dimethyl- | 29000 | T J N | ug/Kg | ☼ | 14.86 | 581-40-8 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 93 | | 53 - 146 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| Toluene-d8 (Surr) | 91 | | 50 - 149 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |
| 4-Bromofluorobenzene (Surr) | 103 | | 49 - 148 | 05/17/13 17:16 | 05/18/13 06:08 | 40 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 66000 | J | 96000 | 1100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Acenaphthylene | 210000 | | 96000 | 780 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Anthracene | 930000 | | 96000 | 2400 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Benz(a)anthracene | 2100000 | | 96000 | 1600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Benzo(a)pyrene | 1600000 | | 96000 | 2300 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Benzo(b)fluoranthene | 2200000 | | 96000 | 1800 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Benzo(g,h,i)perylene | 480000 | | 96000 | 1100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Benzo(k)fluoranthene | 1000000 | | 96000 | 1000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Chrysene | 1700000 | | 96000 | 950 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Dibenz(a,h)anthracene | 210000 | | 96000 | 1100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Fluoranthene | 3500000 | E | 96000 | 1400 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Fluorene | 860000 | | 96000 | 2200 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Indeno(1,2,3-c,d)pyrene | 490000 | | 96000 | 2600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Naphthalene | 2100000 | | 96000 | 1600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Phenanthrene | 3700000 | E | 96000 | 2000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| Pyrene | 2100000 | | 96000 | 610 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 20:36 | 50 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 0 | X | 34 - 132 | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| 2-Fluorobiphenyl | 0 | X | 37 - 120 | 05/14/13 14:43 | 05/21/13 20:36 | 50 |
| p-Terphenyl-d14 | 0 | X | 65 - 153 | 05/14/13 14:43 | 05/21/13 20:36 | 50 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) - DL

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 69000 | J | 480000 | 5600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Acenaphthylene | 190000 | J | 480000 | 3900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Anthracene | 960000 | | 480000 | 12000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Benz(a)anthracene | 2400000 | | 480000 | 8200 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Benzo(a)pyrene | 1600000 | | 480000 | 11000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Benzo(b)fluoranthene | 1900000 | | 480000 | 9200 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Benzo(g,h,i)perylene | 880000 | | 480000 | 5700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Benzo(k)fluoranthene | 1100000 | | 480000 | 5200 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Chrysene | 2000000 | | 480000 | 4700 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Dibenz(a,h)anthracene | 530000 | | 480000 | 5600 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Fluoranthene | 3700000 | | 480000 | 6900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Fluorene | 910000 | | 480000 | 11000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |

## Client Sample ID: DPT-24(9.0-10.0)

**Lab Sample ID: 480-38154-12**
**Date Collected: 05/10/13 12:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 70.2**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) - DL (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-c,d)pyrene | 1000000 | | 480000 | 13000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Naphthalene | 2300000 | | 480000 | 7900 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Phenanthrene | 4000000 | | 480000 | 10000 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |
| Pyrene | 2700000 | | 480000 | 3100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 14:53 | 250 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *0* | *X* | *34 - 132* | *05/14/13 14:43* | *05/22/13 14:53* | *250* |
| *2-Fluorobiphenyl* | *0* | *X* | *37 - 120* | *05/14/13 14:43* | *05/22/13 14:53* | *250* |
| *p-Terphenyl-d14* | *0* | *X* | *65 - 153* | *05/14/13 14:43* | *05/22/13 14:53* | *250* |

## Client Sample ID: DPT-25(22.0-23.0)

**Lab Sample ID: 480-38154-13**
**Date Collected: 05/10/13 13:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 61.2**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 750 | J | 2800 | 32 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Acenaphthylene | 350 | J | 2800 | 22 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Anthracene | 4300 | | 2800 | 70 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Benz(a)anthracene | 8000 | | 2800 | 47 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Benzo(a)pyrene | 5700 | | 2800 | 66 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Benzo(b)fluoranthene | 8500 | | 2800 | 53 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Benzo(g,h,i)perylene | 2000 | J | 2800 | 33 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Benzo(k)fluoranthene | 3700 | | 2800 | 30 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Chrysene | 6400 | | 2800 | 27 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Dibenz(a,h)anthracene | 2400 | J | 2800 | 32 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Fluoranthene | 17000 | | 2800 | 40 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Fluorene | 6000 | | 2800 | 63 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Indeno(1,2,3-c,d)pyrene | 3400 | | 2800 | 76 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Naphthalene | 8100 | | 2800 | 46 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Phenanthrene | 22000 | | 2800 | 58 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |
| Pyrene | 11000 | | 2800 | 18 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:01 | 10 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *71* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 21:01* | *10* |
| *2-Fluorobiphenyl* | *83* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 21:01* | *10* |
| *p-Terphenyl-d14* | *81* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 21:01* | *10* |

## Client Sample ID: DPT-26(17.0-17.5)

**Lab Sample ID: 480-38154-14**
**Date Collected: 05/10/13 13:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 84.5**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 290 | | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Acenaphthylene | ND | | 200 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Anthracene | ND | | 200 | 5.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Benz(a)anthracene | 80 | J | 200 | 3.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Benzo(a)pyrene | 69 | J | 200 | 4.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Benzo(b)fluoranthene | 200 | | 200 | 3.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |

## Client Sample ID: DPT-26(17.0-17.5)

**Lab Sample ID: 480-38154-14**
**Date Collected: 05/10/13 13:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 84.5**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Benzo(g,h,i)perylene | 31 | J | 200 | 2.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Benzo(k)fluoranthene | 47 | J | 200 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Chrysene | 100 | J | 200 | 2.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Dibenz(a,h)anthracene | 150 | J | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Fluoranthene | 180 | J | 200 | 2.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Fluorene | ND | | 200 | 4.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Indeno(1,2,3-c,d)pyrene | 160 | J | 200 | 5.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Naphthalene | 120 | J | 200 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Phenanthrene | 310 | | 200 | 4.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |
| Pyrene | 160 | J | 200 | 1.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 21:25 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *43* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 21:25* | *1* |
| *2-Fluorobiphenyl* | *59* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 21:25* | *1* |
| *p-Terphenyl-d14* | *70* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 21:25* | *1* |

## Client Sample ID: DPT-27(12.0-13.0)

**Lab Sample ID: 480-38154-15**
**Date Collected: 05/10/13 14:15**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 84.6**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 140 | J | 4000 | 47 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Acenaphthylene | 1200 | J | 4000 | 32 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Anthracene | 7800 | | 4000 | 100 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Benz(a)anthracene | 20000 | | 4000 | 68 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Benzo(a)pyrene | 15000 | | 4000 | 95 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Benzo(b)fluoranthene | 20000 | | 4000 | 77 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Benzo(g,h,i)perylene | 13000 | | 4000 | 48 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Benzo(k)fluoranthene | 9800 | | 4000 | 44 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Chrysene | 18000 | | 4000 | 40 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Dibenz(a,h)anthracene | 4800 | | 4000 | 47 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Fluoranthene | 44000 | | 4000 | 57 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Fluorene | 820 | J | 4000 | 91 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Indeno(1,2,3-c,d)pyrene | 12000 | | 4000 | 110 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Naphthalene | 1300 | J | 4000 | 66 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Phenanthrene | 33000 | | 4000 | 83 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |
| Pyrene | 33000 | | 4000 | 26 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:17 | 20 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *49* | | *34 - 132* | *05/14/13 14:43* | *05/22/13 15:17* | *20* |
| *2-Fluorobiphenyl* | *58* | | *37 - 120* | *05/14/13 14:43* | *05/22/13 15:17* | *20* |
| *p-Terphenyl-d14* | *58* | *X* | *65 - 153* | *05/14/13 14:43* | *05/22/13 15:17* | *20* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-27(22.0-22.5)

**Lab Sample ID: 480-38154-16**

**Date Collected: 05/10/13 14:25**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.3**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 17 | J | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Acenaphthylene | 37 | J | 200 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Anthracene | 77 | J | 200 | 5.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Benz(a)anthracene | 120 | J | 200 | 3.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Benzo(a)pyrene | 73 | J | 200 | 4.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Benzo(b)fluoranthene | 200 | | 200 | 3.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Benzo(g,h,i)perylene | 50 | J | 200 | 2.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Benzo(k)fluoranthene | 39 | J | 200 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Chrysene | 140 | J | 200 | 2.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Dibenz(a,h)anthracene | 150 | J | 200 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Fluoranthene | 230 | | 200 | 2.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Fluorene | 150 | J | 200 | 4.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Indeno(1,2,3-c,d)pyrene | 170 | J | 200 | 5.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Naphthalene | 830 | | 200 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Phenanthrene | 440 | | 200 | 4.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |
| Pyrene | 160 | J | 200 | 1.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 15:41 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *70* | | *34 - 132* | *05/14/13 14:43* | *05/22/13 15:41* | *1* |
| *2-Fluorobiphenyl* | *80* | | *37 - 120* | *05/14/13 14:43* | *05/22/13 15:41* | *1* |
| *p-Terphenyl-d14* | *88* | | *65 - 153* | *05/14/13 14:43* | *05/22/13 15:41* | *1* |

## Client Sample ID: SPT-29(1.0-2.0)

**Lab Sample ID: 480-38154-17**

**Date Collected: 05/10/13 15:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.9**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.5 | 0.40 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.5 | 0.90 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.5 | 0.72 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.5 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,1-Dichloroethane | ND | | 5.5 | 0.68 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,1-Dichloroethene | ND | | 5.5 | 0.68 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.5 | 0.34 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.5 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,2-Dibromoethane | ND | | 5.5 | 0.71 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.5 | 0.43 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,2-Dichloroethane | ND | | 5.5 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,2-Dichloropropane | ND | | 5.5 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.5 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.5 | 0.77 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 2-Hexanone | ND | | 28 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 2-Butanone (MEK) | ND | | 28 | 2.0 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 28 | 1.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Acetone | ND | | 28 | 4.7 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Benzene | ND | | 5.5 | 0.27 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Bromodichloromethane | ND | | 5.5 | 0.74 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Bromoform | ND | | 5.5 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Bromomethane | ND | | 5.5 | 0.50 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |

**Client Sample ID: SPT-29(1.0-2.0)**
**Date Collected: 05/10/13 15:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-17**
**Matrix: Solid**
**Percent Solids: 88.9**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Carbon disulfide | ND | | 5.5 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Carbon tetrachloride | ND | | 5.5 | 0.54 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Chlorobenzene | ND | | 5.5 | 0.73 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Dibromochloromethane | ND | | 5.5 | 0.71 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Chloroethane | ND | | 5.5 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Chloroform | ND | | 5.5 | 0.34 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Chloromethane | ND | | 5.5 | 0.33 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.5 | 0.71 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.5 | 0.80 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Cyclohexane | ND | | 5.5 | 0.77 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Dichlorodifluoromethane | ND | | 5.5 | 0.46 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Ethylbenzene | ND | | 5.5 | 0.38 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Isopropylbenzene | ND | | 5.5 | 0.83 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Methyl acetate | ND | | 5.5 | 1.0 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Methyl tert-butyl ether | ND | | 5.5 | 0.54 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| **Methylcyclohexane** | **1.9** | **J** | 5.5 | 0.84 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Methylene Chloride | ND | | 5.5 | 2.5 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Styrene | ND | | 5.5 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Tetrachloroethene | ND | | 5.5 | 0.74 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Toluene | ND | | 5.5 | 0.42 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.5 | 0.57 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.5 | 2.4 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Trichloroethene | ND | | 5.5 | 1.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Trichlorofluoromethane | ND | | 5.5 | 0.52 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Vinyl chloride | ND | | 5.5 | 0.68 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |
| Xylenes, Total | ND | | 11 | 0.93 | ug/Kg | ☼ | 05/13/13 10:13 | 05/13/13 20:16 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Ethane, 1,1-difluoro-* | *230* | *T J N* | *ug/Kg* | ☼ | *1.93* | *75-37-6* | *05/13/13 10:13* | *05/13/13 20:16* | *1* |
| *Disiloxane, hexamethyl-* | *5.5* | *T J N* | *ug/Kg* | ☼ | *5.05* | *107-46-0* | *05/13/13 10:13* | *05/13/13 20:16* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *114* | | *64 - 126* | *05/13/13 10:13* | *05/13/13 20:16* | *1* |
| *Toluene-d8 (Surr)* | *112* | | *71 - 125* | *05/13/13 10:13* | *05/13/13 20:16* | *1* |
| *4-Bromofluorobenzene (Surr)* | *89* | | *72 - 126* | *05/13/13 10:13* | *05/13/13 20:16* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 940 | 11 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Acenaphthylene** | **350** | **J** | 940 | 7.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Anthracene** | **440** | **J** | 940 | 24 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Benz(a)anthracene** | **2000** | | 940 | 16 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Benzo(a)pyrene** | **1500** | | 940 | 22 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Benzo(b)fluoranthene** | **2700** | | 940 | 18 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Benzo(g,h,i)perylene** | **750** | **J** | 940 | 11 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Benzo(k)fluoranthene** | **860** | **J** | 940 | 10 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Chrysene** | **1900** | | 940 | 9.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Dibenz(a,h)anthracene** | **830** | **J** | 940 | 11 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Fluoranthene** | **3200** | | 940 | 14 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| **Fluorene** | **160** | **J** | 940 | 21 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: SPT-29(1.0-2.0)

**Lab Sample ID: 480-38154-17**
**Date Collected: 05/10/13 15:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.9**

### Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Indeno(1,2,3-c,d)pyrene | 1200 | | 940 | 26 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| Naphthalene | 460 | J | 940 | 16 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| Phenanthrene | 2400 | | 940 | 20 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |
| Pyrene | 2400 | | 940 | 6.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/21/13 14:55 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *71* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 14:55* | *5* |
| *2-Fluorobiphenyl* | *79* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 14:55* | *5* |
| *p-Terphenyl-d14* | *86* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 14:55* | *5* |

## Client Sample ID: DPT-29(6.0-7.0)

**Lab Sample ID: 480-38154-18**
**Date Collected: 05/10/13 15:15**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.1**

### Method: 8260B - Volatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.6 | 0.41 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.6 | 0.91 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.6 | 0.73 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.6 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,1-Dichloroethane | ND | | 5.6 | 0.69 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,1-Dichloroethene | ND | | 5.6 | 0.69 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.6 | 0.34 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.6 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,2-Dibromoethane | ND | | 5.6 | 0.72 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.6 | 0.44 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,2-Dichloroethane | ND | | 5.6 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,2-Dichloropropane | ND | | 5.6 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.6 | 0.29 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.6 | 0.79 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 2-Hexanone | ND | | 28 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 2-Butanone (MEK) | ND | | 28 | 2.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 28 | 1.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Acetone | ND | | 28 | 4.7 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Benzene | 2.6 | J | 5.6 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Bromodichloromethane | ND | | 5.6 | 0.75 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Bromoform | ND | | 5.6 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Bromomethane | ND | | 5.6 | 0.51 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Carbon disulfide | ND | | 5.6 | 2.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Carbon tetrachloride | ND | | 5.6 | 0.55 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Chlorobenzene | ND | | 5.6 | 0.74 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Dibromochloromethane | ND | | 5.6 | 0.72 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Chloroethane | ND | | 5.6 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Chloroform | ND | | 5.6 | 0.35 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Chloromethane | ND | | 5.6 | 0.34 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.6 | 0.72 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.6 | 0.81 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Cyclohexane | ND | | 5.6 | 0.79 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Dichlorodifluoromethane | ND | | 5.6 | 0.47 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Ethylbenzene | ND | | 5.6 | 0.39 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: DPT-29(6.0-7.0)**
**Date Collected: 05/10/13 15:15**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-18**
**Matrix: Solid**
**Percent Solids: 88.1**

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | ND | | 5.6 | 0.85 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Methyl acetate | ND | | 5.6 | 1.0 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Methyl tert-butyl ether | ND | | 5.6 | 0.55 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Methylcyclohexane | ND | | 5.6 | 0.86 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Methylene Chloride | ND | | 5.6 | 2.6 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Styrene | ND | | 5.6 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Tetrachloroethene | ND | | 5.6 | 0.76 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| **Toluene** | **1.3** | **J** | 5.6 | 0.43 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.6 | 0.58 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.6 | 2.5 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Trichloroethene | ND | | 5.6 | 1.2 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Trichlorofluoromethane | ND | | 5.6 | 0.53 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Vinyl chloride | ND | | 5.6 | 0.69 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |
| Xylenes, Total | ND | | 11 | 0.95 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:34 | 1 |

| *Tentatively Identified Compound* | *Est. Result* | *Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Naphthalene* | *7.1* | | *ug/Kg* | ☼ | *12.60* | *91-20-3* | *05/13/13 10:13* | *05/14/13 19:34* | *1* |
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | ☼ | | | *05/13/13 10:13* | *05/14/13 19:34* | *1* |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *113* | | *64 - 126* | *05/13/13 10:13* | *05/14/13 19:34* | *1* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* | *05/13/13 10:13* | *05/14/13 19:34* | *1* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *72 - 126* | *05/13/13 10:13* | *05/14/13 19:34* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Acenaphthene** | **130** | **J** | 190 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Acenaphthylene** | **360** | | 190 | 1.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Anthracene** | **760** | | 190 | 4.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Benz(a)anthracene** | **1700** | | 190 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Benzo(a)pyrene** | **1000** | | 190 | 4.5 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Benzo(b)fluoranthene** | **1400** | | 190 | 3.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Benzo(g,h,i)perylene** | **480** | | 190 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Benzo(k)fluoranthene** | **660** | | 190 | 2.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Chrysene** | **1500** | | 190 | 1.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Dibenz(a,h)anthracene** | **290** | | 190 | 2.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Fluoranthene** | **3900** | | 190 | 2.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Fluorene** | **1000** | | 190 | 4.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Indeno(1,2,3-c,d)pyrene** | **560** | | 190 | 5.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Naphthalene** | **5100** | | 190 | 3.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Phenanthrene** | **4700** | | 190 | 4.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |
| **Pyrene** | **2500** | | 190 | 1.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:06 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *71* | | *34 - 132* | *05/14/13 14:43* | *05/22/13 16:06* | *1* |
| *2-Fluorobiphenyl* | *82* | | *37 - 120* | *05/14/13 14:43* | *05/22/13 16:06* | *1* |
| *p-Terphenyl-d14* | *86* | | *65 - 153* | *05/14/13 14:43* | *05/22/13 16:06* | *1* |

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

**Client Sample ID: FD051013**
**Date Collected: 05/10/13 00:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-19**
**Matrix: Solid**
**Percent Solids: 86.5**

**Method: 8260B - Volatile Organic Compounds (GC/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.8 | 0.42 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.8 | 0.93 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.8 | 0.75 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,1-Dichloroethane | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,1-Dichloroethene | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,2-Dibromoethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.8 | 0.45 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,2-Dichloroethane | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,2-Dichloropropane | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.8 | 0.30 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 2-Hexanone | ND | | 29 | 2.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 2-Butanone (MEK) | ND | | 29 | 2.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 29 | 1.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Acetone | ND | | 29 | 4.8 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| **Benzene** | **2.2** | **J** | 5.8 | 0.28 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Bromodichloromethane | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Bromoform | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Bromomethane | ND | | 5.8 | 0.52 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Carbon disulfide | ND | | 5.8 | 2.9 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Carbon tetrachloride | ND | | 5.8 | 0.56 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Chlorobenzene | ND | | 5.8 | 0.76 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Dibromochloromethane | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Chloroethane | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Chloroform | ND | | 5.8 | 0.36 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Chloromethane | ND | | 5.8 | 0.35 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.8 | 0.74 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.8 | 0.83 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Cyclohexane | ND | | 5.8 | 0.81 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Dichlorodifluoromethane | ND | | 5.8 | 0.48 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Ethylbenzene | ND | | 5.8 | 0.40 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Isopropylbenzene | ND | | 5.8 | 0.87 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Methyl acetate | ND | | 5.8 | 1.1 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Methyl tert-butyl ether | ND | | 5.8 | 0.57 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Methylcyclohexane | ND | | 5.8 | 0.88 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Methylene Chloride | ND | | 5.8 | 2.6 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Styrene | ND | | 5.8 | 0.29 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Tetrachloroethene | ND | | 5.8 | 0.77 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| **Toluene** | **1.1** | **J** | 5.8 | 0.44 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.8 | 0.59 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.8 | 2.5 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Trichloroethene | ND | | 5.8 | 1.3 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Trichlorofluoromethane | ND | | 5.8 | 0.54 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Vinyl chloride | ND | | 5.8 | 0.70 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Xylenes, Total | ND | | 12 | 0.97 | ug/Kg | ☼ | 05/13/13 10:13 | 05/14/13 19:59 | 1 |

**Client Sample ID: FD051013**
**Date Collected: 05/10/13 00:00**
**Date Received: 05/11/13 02:00**

**Lab Sample ID: 480-38154-19**
**Matrix: Solid**
**Percent Solids: 86.5**

| Tentatively Identified Compound | Est. Result | Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| tert-Butyldimethylsilanol | 8.3 | T J N | ug/Kg | ☼ | 4.47 | 18173-64-3 | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Naphthalene | 2.4 | J | ug/Kg | ☼ | 12.61 | 91-20-3 | 05/13/13 10:13 | 05/14/13 19:59 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 114 | | 64 - 126 | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| Toluene-d8 (Surr) | 106 | | 71 - 125 | 05/13/13 10:13 | 05/14/13 19:59 | 1 |
| 4-Bromofluorobenzene (Surr) | 100 | | 72 - 126 | 05/13/13 10:13 | 05/14/13 19:59 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Acenaphthylene | ND | | 190 | 1.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Anthracene** | **9.8** | **J** | 190 | 4.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Benz(a)anthracene | ND | | 190 | 3.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Benzo(a)pyrene | ND | | 190 | 4.6 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Benzo(b)fluoranthene | ND | | 190 | 3.7 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Benzo(g,h,i)perylene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Benzo(k)fluoranthene** | **2.9** | **J** | 190 | 2.1 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Chrysene** | **7.9** | **J** | 190 | 1.9 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Dibenz(a,h)anthracene | ND | | 190 | 2.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Fluoranthene** | **21** | **J** | 190 | 2.8 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Fluorene** | **12** | **J** | 190 | 4.4 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 190 | 5.3 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Naphthalene** | **4500** | | 190 | 3.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Phenanthrene** | **59** | **J** | 190 | 4.0 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| **Pyrene** | **13** | **J** | 190 | 1.2 | ug/Kg | ☼ | 05/14/13 14:43 | 05/22/13 16:30 | 1 |

| Surrogate | %Recovery | Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| Nitrobenzene-d5 | 69 | | 34 - 132 | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| 2-Fluorobiphenyl | 82 | | 37 - 120 | 05/14/13 14:43 | 05/22/13 16:30 | 1 |
| p-Terphenyl-d14 | 83 | | 65 - 153 | 05/14/13 14:43 | 05/22/13 16:30 | 1 |

# Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | 12DCE | TOL | BFB |
| Lab Sample ID | Client Sample ID | (53-146) | (50-149) | (49-148) |
| 480-37943-2 | DPT-02 (4.5-5.0) | 95 | 97 | 100 |
| 480-38154-4 | DPT-15(10.0-11.0) | 104 | 92 | 92 |
| 480-38154-6 | DPT-16(9.5-10.0) | 104 | 94 | 89 |
| 480-38154-8 | DPT-18(3.5-4.0) | 117 | 94 | 105 |
| 480-38154-12 | DPT-24(9.0-10.0) | 93 | 91 | 103 |
| LCS 480-117898/1-A | Lab Control Sample | 109 | 112 | 113 |
| LCS 480-119364/1-A | Lab Control Sample | 110 | 110 | 110 |
| MB 480-117898/2-A | Method Blank | 113 | 115 | 115 |
| MB 480-119364/2-A | Method Blank | 117 | 114 | 110 |

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | 12DCE | TOL | BFB |
| Lab Sample ID | Client Sample ID | (64-126) | (71-125) | (72-126) |
| 480-37943-5 | DPT-05 (22.5-23.0) | 97 | 98 | 94 |
| 480-37943-7 | DPT-08 (3.5-4.0) | 100 | 99 | 94 |
| 480-37943-9 | DPT-10 (4.0-4.5) | 113 | 103 | 95 |
| 480-37943-9 MS | DPT-10 (4.0-4.5) | 101 | 105 | 94 |
| 480-37943-9 MSD | DPT-10 (4.0-4.5) | 99 | 104 | 95 |
| 480-38154-1 | DPT-20(12.0-12.5) | 112 | 106 | 102 |
| 480-38154-2 | DPT-21(3.0-3.5) | 113 | 104 | 102 |
| 480-38154-10 | DPT-22(13.5-14.0) | 111 | 101 | 98 |
| 480-38154-17 | SPT-29(1.0-2.0) | 114 | 112 | 89 |
| 480-38154-17 MS | SPT-29(1.0-2.0) | 86 | 128 X | 56 X |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | 89 | 114 | 67 X |
| 480-38154-18 | DPT-29(6.0-7.0) | 113 | 105 | 100 |
| 480-38154-19 | FD051013 | 114 | 106 | 100 |
| 480-38156-D-10-B MS | Matrix Spike | 101 | 105 | 101 |
| 480-38156-D-10-C MSD | Matrix Spike Duplicate | 99 | 105 | 101 |
| LCS 480-118093/4 | Lab Control Sample | 108 | 102 | 100 |
| LCS 480-118255/4 | Lab Control Sample | 107 | 105 | 105 |
| LCS 480-118414/4 | Lab Control Sample | 104 | 105 | 103 |
| LCS 480-119655/6 | Lab Control Sample | 97 | 96 | 96 |
| MB 480-118093/5 | Method Blank | 109 | 102 | 98 |
| MB 480-118255/7 | Method Blank | 107 | 106 | 103 |
| MB 480-118414/5 | Method Blank | 108 | 105 | 101 |
| MB 480-119655/7 | Method Blank | 93 | 97 | 96 |

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

# Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Matrix: Solid**

**Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | |
|---|---|---|---|---|
| | | NBZ | FBP | TPH |
| Lab Sample ID | Client Sample ID | (34-132) | (37-120) | (65-153) |
| 480-37943-1 | DPT-01 (13-5-14.0) | 60 | 66 | 97 |
| 480-37943-1 MS | DPT-01 (13-5-14.0) | 64 | 71 | 96 |
| 480-37943-1 MSD | DPT-01 (13-5-14.0) | 62 | 68 | 89 |
| 480-37943-2 | DPT-02 (4.5-5.0) | 0 X | 0 X | 0 X |
| 480-37943-3 | DPT-03 (14.5-15.0) | 60 | 66 | 89 |
| 480-37943-4 | DPT-05 (2.5-3.0) | 52 | 55 | 72 |
| 480-37943-5 | DPT-05 (22.5-23.0) | 64 | 70 | 98 |
| 480-37943-6 | DPT-07 (11.0-11.5) | 59 | 66 | 86 |
| 480-37943-7 | DPT-08 (3.5-4.0) | 61 | 66 | 87 |
| 480-37943-8 | DPT-09 (22.5-23.0) | 67 | 73 | 98 |
| 480-37943-9 | DPT-10 (4.0-4.5) | 62 | 69 | 90 |
| 480-37943-10 | DPT-11 (23.0-23.5) | 63 | 69 | 94 |
| 480-37943-11 | DPT-12 (3.5-4.0) | 61 | 67 | 77 |
| 480-37943-12 | DPT-13 (7.5-8.0) | 65 | 74 | 86 |
| 480-37943-13 | DPT-13 (15.0-15.5) | 60 | 66 | 87 |
| 480-37943-14 | DPT-14 (6.0-6.5) | 51 | 57 | 74 |
| 480-37943-15 | DPT-14 (16.0-16.5) | 53 | 58 | 71 |
| 480-38154-1 | DPT-20(12.0-12.5) | 80 | 88 | 96 |
| 480-38154-2 | DPT-21(3.0-3.5) | 74 | 83 | 95 |
| 480-38154-3 | DPT-21(21.5-22.0) | 78 | 87 | 96 |
| 480-38154-4 | DPT-15(10.0-11.0) | 0 X | 0 X | 0 X |
| 480-38154-5 | DPT-15(17.0-17.5) | 69 | 79 | 81 |
| 480-38154-6 | DPT-16(9.5-10.0) | 0 X | 0 X | 0 X |
| 480-38154-6 - DL | DPT-16(9.5-10.0) | 0 X | 0 X | 0 X |
| 480-38154-7 | DPT-17(18.5-19.0) | 72 | 80 | 87 |
| 480-38154-8 | DPT-18(3.5-4.0) | 82 | 84 | 79 |
| 480-38154-8 - DL | DPT-18(3.5-4.0) | 0 X | 83 | 88 |
| 480-38154-9 | DPT-19(15.5-16.0) | 80 | 90 | 96 |
| 480-38154-10 | DPT-22(13.5-14.0) | 36 | 43 | 64 X |
| 480-38154-11 | DPT-23(2.5-3.0) | 70 | 80 | 82 |
| 480-38154-12 | DPT-24(9.0-10.0) | 0 X | 0 X | 0 X |
| 480-38154-12 - DL | DPT-24(9.0-10.0) | 0 X | 0 X | 0 X |
| 480-38154-13 | DPT-25(22.0-23.0) | 71 | 83 | 81 |
| 480-38154-14 | DPT-26(17.0-17.5) | 43 | 59 | 70 |
| 480-38154-15 | DPT-27(12.0-13.0) | 49 | 58 | 58 X |
| 480-38154-16 | DPT-27(22.0-22.5) | 70 | 80 | 88 |
| 480-38154-17 | SPT-29(1.0-2.0) | 71 | 79 | 86 |
| 480-38154-17 MS | SPT-29(1.0-2.0) | 61 | 69 | 70 |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | 64 | 74 | 74 |
| 480-38154-18 | DPT-29(6.0-7.0) | 71 | 82 | 86 |
| 480-38154-19 | FD051013 | 69 | 82 | 83 |
| LCS 480-117993/2-A | Lab Control Sample | 67 | 75 | 101 |
| LCS 480-118555/2-A | Lab Control Sample | 72 | 81 | 93 |
| MB 480-117993/1-A | Method Blank | 66 | 69 | 101 |
| MB 480-118555/1-A | Method Blank | 63 | 67 | 85 |

**Surrogate Legend**

NBZ = Nitrobenzene-d5

FBP = 2-Fluorobiphenyl

# Surrogate Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

TPH = p-Terphenyl-d14

## Method: 8260B - Volatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 480-117898/2-A**
**Matrix: Solid**
**Analysis Batch: 117857**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 117898**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 99 | 28 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 99 | 16 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,1,2-Trichloroethane | ND | | 99 | 21 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 99 | 50 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,1-Dichloroethane | ND | | 99 | 31 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,1-Dichloroethene | ND | | 99 | 34 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 99 | 38 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 99 | 50 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,2-Dibromoethane | ND | | 99 | 3.8 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,2-Dichlorobenzene | ND | | 99 | 25 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,2-Dichloroethane | ND | | 99 | 41 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,2-Dichloropropane | ND | | 99 | 16 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,3-Dichlorobenzene | ND | | 99 | 27 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 1,4-Dichlorobenzene | ND | | 99 | 14 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 2-Hexanone | ND | | 500 | 200 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 2-Butanone (MEK) | ND | | 500 | 300 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 500 | 32 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Acetone | ND | | 500 | 410 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Benzene | ND | | 99 | 4.8 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Bromodichloromethane | ND | | 99 | 20 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Bromoform | ND | | 99 | 50 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Bromomethane | ND | | 99 | 22 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Carbon disulfide | ND | | 99 | 45 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Carbon tetrachloride | ND | | 99 | 25 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Chlorobenzene | ND | | 99 | 13 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Dibromochloromethane | ND | | 99 | 48 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Chloroethane | ND | | 99 | 21 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Chloroform | ND | | 99 | 68 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Chloromethane | ND | | 99 | 24 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| cis-1,2-Dichloroethene | ND | | 99 | 27 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| cis-1,3-Dichloropropene | ND | | 99 | 24 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Cyclohexane | ND | | 99 | 22 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Dichlorodifluoromethane | ND | | 99 | 43 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Ethylbenzene | ND | | 99 | 29 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Isopropylbenzene | ND | | 99 | 15 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Methyl acetate | ND | | 99 | 47 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Methyl tert-butyl ether | ND | | 99 | 38 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Methylcyclohexane | ND | | 99 | 47 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Methylene Chloride | ND | | 99 | 20 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Styrene | ND | | 99 | 24 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Tetrachloroethene | ND | | 99 | 13 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Toluene | ND | | 99 | 27 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| trans-1,2-Dichloroethene | ND | | 99 | 23 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| trans-1,3-Dichloropropene | ND | | 99 | 4.8 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Trichloroethene | ND | | 99 | 28 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Trichlorofluoromethane | ND | | 99 | 47 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Vinyl chloride | ND | | 99 | 33 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Xylenes, Total | ND | | 200 | 17 | ug/Kg | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-117898/2-A**
**Matrix: Solid**
**Analysis Batch: 117857**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 117898**

| Tentatively Identified Compound | MB Est. Result | MB Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tentatively Identified Compound | None | | ug/Kg | | | | 05/10/13 08:50 | 05/10/13 12:11 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 113 | | 53 - 146 | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| Toluene-d8 (Surr) | 115 | | 50 - 149 | 05/10/13 08:50 | 05/10/13 12:11 | 1 |
| 4-Bromofluorobenzene (Surr) | 115 | | 49 - 148 | 05/10/13 08:50 | 05/10/13 12:11 | 1 |

**Lab Sample ID: LCS 480-117898/1-A**
**Matrix: Solid**
**Analysis Batch: 117857**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 117898**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 2450 | 2620 | | ug/Kg | | 107 | 82 - 138 |
| 1,1-Dichloroethene | 2450 | 2360 | | ug/Kg | | 96 | 54 - 144 |
| 1,2-Dichlorobenzene | 2450 | 2920 | | ug/Kg | | 119 | 80 - 132 |
| 1,2-Dichloroethane | 2450 | 2650 | | ug/Kg | | 108 | 78 - 129 |
| Benzene | 2450 | 2990 | | ug/Kg | | 122 | 75 - 131 |
| Chlorobenzene | 2450 | 3080 | | ug/Kg | | 126 | 80 - 127 |
| cis-1,2-Dichloroethene | 2450 | 2940 | | ug/Kg | | 120 | 79 - 128 |
| Ethylbenzene | 2450 | 3160 | | ug/Kg | | 129 | 78 - 136 |
| Methyl tert-butyl ether | 2450 | 2360 | | ug/Kg | | 96 | 67 - 137 |
| Tetrachloroethene | 2450 | 3380 | | ug/Kg | | 138 | 72 - 141 |
| Toluene | 2450 | 3070 | | ug/Kg | | 125 | 76 - 133 |
| trans-1,2-Dichloroethene | 2450 | 2950 | | ug/Kg | | 120 | 81 - 147 |
| Trichloroethene | 2450 | 3080 | | ug/Kg | | 126 | 77 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 109 | | 53 - 146 |
| Toluene-d8 (Surr) | 112 | | 50 - 149 |
| 4-Bromofluorobenzene (Surr) | 113 | | 49 - 148 |

**Lab Sample ID: MB 480-118093/5**
**Matrix: Solid**
**Analysis Batch: 118093**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.0 | 0.36 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 0.81 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 0.65 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 0.61 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.61 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.30 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,2-Dibromoethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 0.39 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 0.25 | ug/Kg | | | 05/11/13 14:44 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-118093/5**
**Matrix: Solid**
**Analysis Batch: 118093**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 0.26 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 0.70 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 2-Hexanone | ND | | 25 | 2.5 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 2-Butanone (MEK) | ND | | 25 | 1.8 | ug/Kg | | | 05/11/13 14:44 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | 1.6 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Acetone | ND | | 25 | 4.2 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Benzene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Bromodichloromethane | ND | | 5.0 | 0.67 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Bromoform | ND | | 5.0 | 2.5 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Bromomethane | ND | | 5.0 | 0.45 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Carbon disulfide | ND | | 5.0 | 2.5 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.48 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Chlorobenzene | ND | | 5.0 | 0.66 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Dibromochloromethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Chloroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Chloroform | ND | | 5.0 | 0.31 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Chloromethane | ND | | 5.0 | 0.30 | ug/Kg | | | 05/11/13 14:44 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 0.64 | ug/Kg | | | 05/11/13 14:44 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 0.72 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Cyclohexane | ND | | 5.0 | 0.70 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.41 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Ethylbenzene | ND | | 5.0 | 0.35 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Isopropylbenzene | ND | | 5.0 | 0.75 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Methyl acetate | ND | | 5.0 | 0.93 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 0.49 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Methylcyclohexane | ND | | 5.0 | 0.76 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Methylene Chloride | ND | | 5.0 | 2.3 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Styrene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Tetrachloroethene | ND | | 5.0 | 0.67 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Toluene | ND | | 5.0 | 0.38 | ug/Kg | | | 05/11/13 14:44 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 0.52 | ug/Kg | | | 05/11/13 14:44 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.2 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Trichloroethene | ND | | 5.0 | 1.1 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.47 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.61 | ug/Kg | | | 05/11/13 14:44 | 1 |
| Xylenes, Total | ND | | 10 | 0.84 | ug/Kg | | | 05/11/13 14:44 | 1 |

| *Tentatively Identified Compound* | *MB Est. Result* | *MB Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | | | | | *05/11/13 14:44* | *1* |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *109* | | *64 - 126* | | *05/11/13 14:44* | *1* |
| *Toluene-d8 (Surr)* | *102* | | *71 - 125* | | *05/11/13 14:44* | *1* |
| *4-Bromofluorobenzene (Surr)* | *98* | | *72 - 126* | | *05/11/13 14:44* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 480-118093/4**
**Matrix: Solid**
**Analysis Batch: 118093**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 50.0 | 48.9 | | ug/Kg | | 98 | 73 - 126 |
| 1,1-Dichloroethene | 50.0 | 40.9 | | ug/Kg | | 82 | 59 - 125 |
| 1,2-Dichlorobenzene | 50.0 | 50.2 | | ug/Kg | | 100 | 75 - 120 |
| 1,2-Dichloroethane | 50.0 | 52.6 | | ug/Kg | | 105 | 77 - 122 |
| Benzene | 50.0 | 50.9 | | ug/Kg | | 102 | 79 - 127 |
| Chlorobenzene | 50.0 | 50.4 | | ug/Kg | | 101 | 76 - 124 |
| cis-1,2-Dichloroethene | 50.0 | 50.1 | | ug/Kg | | 100 | 81 - 117 |
| Ethylbenzene | 50.0 | 49.3 | | ug/Kg | | 99 | 80 - 120 |
| Methyl tert-butyl ether | 50.0 | 49.1 | | ug/Kg | | 98 | 63 - 125 |
| Tetrachloroethene | 50.0 | 48.9 | | ug/Kg | | 98 | 74 - 122 |
| Toluene | 50.0 | 47.7 | | ug/Kg | | 95 | 74 - 128 |
| trans-1,2-Dichloroethene | 50.0 | 50.3 | | ug/Kg | | 101 | 78 - 126 |
| Trichloroethene | 50.0 | 49.4 | | ug/Kg | | 99 | 77 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *102* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *100* | | *72 - 126* |

**Lab Sample ID: 480-37943-9 MS**
**Matrix: Solid**
**Analysis Batch: 118093**

**Client Sample ID: DPT-10 (4.0-4.5)**
**Prep Type: Total/NA**
**Prep Batch: 118104**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 53.3 | 43.0 | | ug/Kg | ☼ | 81 | 73 - 126 |
| 1,1-Dichloroethene | ND | | 53.3 | 30.8 | F | ug/Kg | ☼ | 58 | 59 - 125 |
| 1,2-Dichlorobenzene | ND | | 53.3 | 9.96 | F | ug/Kg | ☼ | 19 | 75 - 120 |
| 1,2-Dichloroethane | ND | | 53.3 | 39.5 | F | ug/Kg | ☼ | 74 | 77 - 122 |
| Benzene | ND | | 53.3 | 40.2 | F | ug/Kg | ☼ | 75 | 79 - 127 |
| Chlorobenzene | ND | | 53.3 | 20.2 | F | ug/Kg | ☼ | 38 | 76 - 124 |
| cis-1,2-Dichloroethene | ND | | 53.3 | 35.1 | F | ug/Kg | ☼ | 66 | 81 - 117 |
| Ethylbenzene | ND | | 53.3 | 20.8 | F | ug/Kg | ☼ | 39 | 80 - 120 |
| Methyl tert-butyl ether | ND | | 53.3 | 45.4 | | ug/Kg | ☼ | 85 | 63 - 125 |
| Tetrachloroethene | ND | | 53.3 | 23.1 | F | ug/Kg | ☼ | 43 | 74 - 122 |
| Toluene | 0.51 | J | 53.3 | 29.2 | F | ug/Kg | ☼ | 54 | 74 - 128 |
| trans-1,2-Dichloroethene | ND | | 53.3 | 31.6 | F | ug/Kg | ☼ | 59 | 78 - 126 |
| Trichloroethene | ND | | 53.3 | 26.4 | F | ug/Kg | ☼ | 49 | 77 - 129 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *94* | | *72 - 126* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 480-37943-9 MSD**
**Matrix: Solid**
**Analysis Batch: 118093**

**Client Sample ID: DPT-10 (4.0-4.5)**
**Prep Type: Total/NA**
**Prep Batch: 118104**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 53.5 | 44.1 | | ug/Kg | ☼ | 82 | 73 - 126 | 3 | 30 |
| 1,1-Dichloroethene | ND | | 53.5 | 32.1 | | ug/Kg | ☼ | 60 | 59 - 125 | 4 | 30 |
| 1,2-Dichlorobenzene | ND | | 53.5 | 12.5 | F | ug/Kg | ☼ | 23 | 75 - 120 | 23 | 30 |
| 1,2-Dichloroethane | ND | | 53.5 | 41.0 | | ug/Kg | ☼ | 77 | 77 - 122 | 4 | 30 |
| Benzene | ND | | 53.5 | 41.7 | F | ug/Kg | ☼ | 78 | 79 - 127 | 4 | 30 |
| Chlorobenzene | ND | | 53.5 | 22.9 | F | ug/Kg | ☼ | 43 | 76 - 124 | 13 | 30 |
| cis-1,2-Dichloroethene | ND | | 53.5 | 37.3 | F | ug/Kg | ☼ | 70 | 81 - 117 | 6 | 30 |
| Ethylbenzene | ND | | 53.5 | 23.2 | F | ug/Kg | ☼ | 43 | 80 - 120 | 11 | 30 |
| Methyl tert-butyl ether | ND | | 53.5 | 46.1 | | ug/Kg | ☼ | 86 | 63 - 125 | 2 | 30 |
| Tetrachloroethene | ND | | 53.5 | 25.2 | F | ug/Kg | ☼ | 47 | 74 - 122 | 9 | 30 |
| Toluene | 0.51 | J | 53.5 | 31.5 | F | ug/Kg | ☼ | 58 | 74 - 128 | 8 | 30 |
| trans-1,2-Dichloroethene | ND | | 53.5 | 33.3 | F | ug/Kg | ☼ | 62 | 78 - 126 | 5 | 30 |
| Trichloroethene | ND | | 53.5 | 28.6 | F | ug/Kg | ☼ | 53 | 77 - 129 | 8 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *104* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *95* | | *72 - 126* |

**Lab Sample ID: MB 480-118255/7**
**Matrix: Solid**
**Analysis Batch: 118255**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.0 | 0.36 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 0.81 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 0.65 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 0.61 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.61 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.30 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,2-Dibromoethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 0.39 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 0.25 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 0.26 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 0.70 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 2-Hexanone | ND | | 25 | 2.5 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 2-Butanone (MEK) | ND | | 25 | 1.8 | ug/Kg | | | 05/13/13 12:49 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | 1.6 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Acetone | ND | | 25 | 4.2 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Benzene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Bromodichloromethane | ND | | 5.0 | 0.67 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Bromoform | ND | | 5.0 | 2.5 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Bromomethane | ND | | 5.0 | 0.45 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Carbon disulfide | ND | | 5.0 | 2.5 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.48 | ug/Kg | | | 05/13/13 12:49 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-118255/7**
**Matrix: Solid**
**Analysis Batch: 118255**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Chlorobenzene | ND | | 5.0 | 0.66 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Dibromochloromethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Chloroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Chloroform | ND | | 5.0 | 0.31 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Chloromethane | ND | | 5.0 | 0.30 | ug/Kg | | | 05/13/13 12:49 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 0.64 | ug/Kg | | | 05/13/13 12:49 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 0.72 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Cyclohexane | ND | | 5.0 | 0.70 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.41 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Ethylbenzene | ND | | 5.0 | 0.35 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Isopropylbenzene | ND | | 5.0 | 0.75 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Methyl acetate | ND | | 5.0 | 0.93 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 0.49 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Methylcyclohexane | ND | | 5.0 | 0.76 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Methylene Chloride | ND | | 5.0 | 2.3 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Styrene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Tetrachloroethene | ND | | 5.0 | 0.67 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Toluene | ND | | 5.0 | 0.38 | ug/Kg | | | 05/13/13 12:49 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 0.52 | ug/Kg | | | 05/13/13 12:49 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.2 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Trichloroethene | ND | | 5.0 | 1.1 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.47 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.61 | ug/Kg | | | 05/13/13 12:49 | 1 |
| Xylenes, Total | ND | | 10 | 0.84 | ug/Kg | | | 05/13/13 12:49 | 1 |

| *Tentatively Identified Compound* | *MB Est. Result* | *MB Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | | | | | *05/13/13 12:49* | *1* |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *64 - 126* | | *05/13/13 12:49* | *1* |
| *Toluene-d8 (Surr)* | *106* | | *71 - 125* | | *05/13/13 12:49* | *1* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *72 - 126* | | *05/13/13 12:49* | *1* |

**Lab Sample ID: LCS 480-118255/4**
**Matrix: Solid**
**Analysis Batch: 118255**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 50.0 | 49.4 | | ug/Kg | | 99 | 73 - 126 |
| 1,1-Dichloroethene | 50.0 | 46.4 | | ug/Kg | | 93 | 59 - 125 |
| 1,2-Dichlorobenzene | 50.0 | 50.4 | | ug/Kg | | 101 | 75 - 120 |
| 1,2-Dichloroethane | 50.0 | 50.0 | | ug/Kg | | 100 | 77 - 122 |
| Benzene | 50.0 | 48.7 | | ug/Kg | | 97 | 79 - 127 |
| Chlorobenzene | 50.0 | 49.5 | | ug/Kg | | 99 | 76 - 124 |
| cis-1,2-Dichloroethene | 50.0 | 49.3 | | ug/Kg | | 99 | 81 - 117 |
| Ethylbenzene | 50.0 | 48.1 | | ug/Kg | | 96 | 80 - 120 |
| Methyl tert-butyl ether | 50.0 | 49.5 | | ug/Kg | | 99 | 63 - 125 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 480-118255/4**
**Matrix: Solid**
**Analysis Batch: 118255**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Tetrachloroethene | 50.0 | 49.5 | | ug/Kg | | 99 | 74 - 122 |
| Toluene | 50.0 | 46.9 | | ug/Kg | | 94 | 74 - 128 |
| trans-1,2-Dichloroethene | 50.0 | 47.9 | | ug/Kg | | 96 | 78 - 126 |
| Trichloroethene | 50.0 | 48.9 | | ug/Kg | | 98 | 77 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *107* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *105* | | *72 - 126* |

**Lab Sample ID: MB 480-118414/5**
**Matrix: Solid**
**Analysis Batch: 118414**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.0 | 0.36 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 0.81 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 0.65 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 0.61 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.61 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.30 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,2-Dibromoethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 0.39 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 0.25 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,2-Dichloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 0.26 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 0.70 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 2-Hexanone | ND | | 25 | 2.5 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 2-Butanone (MEK) | ND | | 25 | 1.8 | ug/Kg | | | 05/14/13 10:50 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | 1.6 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Acetone | ND | | 25 | 4.2 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Benzene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Bromodichloromethane | ND | | 5.0 | 0.67 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Bromoform | ND | | 5.0 | 2.5 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Bromomethane | ND | | 5.0 | 0.45 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Carbon disulfide | ND | | 5.0 | 2.5 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.48 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Chlorobenzene | ND | | 5.0 | 0.66 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Dibromochloromethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Chloroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Chloroform | ND | | 5.0 | 0.31 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Chloromethane | ND | | 5.0 | 0.30 | ug/Kg | | | 05/14/13 10:50 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 0.64 | ug/Kg | | | 05/14/13 10:50 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 0.72 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Cyclohexane | ND | | 5.0 | 0.70 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.41 | ug/Kg | | | 05/14/13 10:50 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-118414/5**
**Matrix: Solid**
**Analysis Batch: 118414**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Ethylbenzene | ND | | 5.0 | 0.35 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Isopropylbenzene | ND | | 5.0 | 0.75 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Methyl acetate | ND | | 5.0 | 0.93 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 0.49 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Methylcyclohexane | ND | | 5.0 | 0.76 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Methylene Chloride | ND | | 5.0 | 2.3 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Styrene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Tetrachloroethene | ND | | 5.0 | 0.67 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Toluene | ND | | 5.0 | 0.38 | ug/Kg | | | 05/14/13 10:50 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 0.52 | ug/Kg | | | 05/14/13 10:50 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.2 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Trichloroethene | ND | | 5.0 | 1.1 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.47 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.61 | ug/Kg | | | 05/14/13 10:50 | 1 |
| Xylenes, Total | ND | | 10 | 0.84 | ug/Kg | | | 05/14/13 10:50 | 1 |

| *Tentatively Identified Compound* | *MB Est. Result* | *MB Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | | | | | *05/14/13 10:50* | *1* |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *108* | | *64 - 126* | | *05/14/13 10:50* | *1* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* | | *05/14/13 10:50* | *1* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *72 - 126* | | *05/14/13 10:50* | *1* |

**Lab Sample ID: LCS 480-118414/4**
**Matrix: Solid**
**Analysis Batch: 118414**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 50.0 | 50.2 | | ug/Kg | | 100 | 73 - 126 |
| 1,1-Dichloroethene | 50.0 | 43.0 | | ug/Kg | | 86 | 59 - 125 |
| 1,2-Dichlorobenzene | 50.0 | 53.1 | | ug/Kg | | 106 | 75 - 120 |
| 1,2-Dichloroethane | 50.0 | 52.8 | | ug/Kg | | 106 | 77 - 122 |
| Benzene | 50.0 | 52.9 | | ug/Kg | | 106 | 79 - 127 |
| Chlorobenzene | 50.0 | 53.6 | | ug/Kg | | 107 | 76 - 124 |
| cis-1,2-Dichloroethene | 50.0 | 51.3 | | ug/Kg | | 103 | 81 - 117 |
| Ethylbenzene | 50.0 | 52.1 | | ug/Kg | | 104 | 80 - 120 |
| Methyl tert-butyl ether | 50.0 | 48.6 | | ug/Kg | | 97 | 63 - 125 |
| Tetrachloroethene | 50.0 | 51.7 | | ug/Kg | | 103 | 74 - 122 |
| Toluene | 50.0 | 50.7 | | ug/Kg | | 101 | 74 - 128 |
| trans-1,2-Dichloroethene | 50.0 | 52.2 | | ug/Kg | | 104 | 78 - 126 |
| Trichloroethene | 50.0 | 51.1 | | ug/Kg | | 102 | 77 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *104* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *103* | | *72 - 126* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 480-38156-D-10-B MS**
**Matrix: Solid**
**Analysis Batch: 118414**

**Client Sample ID: Matrix Spike**
**Prep Type: Total/NA**
**Prep Batch: 118436**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 45.2 | 37.0 | | ug/Kg | ☼ | 82 | 73 - 126 |
| 1,1-Dichloroethene | ND | | 45.2 | 30.6 | | ug/Kg | ☼ | 68 | 59 - 125 |
| 1,2-Dichlorobenzene | ND | | 45.2 | 16.3 | F | ug/Kg | ☼ | 36 | 75 - 120 |
| 1,2-Dichloroethane | ND | | 45.2 | 35.7 | | ug/Kg | ☼ | 79 | 77 - 122 |
| Benzene | ND | | 45.2 | 37.0 | | ug/Kg | ☼ | 82 | 79 - 127 |
| Chlorobenzene | ND | | 45.2 | 26.4 | F | ug/Kg | ☼ | 58 | 76 - 124 |
| cis-1,2-Dichloroethene | ND | | 45.2 | 35.6 | F | ug/Kg | ☼ | 79 | 81 - 117 |
| Ethylbenzene | ND | | 45.2 | 27.9 | F | ug/Kg | ☼ | 62 | 80 - 120 |
| Methyl tert-butyl ether | ND | | 45.2 | 37.8 | | ug/Kg | ☼ | 84 | 63 - 125 |
| Tetrachloroethene | ND | | 45.2 | 27.3 | F | ug/Kg | ☼ | 60 | 74 - 122 |
| Toluene | ND | | 45.2 | 31.3 | F | ug/Kg | ☼ | 69 | 74 - 128 |
| trans-1,2-Dichloroethene | ND | | 45.2 | 34.8 | F | ug/Kg | ☼ | 77 | 78 - 126 |
| Trichloroethene | ND | | 45.2 | 30.1 | F | ug/Kg | ☼ | 67 | 77 - 129 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *101* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *72 - 126* |

**Lab Sample ID: 480-38156-D-10-C MSD**
**Matrix: Solid**
**Analysis Batch: 118414**

**Client Sample ID: Matrix Spike Duplicate**
**Prep Type: Total/NA**
**Prep Batch: 118436**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 51.8 | 42.5 | | ug/Kg | ☼ | 82 | 73 - 126 | 14 | 30 |
| 1,1-Dichloroethene | ND | | 51.8 | 34.3 | | ug/Kg | ☼ | 66 | 59 - 125 | 11 | 30 |
| 1,2-Dichlorobenzene | ND | | 51.8 | 19.6 | F | ug/Kg | ☼ | 38 | 75 - 120 | 18 | 30 |
| 1,2-Dichloroethane | ND | | 51.8 | 42.0 | | ug/Kg | ☼ | 81 | 77 - 122 | 16 | 30 |
| Benzene | ND | | 51.8 | 42.5 | | ug/Kg | ☼ | 82 | 79 - 127 | 14 | 30 |
| Chlorobenzene | ND | | 51.8 | 30.9 | F | ug/Kg | ☼ | 60 | 76 - 124 | 16 | 30 |
| cis-1,2-Dichloroethene | ND | | 51.8 | 40.7 | F | ug/Kg | ☼ | 79 | 81 - 117 | 13 | 30 |
| Ethylbenzene | ND | | 51.8 | 32.0 | F | ug/Kg | ☼ | 62 | 80 - 120 | 14 | 30 |
| Methyl tert-butyl ether | ND | | 51.8 | 42.9 | | ug/Kg | ☼ | 83 | 63 - 125 | 13 | 30 |
| Tetrachloroethene | ND | | 51.8 | 31.2 | F | ug/Kg | ☼ | 60 | 74 - 122 | 13 | 30 |
| Toluene | ND | | 51.8 | 35.9 | F | ug/Kg | ☼ | 69 | 74 - 128 | 14 | 30 |
| trans-1,2-Dichloroethene | ND | | 51.8 | 39.1 | F | ug/Kg | ☼ | 75 | 78 - 126 | 12 | 30 |
| Trichloroethene | ND | | 51.8 | 34.4 | F | ug/Kg | ☼ | 66 | 77 - 129 | 13 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *99* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *105* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *101* | | *72 - 126* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-119364/2-A**
**Matrix: Solid**
**Analysis Batch: 119378**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119364**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 98 | 27 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 98 | 16 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,1,2-Trichloroethane | ND | | 98 | 21 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 98 | 49 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,1-Dichloroethane | ND | | 98 | 30 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,1-Dichloroethene | ND | | 98 | 34 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 98 | 37 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 98 | 49 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,2-Dibromoethane | ND | | 98 | 3.7 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,2-Dichlorobenzene | ND | | 98 | 25 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,2-Dichloroethane | ND | | 98 | 40 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,2-Dichloropropane | ND | | 98 | 16 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,3-Dichlorobenzene | ND | | 98 | 26 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 1,4-Dichlorobenzene | ND | | 98 | 14 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 2-Hexanone | ND | | 490 | 200 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 2-Butanone (MEK) | ND | | 490 | 290 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 490 | 31 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Acetone | ND | | 490 | 400 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Benzene | ND | | 98 | 4.7 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Bromodichloromethane | ND | | 98 | 20 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Bromoform | ND | | 98 | 49 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Bromomethane | ND | | 98 | 22 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Carbon disulfide | ND | | 98 | 45 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Carbon tetrachloride | ND | | 98 | 25 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Chlorobenzene | ND | | 98 | 13 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Dibromochloromethane | ND | | 98 | 48 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Chloroethane | ND | | 98 | 20 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Chloroform | ND | | 98 | 67 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Chloromethane | ND | | 98 | 23 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| cis-1,2-Dichloroethene | ND | | 98 | 27 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| cis-1,3-Dichloropropene | ND | | 98 | 23 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Cyclohexane | ND | | 98 | 22 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Dichlorodifluoromethane | ND | | 98 | 43 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Ethylbenzene | ND | | 98 | 29 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Isopropylbenzene | ND | | 98 | 15 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Methyl acetate | ND | | 98 | 47 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Methyl tert-butyl ether | ND | | 98 | 37 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Methylcyclohexane | ND | | 98 | 46 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Methylene Chloride | 24.2 | J | 98 | 19 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Styrene | ND | | 98 | 24 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Tetrachloroethene | ND | | 98 | 13 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Toluene | ND | | 98 | 26 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| trans-1,2-Dichloroethene | ND | | 98 | 23 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| trans-1,3-Dichloropropene | ND | | 98 | 4.7 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Trichloroethene | ND | | 98 | 27 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Trichlorofluoromethane | ND | | 98 | 46 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Vinyl chloride | ND | | 98 | 33 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Xylenes, Total | ND | | 200 | 17 | ug/Kg | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-119364/2-A**
**Matrix: Solid**
**Analysis Batch: 119378**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 119364**

| Tentatively Identified Compound | MB Est. Result | MB Qualifier | Unit | D | RT | CAS No. | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Tentatively Identified Compound | None | | ug/Kg | | | | 05/17/13 17:16 | 05/17/13 23:46 | 1 |

| Surrogate | MB %Recovery | MB Qualifier | Limits | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 117 | | 53 - 146 | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| Toluene-d8 (Surr) | 114 | | 50 - 149 | 05/17/13 17:16 | 05/17/13 23:46 | 1 |
| 4-Bromofluorobenzene (Surr) | 110 | | 49 - 148 | 05/17/13 17:16 | 05/17/13 23:46 | 1 |

**Lab Sample ID: LCS 480-119364/1-A**
**Matrix: Solid**
**Analysis Batch: 119378**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 119364**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 2480 | 2670 | | ug/Kg | | 108 | 82 - 138 |
| 1,1-Dichloroethene | 2480 | 1610 | | ug/Kg | | 65 | 54 - 144 |
| 1,2-Dichlorobenzene | 2480 | 2810 | | ug/Kg | | 113 | 80 - 132 |
| 1,2-Dichloroethane | 2480 | 2740 | | ug/Kg | | 110 | 78 - 129 |
| Benzene | 2480 | 3050 | | ug/Kg | | 123 | 75 - 131 |
| Chlorobenzene | 2480 | 2970 | | ug/Kg | | 120 | 80 - 127 |
| cis-1,2-Dichloroethene | 2480 | 2860 | | ug/Kg | | 115 | 79 - 128 |
| Ethylbenzene | 2480 | 3060 | | ug/Kg | | 123 | 78 - 136 |
| Methyl tert-butyl ether | 2480 | 2640 | | ug/Kg | | 107 | 67 - 137 |
| Tetrachloroethene | 2480 | 2920 | | ug/Kg | | 118 | 72 - 141 |
| Toluene | 2480 | 3000 | | ug/Kg | | 121 | 76 - 133 |
| trans-1,2-Dichloroethene | 2480 | 3280 | | ug/Kg | | 132 | 81 - 147 |
| Trichloroethene | 2480 | 2980 | | ug/Kg | | 120 | 77 - 130 |

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 110 | | 53 - 146 |
| Toluene-d8 (Surr) | 110 | | 50 - 149 |
| 4-Bromofluorobenzene (Surr) | 110 | | 49 - 148 |

**Lab Sample ID: MB 480-119655/7**
**Matrix: Solid**
**Analysis Batch: 119655**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | ND | | 5.0 | 0.36 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,1,2,2-Tetrachloroethane | ND | | 5.0 | 0.81 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,1,2-Trichloroethane | ND | | 5.0 | 0.65 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,1-Dichloroethane | ND | | 5.0 | 0.61 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,1-Dichloroethene | ND | | 5.0 | 0.61 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,2,4-Trichlorobenzene | ND | | 5.0 | 0.30 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,2-Dibromo-3-Chloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,2-Dibromoethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,2-Dichlorobenzene | ND | | 5.0 | 0.39 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,2-Dichloroethane | ND | | 5.0 | 0.25 | ug/Kg | | | 05/20/13 19:58 | 1 |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-119655/7**
**Matrix: Solid**
**Analysis Batch: 119655**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | ND | | 5.0 | 2.5 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,3-Dichlorobenzene | ND | | 5.0 | 0.26 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 1,4-Dichlorobenzene | ND | | 5.0 | 0.70 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 2-Hexanone | ND | | 25 | 2.5 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 2-Butanone (MEK) | ND | | 25 | 1.8 | ug/Kg | | | 05/20/13 19:58 | 1 |
| 4-Methyl-2-pentanone (MIBK) | ND | | 25 | 1.6 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Acetone | ND | | 25 | 4.2 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Benzene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Bromodichloromethane | ND | | 5.0 | 0.67 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Bromoform | ND | | 5.0 | 2.5 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Bromomethane | ND | | 5.0 | 0.45 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Carbon disulfide | ND | | 5.0 | 2.5 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Carbon tetrachloride | ND | | 5.0 | 0.48 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Chlorobenzene | ND | | 5.0 | 0.66 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Dibromochloromethane | ND | | 5.0 | 0.64 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Chloroethane | ND | | 5.0 | 1.1 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Chloroform | ND | | 5.0 | 0.31 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Chloromethane | ND | | 5.0 | 0.30 | ug/Kg | | | 05/20/13 19:58 | 1 |
| cis-1,2-Dichloroethene | ND | | 5.0 | 0.64 | ug/Kg | | | 05/20/13 19:58 | 1 |
| cis-1,3-Dichloropropene | ND | | 5.0 | 0.72 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Cyclohexane | ND | | 5.0 | 0.70 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Dichlorodifluoromethane | ND | | 5.0 | 0.41 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Ethylbenzene | ND | | 5.0 | 0.35 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Isopropylbenzene | ND | | 5.0 | 0.75 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Methyl acetate | ND | | 5.0 | 0.93 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Methyl tert-butyl ether | ND | | 5.0 | 0.49 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Methylcyclohexane | ND | | 5.0 | 0.76 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Methylene Chloride | ND | | 5.0 | 2.3 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Styrene | ND | | 5.0 | 0.25 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Tetrachloroethene | ND | | 5.0 | 0.67 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Toluene | ND | | 5.0 | 0.38 | ug/Kg | | | 05/20/13 19:58 | 1 |
| trans-1,2-Dichloroethene | ND | | 5.0 | 0.52 | ug/Kg | | | 05/20/13 19:58 | 1 |
| trans-1,3-Dichloropropene | ND | | 5.0 | 2.2 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Trichloroethene | ND | | 5.0 | 1.1 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Trichlorofluoromethane | ND | | 5.0 | 0.47 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Vinyl chloride | ND | | 5.0 | 0.61 | ug/Kg | | | 05/20/13 19:58 | 1 |
| Xylenes, Total | ND | | 10 | 0.84 | ug/Kg | | | 05/20/13 19:58 | 1 |

| *Tentatively Identified Compound* | *MB Est. Result* | *MB Qualifier* | *Unit* | *D* | *RT* | *CAS No.* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|---|---|---|
| *Tentatively Identified Compound* | *None* | | *ug/Kg* | | | | | *05/20/13 19:58* | *1* |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *93* | | *64 - 126* | | *05/20/13 19:58* | *1* |
| *Toluene-d8 (Surr)* | *97* | | *71 - 125* | | *05/20/13 19:58* | *1* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *72 - 126* | | *05/20/13 19:58* | *1* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 480-119655/6**
**Matrix: Solid**
**Analysis Batch: 119655**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | 50.0 | 47.1 | | ug/Kg | | 94 | 73 - 126 |
| 1,1-Dichloroethene | 50.0 | 45.4 | | ug/Kg | | 91 | 59 - 125 |
| 1,2-Dichlorobenzene | 50.0 | 50.0 | | ug/Kg | | 100 | 75 - 120 |
| 1,2-Dichloroethane | 50.0 | 49.7 | | ug/Kg | | 99 | 77 - 122 |
| Benzene | 50.0 | 46.6 | | ug/Kg | | 93 | 79 - 127 |
| Chlorobenzene | 50.0 | 48.5 | | ug/Kg | | 97 | 76 - 124 |
| cis-1,2-Dichloroethene | 50.0 | 47.1 | | ug/Kg | | 94 | 81 - 117 |
| Ethylbenzene | 50.0 | 48.6 | | ug/Kg | | 97 | 80 - 120 |
| Methyl tert-butyl ether | 50.0 | 50.3 | | ug/Kg | | 101 | 63 - 125 |
| Tetrachloroethene | 50.0 | 47.6 | | ug/Kg | | 95 | 74 - 122 |
| Toluene | 50.0 | 47.6 | | ug/Kg | | 95 | 74 - 128 |
| trans-1,2-Dichloroethene | 50.0 | 46.5 | | ug/Kg | | 93 | 78 - 126 |
| Trichloroethene | 50.0 | 46.8 | | ug/Kg | | 94 | 77 - 129 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *97* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *96* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *96* | | *72 - 126* |

**Lab Sample ID: 480-38154-17 MS**
**Matrix: Solid**
**Analysis Batch: 119655**

**Client Sample ID: SPT-29(1.0-2.0)**
**Prep Type: Total/NA**
**Prep Batch: 119670**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 55.0 | 29.3 | F | ug/Kg | ☼ | 53 | 73 - 126 |
| 1,1-Dichloroethene | ND | | 55.0 | 16.7 | F | ug/Kg | ☼ | 30 | 59 - 125 |
| 1,2-Dichlorobenzene | ND | | 55.0 | 8.83 | F | ug/Kg | ☼ | 16 | 75 - 120 |
| 1,2-Dichloroethane | ND | | 55.0 | 16.8 | F | ug/Kg | ☼ | 31 | 77 - 122 |
| Benzene | ND | | 55.0 | 19.6 | F | ug/Kg | ☼ | 36 | 79 - 127 |
| Chlorobenzene | ND | | 55.0 | 8.78 | F | ug/Kg | ☼ | 16 | 76 - 124 |
| cis-1,2-Dichloroethene | ND | | 55.0 | 14.2 | F | ug/Kg | ☼ | 26 | 81 - 117 |
| Ethylbenzene | ND | | 55.0 | 8.94 | F | ug/Kg | ☼ | 16 | 80 - 120 |
| Methyl tert-butyl ether | ND | | 55.0 | 47.6 | | ug/Kg | ☼ | 87 | 63 - 125 |
| Tetrachloroethene | ND | | 55.0 | 13.2 | F | ug/Kg | ☼ | 24 | 74 - 122 |
| Toluene | ND | | 55.0 | 15.6 | F | ug/Kg | ☼ | 28 | 74 - 128 |
| trans-1,2-Dichloroethene | ND | | 55.0 | 12.6 | F | ug/Kg | ☼ | 23 | 78 - 126 |
| Trichloroethene | ND | | 55.0 | 9.72 | F | ug/Kg | ☼ | 18 | 77 - 129 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *86* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *128* | *X* | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *56* | *X* | *72 - 126* |

## Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 480-38154-17 MSD**
**Matrix: Solid**
**Analysis Batch: 119655**

**Client Sample ID: SPT-29(1.0-2.0)**
**Prep Type: Total/NA**
**Prep Batch: 119670**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,1-Dichloroethane | ND | | 54.5 | 33.5 | F | ug/Kg | ☼ | 61 | 73 - 126 | 13 | 30 |
| 1,1-Dichloroethene | ND | | 54.5 | 22.2 | F | ug/Kg | ☼ | 41 | 59 - 125 | 28 | 30 |
| 1,2-Dichlorobenzene | ND | | 54.5 | 8.15 | F | ug/Kg | ☼ | 15 | 75 - 120 | 8 | 30 |
| 1,2-Dichloroethane | ND | | 54.5 | 20.2 | F | ug/Kg | ☼ | 37 | 77 - 122 | 18 | 30 |
| Benzene | ND | | 54.5 | 23.6 | F | ug/Kg | ☼ | 43 | 79 - 127 | 18 | 30 |
| Chlorobenzene | ND | | 54.5 | 10.0 | F | ug/Kg | ☼ | 18 | 76 - 124 | 13 | 30 |
| cis-1,2-Dichloroethene | ND | | 54.5 | 17.5 | F | ug/Kg | ☼ | 32 | 81 - 117 | 21 | 30 |
| Ethylbenzene | ND | | 54.5 | 11.7 | F | ug/Kg | ☼ | 21 | 80 - 120 | 27 | 30 |
| Methyl tert-butyl ether | ND | | 54.5 | 47.6 | | ug/Kg | ☼ | 87 | 63 - 125 | 0 | 30 |
| Tetrachloroethene | ND | | 54.5 | 17.6 | F | ug/Kg | ☼ | 32 | 74 - 122 | 29 | 30 |
| Toluene | ND | | 54.5 | 17.4 | F | ug/Kg | ☼ | 32 | 74 - 128 | 11 | 30 |
| trans-1,2-Dichloroethene | ND | | 54.5 | 16.9 | F | ug/Kg | ☼ | 31 | 78 - 126 | 29 | 30 |
| Trichloroethene | ND | | 54.5 | 13.6 | F | ug/Kg | ☼ | 25 | 77 - 129 | 34 | 30 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *1,2-Dichloroethane-d4 (Surr)* | *89* | | *64 - 126* |
| *Toluene-d8 (Surr)* | *114* | | *71 - 125* |
| *4-Bromofluorobenzene (Surr)* | *67* | *X* | *72 - 126* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 480-117993/1-A**
**Matrix: Solid**
**Analysis Batch: 118262**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 117993**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 170 | 1.9 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Acenaphthylene | ND | | 170 | 1.4 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Anthracene | ND | | 170 | 4.2 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Benz(a)anthracene | ND | | 170 | 2.9 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Benzo(a)pyrene | ND | | 170 | 4.0 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Benzo(b)fluoranthene | ND | | 170 | 3.2 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Benzo(g,h,i)perylene | ND | | 170 | 2.0 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Benzo(k)fluoranthene | ND | | 170 | 1.8 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Chrysene | ND | | 170 | 1.7 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Dibenz(a,h)anthracene | ND | | 170 | 1.9 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Fluoranthene | ND | | 170 | 2.4 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Fluorene | ND | | 170 | 3.8 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 170 | 4.6 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Naphthalene | ND | | 170 | 2.7 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Phenanthrene | ND | | 170 | 3.5 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |
| Pyrene | ND | | 170 | 1.1 | ug/Kg | | 05/10/13 14:23 | 05/13/13 13:29 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *66* | | *34 - 132* | *05/10/13 14:23* | *05/13/13 13:29* | *1* |
| *2-Fluorobiphenyl* | *69* | | *37 - 120* | *05/10/13 14:23* | *05/13/13 13:29* | *1* |
| *p-Terphenyl-d14* | *101* | | *65 - 153* | *05/10/13 14:23* | *05/13/13 13:29* | *1* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LCS 480-117993/2-A**
**Matrix: Solid**
**Analysis Batch: 118262**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 117993**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 1630 | 1550 | | ug/Kg | | 95 | 53 - 120 |
| Acenaphthylene | 1630 | 1560 | | ug/Kg | | 96 | 58 - 121 |
| Anthracene | 1630 | 1630 | | ug/Kg | | 100 | 62 - 129 |
| Benz(a)anthracene | 1630 | 1940 | | ug/Kg | | 119 | 65 - 133 |
| Benzo(a)pyrene | 1630 | 1840 | | ug/Kg | | 113 | 64 - 127 |
| Benzo(b)fluoranthene | 1630 | 1770 | | ug/Kg | | 109 | 64 - 135 |
| Benzo(g,h,i)perylene | 1630 | 2230 | | ug/Kg | | 137 | 50 - 152 |
| Benzo(k)fluoranthene | 1630 | 1560 | | ug/Kg | | 96 | 58 - 138 |
| Chrysene | 1630 | 1790 | | ug/Kg | | 110 | 64 - 131 |
| Dibenz(a,h)anthracene | 1630 | 1880 | | ug/Kg | | 116 | 54 - 148 |
| Fluoranthene | 1630 | 1580 | | ug/Kg | | 97 | 62 - 131 |
| Fluorene | 1630 | 1580 | | ug/Kg | | 97 | 63 - 126 |
| Indeno(1,2,3-c,d)pyrene | 1630 | 1890 | | ug/Kg | | 116 | 56 - 149 |
| Naphthalene | 1630 | 1400 | | ug/Kg | | 86 | 46 - 120 |
| Phenanthrene | 1630 | 1630 | | ug/Kg | | 101 | 60 - 130 |
| Pyrene | 1630 | 1840 | | ug/Kg | | 113 | 51 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *67* | | *34 - 132* |
| *2-Fluorobiphenyl* | *75* | | *37 - 120* |
| *p-Terphenyl-d14* | *101* | | *65 - 153* |

**Lab Sample ID: 480-37943-1 MS**
**Matrix: Solid**
**Analysis Batch: 119431**

**Client Sample ID: DPT-01 (13-5-14.0)**
**Prep Type: Total/NA**
**Prep Batch: 117993**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.0 | J | 1860 | 1680 | | ug/Kg | ☼ | 90 | 53 - 120 |
| Acenaphthylene | 32 | J | 1860 | 1640 | | ug/Kg | ☼ | 86 | 58 - 121 |
| Anthracene | ND | | 1860 | 1810 | | ug/Kg | ☼ | 97 | 62 - 129 |
| Benz(a)anthracene | ND | | 1860 | 2050 | | ug/Kg | ☼ | 110 | 65 - 133 |
| Benzo(a)pyrene | ND | | 1860 | 2000 | | ug/Kg | ☼ | 107 | 64 - 127 |
| Benzo(b)fluoranthene | ND | | 1860 | 1930 | | ug/Kg | ☼ | 104 | 64 - 135 |
| Benzo(g,h,i)perylene | ND | | 1860 | 2470 | | ug/Kg | ☼ | 133 | 50 - 152 |
| Benzo(k)fluoranthene | ND | | 1860 | 1780 | | ug/Kg | ☼ | 96 | 58 - 138 |
| Chrysene | ND | | 1860 | 2010 | | ug/Kg | ☼ | 108 | 64 - 131 |
| Dibenz(a,h)anthracene | ND | | 1860 | 1980 | | ug/Kg | ☼ | 106 | 54 - 148 |
| Fluoranthene | 7.8 | J | 1860 | 1870 | | ug/Kg | ☼ | 100 | 62 - 131 |
| Fluorene | 32 | J | 1860 | 1770 | | ug/Kg | ☼ | 93 | 63 - 126 |
| Indeno(1,2,3-c,d)pyrene | ND | | 1860 | 2000 | | ug/Kg | ☼ | 108 | 56 - 149 |
| Naphthalene | 1300 | | 1860 | 1530 | F | ug/Kg | ☼ | 14 | 46 - 120 |
| Phenanthrene | 32 | J | 1860 | 1830 | | ug/Kg | ☼ | 97 | 60 - 130 |
| Pyrene | ND | | 1860 | 1970 | | ug/Kg | ☼ | 106 | 51 - 133 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *64* | | *34 - 132* |
| *2-Fluorobiphenyl* | *71* | | *37 - 120* |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 480-37943-1 MS**
**Matrix: Solid**
**Analysis Batch: 119431**

**Client Sample ID: DPT-01 (13-5-14.0)**
**Prep Type: Total/NA**
**Prep Batch: 117993**

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| *p-Terphenyl-d14* | *96* | | *65 - 153* |

**Lab Sample ID: 480-37943-1 MSD**
**Matrix: Solid**
**Analysis Batch: 119431**

**Client Sample ID: DPT-01 (13-5-14.0)**
**Prep Type: Total/NA**
**Prep Batch: 117993**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 6.0 | J | 1850 | 1580 | | ug/Kg | ☼ | 85 | 53 - 120 | 6 | 35 |
| Acenaphthylene | 32 | J | 1850 | 1570 | | ug/Kg | ☼ | 83 | 58 - 121 | 5 | 18 |
| Anthracene | ND | | 1850 | 1680 | | ug/Kg | ☼ | 91 | 62 - 129 | 7 | 15 |
| Benz(a)anthracene | ND | | 1850 | 1900 | | ug/Kg | ☼ | 103 | 65 - 133 | 8 | 15 |
| Benzo(a)pyrene | ND | | 1850 | 1870 | | ug/Kg | ☼ | 101 | 64 - 127 | 7 | 15 |
| Benzo(b)fluoranthene | ND | | 1850 | 1870 | | ug/Kg | ☼ | 101 | 64 - 135 | 3 | 15 |
| Benzo(g,h,i)perylene | ND | | 1850 | 2300 | | ug/Kg | ☼ | 124 | 50 - 152 | 7 | 15 |
| Benzo(k)fluoranthene | ND | | 1850 | 1560 | | ug/Kg | ☼ | 84 | 58 - 138 | 13 | 22 |
| Chrysene | ND | | 1850 | 1840 | | ug/Kg | ☼ | 99 | 64 - 131 | 9 | 15 |
| Dibenz(a,h)anthracene | ND | | 1850 | 1850 | | ug/Kg | ☼ | 100 | 54 - 148 | 7 | 15 |
| Fluoranthene | 7.8 | J | 1850 | 1700 | | ug/Kg | ☼ | 91 | 62 - 131 | 9 | 15 |
| Fluorene | 32 | J | 1850 | 1650 | | ug/Kg | ☼ | 87 | 63 - 126 | 7 | 15 |
| Indeno(1,2,3-c,d)pyrene | ND | | 1850 | 1880 | | ug/Kg | ☼ | 102 | 56 - 149 | 6 | 15 |
| Naphthalene | 1300 | | 1850 | 1990 | F | ug/Kg | ☼ | 39 | 46 - 120 | 26 | 29 |
| Phenanthrene | 32 | J | 1850 | 1700 | | ug/Kg | ☼ | 90 | 60 - 130 | 8 | 15 |
| Pyrene | ND | | 1850 | 1820 | | ug/Kg | ☼ | 98 | 51 - 133 | 8 | 35 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| *Nitrobenzene-d5* | *62* | | *34 - 132* |
| *2-Fluorobiphenyl* | *68* | | *37 - 120* |
| *p-Terphenyl-d14* | *89* | | *65 - 153* |

**Lab Sample ID: MB 480-118555/1-A**
**Matrix: Solid**
**Analysis Batch: 119772**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 118555**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 170 | 2.0 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Acenaphthylene | ND | | 170 | 1.4 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Anthracene | ND | | 170 | 4.3 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Benz(a)anthracene | ND | | 170 | 2.9 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Benzo(a)pyrene | ND | | 170 | 4.0 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Benzo(b)fluoranthene | ND | | 170 | 3.3 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Benzo(g,h,i)perylene | ND | | 170 | 2.0 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Benzo(k)fluoranthene | ND | | 170 | 1.8 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Chrysene | ND | | 170 | 1.7 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Dibenz(a,h)anthracene | ND | | 170 | 2.0 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Fluoranthene | ND | | 170 | 2.4 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Fluorene | ND | | 170 | 3.9 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Indeno(1,2,3-c,d)pyrene | ND | | 170 | 4.6 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Naphthalene | ND | | 170 | 2.8 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-118555/1-A**
**Matrix: Solid**
**Analysis Batch: 119772**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 118555**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Phenanthrene | ND | | 170 | 3.5 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |
| Pyrene | ND | | 170 | 1.1 | ug/Kg | | 05/14/13 14:43 | 05/21/13 14:06 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Nitrobenzene-d5* | *63* | | *34 - 132* | *05/14/13 14:43* | *05/21/13 14:06* | *1* |
| *2-Fluorobiphenyl* | *67* | | *37 - 120* | *05/14/13 14:43* | *05/21/13 14:06* | *1* |
| *p-Terphenyl-d14* | *85* | | *65 - 153* | *05/14/13 14:43* | *05/21/13 14:06* | *1* |

**Lab Sample ID: LCS 480-118555/2-A**
**Matrix: Solid**
**Analysis Batch: 119772**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 118555**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 1660 | 1430 | | ug/Kg | | 86 | 53 - 120 |
| Acenaphthylene | 1660 | 1410 | | ug/Kg | | 85 | 58 - 121 |
| Anthracene | 1660 | 1460 | | ug/Kg | | 88 | 62 - 129 |
| Benz(a)anthracene | 1660 | 1570 | | ug/Kg | | 95 | 65 - 133 |
| Benzo(a)pyrene | 1660 | 1570 | | ug/Kg | | 95 | 64 - 127 |
| Benzo(b)fluoranthene | 1660 | 1440 | | ug/Kg | | 86 | 64 - 135 |
| Benzo(g,h,i)perylene | 1660 | 1400 | | ug/Kg | | 84 | 50 - 152 |
| Benzo(k)fluoranthene | 1660 | 1450 | | ug/Kg | | 87 | 58 - 138 |
| Chrysene | 1660 | 1470 | | ug/Kg | | 89 | 64 - 131 |
| Dibenz(a,h)anthracene | 1660 | 1320 | | ug/Kg | | 80 | 54 - 148 |
| Fluoranthene | 1660 | 1520 | | ug/Kg | | 91 | 62 - 131 |
| Fluorene | 1660 | 1480 | | ug/Kg | | 89 | 63 - 126 |
| Indeno(1,2,3-c,d)pyrene | 1660 | 1320 | | ug/Kg | | 80 | 56 - 149 |
| Naphthalene | 1660 | 1280 | | ug/Kg | | 77 | 46 - 120 |
| Phenanthrene | 1660 | 1470 | | ug/Kg | | 88 | 60 - 130 |
| Pyrene | 1660 | 1450 | | ug/Kg | | 87 | 51 - 133 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *72* | | *34 - 132* |
| *2-Fluorobiphenyl* | *81* | | *37 - 120* |
| *p-Terphenyl-d14* | *93* | | *65 - 153* |

**Lab Sample ID: 480-38154-17 MS**
**Matrix: Solid**
**Analysis Batch: 119772**

**Client Sample ID: SPT-29(1.0-2.0)**
**Prep Type: Total/NA**
**Prep Batch: 118555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1860 | 1460 | | ug/Kg | ☼ | 79 | 53 - 120 |
| Acenaphthylene | 350 | J | 1860 | 2590 | | ug/Kg | ☼ | 120 | 58 - 121 |
| Anthracene | 440 | J | 1860 | 3370 | F | ug/Kg | ☼ | 158 | 62 - 129 |
| Benz(a)anthracene | 2000 | | 1860 | 6590 | F | ug/Kg | ☼ | 246 | 65 - 133 |
| Benzo(a)pyrene | 1500 | | 1860 | 5790 | F | ug/Kg | ☼ | 230 | 64 - 127 |
| Benzo(b)fluoranthene | 2700 | | 1860 | 10000 | F | ug/Kg | ☼ | 393 | 64 - 135 |
| Benzo(g,h,i)perylene | 750 | J | 1860 | 2940 | | ug/Kg | ☼ | 118 | 50 - 152 |
| Benzo(k)fluoranthene | 860 | J | 1860 | 4090 | F | ug/Kg | ☼ | 174 | 58 - 138 |

## Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 480-38154-17 MS**
**Matrix: Solid**
**Analysis Batch: 119772**

**Client Sample ID: SPT-29(1.0-2.0)**
**Prep Type: Total/NA**
**Prep Batch: 118555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chrysene | 1900 | | 1860 | 6710 | F | ug/Kg | ☼ | 256 | 64 - 131 |
| Dibenz(a,h)anthracene | 830 | J | 1860 | 2080 | | ug/Kg | ☼ | 67 | 54 - 148 |
| Fluoranthene | 3200 | | 1860 | 10400 | F | ug/Kg | ☼ | 387 | 62 - 131 |
| Fluorene | 160 | J | 1860 | 2320 | | ug/Kg | ☼ | 116 | 63 - 126 |
| Indeno(1,2,3-c,d)pyrene | 1200 | | 1860 | 3230 | | ug/Kg | ☼ | 110 | 56 - 149 |
| Naphthalene | 460 | J | 1860 | 3330 | F | ug/Kg | ☼ | 155 | 46 - 120 |
| Phenanthrene | 2400 | | 1860 | 9350 | F | ug/Kg | ☼ | 374 | 60 - 130 |
| Pyrene | 2400 | | 1860 | 7720 | F | ug/Kg | ☼ | 286 | 51 - 133 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *61* | | *34 - 132* |
| *2-Fluorobiphenyl* | *69* | | *37 - 120* |
| *p-Terphenyl-d14* | *70* | | *65 - 153* |

**Lab Sample ID: 480-38154-17 MSD**
**Matrix: Solid**
**Analysis Batch: 119772**

**Client Sample ID: SPT-29(1.0-2.0)**
**Prep Type: Total/NA**
**Prep Batch: 118555**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acenaphthene | ND | | 1870 | 1500 | | ug/Kg | ☼ | 80 | 53 - 120 | 2 | 35 |
| Acenaphthylene | 350 | J | 1870 | 2140 | F | ug/Kg | ☼ | 96 | 58 - 121 | 19 | 18 |
| Anthracene | 440 | J | 1870 | 2920 | F | ug/Kg | ☼ | 133 | 62 - 129 | 15 | 15 |
| Benz(a)anthracene | 2000 | | 1870 | 4580 | F | ug/Kg | ☼ | 137 | 65 - 133 | 36 | 15 |
| Benzo(a)pyrene | 1500 | | 1870 | 3680 | F | ug/Kg | ☼ | 117 | 64 - 127 | 44 | 15 |
| Benzo(b)fluoranthene | 2700 | | 1870 | 5000 | F | ug/Kg | ☼ | 123 | 64 - 135 | 67 | 15 |
| Benzo(g,h,i)perylene | 750 | J | 1870 | 2100 | F | ug/Kg | ☼ | 72 | 50 - 152 | 33 | 15 |
| Benzo(k)fluoranthene | 860 | J | 1870 | 2940 | F | ug/Kg | ☼ | 112 | 58 - 138 | 33 | 22 |
| Chrysene | 1900 | | 1870 | 4270 | F | ug/Kg | ☼ | 125 | 64 - 131 | 44 | 15 |
| Dibenz(a,h)anthracene | 830 | J | 1870 | 1830 | F | ug/Kg | ☼ | 53 | 54 - 148 | 13 | 15 |
| Fluoranthene | 3200 | | 1870 | 7700 | F | ug/Kg | ☼ | 239 | 62 - 131 | 30 | 15 |
| Fluorene | 160 | J | 1870 | 2230 | | ug/Kg | ☼ | 111 | 63 - 126 | 4 | 15 |
| Indeno(1,2,3-c,d)pyrene | 1200 | | 1870 | 2450 | F | ug/Kg | ☼ | 68 | 56 - 149 | 27 | 15 |
| Naphthalene | 460 | J | 1870 | 2050 | F | ug/Kg | ☼ | 85 | 46 - 120 | 48 | 29 |
| Phenanthrene | 2400 | | 1870 | 8420 | F | ug/Kg | ☼ | 323 | 60 - 130 | 10 | 15 |
| Pyrene | 2400 | | 1870 | 5590 | F | ug/Kg | ☼ | 171 | 51 - 133 | 32 | 35 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *Nitrobenzene-d5* | *64* | | *34 - 132* |
| *2-Fluorobiphenyl* | *74* | | *37 - 120* |
| *p-Terphenyl-d14* | *74* | | *65 - 153* |

## GC/MS VOA

### Analysis Batch: 117857

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 480-117898/1-A | Lab Control Sample | Total/NA | Solid | 8260B | 117898 |
| MB 480-117898/2-A | Method Blank | Total/NA | Solid | 8260B | 117898 |

### Prep Batch: 117898

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-2 | DPT-02 (4.5-5.0) | Total/NA | Solid | 5035 | |
| LCS 480-117898/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| MB 480-117898/2-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 118093

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-9 | DPT-10 (4.0-4.5) | Total/NA | Solid | 8260B | 118104 |
| 480-37943-9 MS | DPT-10 (4.0-4.5) | Total/NA | Solid | 8260B | 118104 |
| 480-37943-9 MSD | DPT-10 (4.0-4.5) | Total/NA | Solid | 8260B | 118104 |
| LCS 480-118093/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| MB 480-118093/5 | Method Blank | Total/NA | Solid | 8260B | |

### Prep Batch: 118104

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-9 | DPT-10 (4.0-4.5) | Total/NA | Solid | 5035 | |
| 480-37943-9 MS | DPT-10 (4.0-4.5) | Total/NA | Solid | 5035 | |
| 480-37943-9 MSD | DPT-10 (4.0-4.5) | Total/NA | Solid | 5035 | |

### Analysis Batch: 118211

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-2 | DPT-02 (4.5-5.0) | Total/NA | Solid | 8260B | 117898 |

### Analysis Batch: 118255

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-10 | DPT-22(13.5-14.0) | Total/NA | Solid | 8260B | 118263 |
| 480-38154-17 | SPT-29(1.0-2.0) | Total/NA | Solid | 8260B | 118263 |
| LCS 480-118255/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| MB 480-118255/7 | Method Blank | Total/NA | Solid | 8260B | |

### Prep Batch: 118263

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-10 | DPT-22(13.5-14.0) | Total/NA | Solid | 5035 | |
| 480-38154-17 | SPT-29(1.0-2.0) | Total/NA | Solid | 5035 | |
| 480-38154-18 | DPT-29(6.0-7.0) | Total/NA | Solid | 5035 | |
| 480-38154-19 | FD051013 | Total/NA | Solid | 5035 | |

### Analysis Batch: 118414

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-1 | DPT-20(12.0-12.5) | Total/NA | Solid | 8260B | 118445 |
| 480-38154-2 | DPT-21(3.0-3.5) | Total/NA | Solid | 8260B | 118445 |
| 480-38154-18 | DPT-29(6.0-7.0) | Total/NA | Solid | 8260B | 118263 |
| 480-38154-19 | FD051013 | Total/NA | Solid | 8260B | 118263 |
| 480-38156-D-10-B MS | Matrix Spike | Total/NA | Solid | 8260B | 118436 |
| 480-38156-D-10-C MSD | Matrix Spike Duplicate | Total/NA | Solid | 8260B | 118436 |
| LCS 480-118414/4 | Lab Control Sample | Total/NA | Solid | 8260B | |
| MB 480-118414/5 | Method Blank | Total/NA | Solid | 8260B | |

## GC/MS VOA (Continued)

### Prep Batch: 118436

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38156-D-10-B MS | Matrix Spike | Total/NA | Solid | 5035 | |
| 480-38156-D-10-C MSD | Matrix Spike Duplicate | Total/NA | Solid | 5035 | |

### Prep Batch: 118445

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-1 | DPT-20(12.0-12.5) | Total/NA | Solid | 5035 | |
| 480-38154-2 | DPT-21(3.0-3.5) | Total/NA | Solid | 5035 | |

### Prep Batch: 119364

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-4 | DPT-15(10.0-11.0) | Total/NA | Solid | 5035 | |
| 480-38154-6 | DPT-16(9.5-10.0) | Total/NA | Solid | 5035 | |
| 480-38154-8 | DPT-18(3.5-4.0) | Total/NA | Solid | 5035 | |
| 480-38154-12 | DPT-24(9.0-10.0) | Total/NA | Solid | 5035 | |
| LCS 480-119364/1-A | Lab Control Sample | Total/NA | Solid | 5035 | |
| MB 480-119364/2-A | Method Blank | Total/NA | Solid | 5035 | |

### Analysis Batch: 119378

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-4 | DPT-15(10.0-11.0) | Total/NA | Solid | 8260B | 119364 |
| 480-38154-6 | DPT-16(9.5-10.0) | Total/NA | Solid | 8260B | 119364 |
| 480-38154-8 | DPT-18(3.5-4.0) | Total/NA | Solid | 8260B | 119364 |
| 480-38154-12 | DPT-24(9.0-10.0) | Total/NA | Solid | 8260B | 119364 |
| LCS 480-119364/1-A | Lab Control Sample | Total/NA | Solid | 8260B | 119364 |
| MB 480-119364/2-A | Method Blank | Total/NA | Solid | 8260B | 119364 |

### Prep Batch: 119649

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-5 | DPT-05 (22.5-23.0) | Total/NA | Solid | 5035 | |
| 480-37943-7 | DPT-08 (3.5-4.0) | Total/NA | Solid | 5035 | |

### Analysis Batch: 119655

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-5 | DPT-05 (22.5-23.0) | Total/NA | Solid | 8260B | 119649 |
| 480-37943-7 | DPT-08 (3.5-4.0) | Total/NA | Solid | 8260B | 119649 |
| 480-38154-17 MS | SPT-29(1.0-2.0) | Total/NA | Solid | 8260B | 119670 |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | Total/NA | Solid | 8260B | 119670 |
| LCS 480-119655/6 | Lab Control Sample | Total/NA | Solid | 8260B | |
| MB 480-119655/7 | Method Blank | Total/NA | Solid | 8260B | |

### Prep Batch: 119670

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-17 MS | SPT-29(1.0-2.0) | Total/NA | Solid | 5035 | |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | Total/NA | Solid | 5035 | |

## GC/MS Semi VOA

### Prep Batch: 117993

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-1 | DPT-01 (13-5-14.0) | Total/NA | Solid | 3550B | |

## GC/MS Semi VOA (Continued)

### Prep Batch: 117993 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-1 MS | DPT-01 (13-5-14.0) | Total/NA | Solid | 3550B | |
| 480-37943-1 MSD | DPT-01 (13-5-14.0) | Total/NA | Solid | 3550B | |
| 480-37943-2 | DPT-02 (4.5-5.0) | Total/NA | Solid | 3550B | |
| 480-37943-3 | DPT-03 (14.5-15.0) | Total/NA | Solid | 3550B | |
| 480-37943-4 | DPT-05 (2.5-3.0) | Total/NA | Solid | 3550B | |
| 480-37943-5 | DPT-05 (22.5-23.0) | Total/NA | Solid | 3550B | |
| 480-37943-6 | DPT-07 (11.0-11.5) | Total/NA | Solid | 3550B | |
| 480-37943-7 | DPT-08 (3.5-4.0) | Total/NA | Solid | 3550B | |
| 480-37943-8 | DPT-09 (22.5-23.0) | Total/NA | Solid | 3550B | |
| 480-37943-9 | DPT-10 (4.0-4.5) | Total/NA | Solid | 3550B | |
| 480-37943-10 | DPT-11 (23.0-23.5) | Total/NA | Solid | 3550B | |
| 480-37943-11 | DPT-12 (3.5-4.0) | Total/NA | Solid | 3550B | |
| 480-37943-12 | DPT-13 (7.5-8.0) | Total/NA | Solid | 3550B | |
| 480-37943-13 | DPT-13 (15.0-15.5) | Total/NA | Solid | 3550B | |
| 480-37943-14 | DPT-14 (6.0-6.5) | Total/NA | Solid | 3550B | |
| 480-37943-15 | DPT-14 (16.0-16.5) | Total/NA | Solid | 3550B | |
| LCS 480-117993/2-A | Lab Control Sample | Total/NA | Solid | 3550B | |
| MB 480-117993/1-A | Method Blank | Total/NA | Solid | 3550B | |

### Analysis Batch: 118262

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 480-117993/2-A | Lab Control Sample | Total/NA | Solid | 8270C | 117993 |
| MB 480-117993/1-A | Method Blank | Total/NA | Solid | 8270C | 117993 |

### Prep Batch: 118555

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-1 | DPT-20(12.0-12.5) | Total/NA | Solid | 3550B | |
| 480-38154-2 | DPT-21(3.0-3.5) | Total/NA | Solid | 3550B | |
| 480-38154-3 | DPT-21(21.5-22.0) | Total/NA | Solid | 3550B | |
| 480-38154-4 | DPT-15(10.0-11.0) | Total/NA | Solid | 3550B | |
| 480-38154-5 | DPT-15(17.0-17.5) | Total/NA | Solid | 3550B | |
| 480-38154-6 | DPT-16(9.5-10.0) | Total/NA | Solid | 3550B | |
| 480-38154-6 - DL | DPT-16(9.5-10.0) | Total/NA | Solid | 3550B | |
| 480-38154-7 | DPT-17(18.5-19.0) | Total/NA | Solid | 3550B | |
| 480-38154-8 | DPT-18(3.5-4.0) | Total/NA | Solid | 3550B | |
| 480-38154-8 - DL | DPT-18(3.5-4.0) | Total/NA | Solid | 3550B | |
| 480-38154-9 | DPT-19(15.5-16.0) | Total/NA | Solid | 3550B | |
| 480-38154-10 | DPT-22(13.5-14.0) | Total/NA | Solid | 3550B | |
| 480-38154-11 | DPT-23(2.5-3.0) | Total/NA | Solid | 3550B | |
| 480-38154-12 | DPT-24(9.0-10.0) | Total/NA | Solid | 3550B | |
| 480-38154-12 - DL | DPT-24(9.0-10.0) | Total/NA | Solid | 3550B | |
| 480-38154-13 | DPT-25(22.0-23.0) | Total/NA | Solid | 3550B | |
| 480-38154-14 | DPT-26(17.0-17.5) | Total/NA | Solid | 3550B | |
| 480-38154-15 | DPT-27(12.0-13.0) | Total/NA | Solid | 3550B | |
| 480-38154-16 | DPT-27(22.0-22.5) | Total/NA | Solid | 3550B | |
| 480-38154-17 | SPT-29(1.0-2.0) | Total/NA | Solid | 3550B | |
| 480-38154-17 MS | SPT-29(1.0-2.0) | Total/NA | Solid | 3550B | |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | Total/NA | Solid | 3550B | |
| 480-38154-18 | DPT-29(6.0-7.0) | Total/NA | Solid | 3550B | |
| 480-38154-19 | FD051013 | Total/NA | Solid | 3550B | |
| LCS 480-118555/2-A | Lab Control Sample | Total/NA | Solid | 3550B | |

## GC/MS Semi VOA (Continued)

### Prep Batch: 118555 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| MB 480-118555/1-A | Method Blank | Total/NA | Solid | 3550B | |

### Analysis Batch: 119431

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-1 | DPT-01 (13-5-14.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-1 MS | DPT-01 (13-5-14.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-1 MSD | DPT-01 (13-5-14.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-2 | DPT-02 (4.5-5.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-3 | DPT-03 (14.5-15.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-4 | DPT-05 (2.5-3.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-5 | DPT-05 (22.5-23.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-6 | DPT-07 (11.0-11.5) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-7 | DPT-08 (3.5-4.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-8 | DPT-09 (22.5-23.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-9 | DPT-10 (4.0-4.5) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-10 | DPT-11 (23.0-23.5) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-11 | DPT-12 (3.5-4.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-12 | DPT-13 (7.5-8.0) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-13 | DPT-13 (15.0-15.5) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-14 | DPT-14 (6.0-6.5) | Total/NA | Solid | 8270C | 117993 |
| 480-37943-15 | DPT-14 (16.0-16.5) | Total/NA | Solid | 8270C | 117993 |

### Analysis Batch: 119772

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-1 | DPT-20(12.0-12.5) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-2 | DPT-21(3.0-3.5) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-3 | DPT-21(21.5-22.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-4 | DPT-15(10.0-11.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-5 | DPT-15(17.0-17.5) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-6 | DPT-16(9.5-10.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-7 | DPT-17(18.5-19.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-8 | DPT-18(3.5-4.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-9 | DPT-19(15.5-16.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-11 | DPT-23(2.5-3.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-12 | DPT-24(9.0-10.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-13 | DPT-25(22.0-23.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-14 | DPT-26(17.0-17.5) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-17 | SPT-29(1.0-2.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-17 MS | SPT-29(1.0-2.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | Total/NA | Solid | 8270C | 118555 |
| LCS 480-118555/2-A | Lab Control Sample | Total/NA | Solid | 8270C | 118555 |
| MB 480-118555/1-A | Method Blank | Total/NA | Solid | 8270C | 118555 |

### Analysis Batch: 119996

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-6 - DL | DPT-16(9.5-10.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-8 - DL | DPT-18(3.5-4.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-10 | DPT-22(13.5-14.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-12 - DL | DPT-24(9.0-10.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-15 | DPT-27(12.0-13.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-16 | DPT-27(22.0-22.5) | Total/NA | Solid | 8270C | 118555 |

## GC/MS Semi VOA (Continued)

### Analysis Batch: 119996 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-18 | DPT-29(6.0-7.0) | Total/NA | Solid | 8270C | 118555 |
| 480-38154-19 | FD051013 | Total/NA | Solid | 8270C | 118555 |

## General Chemistry

### Analysis Batch: 117776

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-37943-1 | DPT-01 (13-5-14.0) | Total/NA | Solid | Moisture | |
| 480-37943-2 | DPT-02 (4.5-5.0) | Total/NA | Solid | Moisture | |
| 480-37943-3 | DPT-03 (14.5-15.0) | Total/NA | Solid | Moisture | |
| 480-37943-4 | DPT-05 (2.5-3.0) | Total/NA | Solid | Moisture | |
| 480-37943-5 | DPT-05 (22.5-23.0) | Total/NA | Solid | Moisture | |
| 480-37943-6 | DPT-07 (11.0-11.5) | Total/NA | Solid | Moisture | |
| 480-37943-7 | DPT-08 (3.5-4.0) | Total/NA | Solid | Moisture | |
| 480-37943-8 | DPT-09 (22.5-23.0) | Total/NA | Solid | Moisture | |
| 480-37943-9 | DPT-10 (4.0-4.5) | Total/NA | Solid | Moisture | |
| 480-37943-10 | DPT-11 (23.0-23.5) | Total/NA | Solid | Moisture | |
| 480-37943-11 | DPT-12 (3.5-4.0) | Total/NA | Solid | Moisture | |
| 480-37943-12 | DPT-13 (7.5-8.0) | Total/NA | Solid | Moisture | |
| 480-37943-13 | DPT-13 (15.0-15.5) | Total/NA | Solid | Moisture | |
| 480-37943-14 | DPT-14 (6.0-6.5) | Total/NA | Solid | Moisture | |
| 480-37943-15 | DPT-14 (16.0-16.5) | Total/NA | Solid | Moisture | |
| 480-37944-A-7 MS | Matrix Spike | Total/NA | Solid | Moisture | |
| 480-37944-A-7 MSD | Matrix Spike Duplicate | Total/NA | Solid | Moisture | |

### Analysis Batch: 118106

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 480-38154-1 | DPT-20(12.0-12.5) | Total/NA | Solid | Moisture | |
| 480-38154-2 | DPT-21(3.0-3.5) | Total/NA | Solid | Moisture | |
| 480-38154-3 | DPT-21(21.5-22.0) | Total/NA | Solid | Moisture | |
| 480-38154-4 | DPT-15(10.0-11.0) | Total/NA | Solid | Moisture | |
| 480-38154-5 | DPT-15(17.0-17.5) | Total/NA | Solid | Moisture | |
| 480-38154-6 | DPT-16(9.5-10.0) | Total/NA | Solid | Moisture | |
| 480-38154-7 | DPT-17(18.5-19.0) | Total/NA | Solid | Moisture | |
| 480-38154-8 | DPT-18(3.5-4.0) | Total/NA | Solid | Moisture | |
| 480-38154-9 | DPT-19(15.5-16.0) | Total/NA | Solid | Moisture | |
| 480-38154-10 | DPT-22(13.5-14.0) | Total/NA | Solid | Moisture | |
| 480-38154-11 | DPT-23(2.5-3.0) | Total/NA | Solid | Moisture | |
| 480-38154-12 | DPT-24(9.0-10.0) | Total/NA | Solid | Moisture | |
| 480-38154-13 | DPT-25(22.0-23.0) | Total/NA | Solid | Moisture | |
| 480-38154-14 | DPT-26(17.0-17.5) | Total/NA | Solid | Moisture | |
| 480-38154-15 | DPT-27(12.0-13.0) | Total/NA | Solid | Moisture | |
| 480-38154-16 | DPT-27(22.0-22.5) | Total/NA | Solid | Moisture | |
| 480-38154-17 | SPT-29(1.0-2.0) | Total/NA | Solid | Moisture | |
| 480-38154-17 MS | SPT-29(1.0-2.0) | Total/NA | Solid | Moisture | |
| 480-38154-17 MSD | SPT-29(1.0-2.0) | Total/NA | Solid | Moisture | |
| 480-38154-18 | DPT-29(6.0-7.0) | Total/NA | Solid | Moisture | |
| 480-38154-19 | FD051013 | Total/NA | Solid | Moisture | |

## Client Sample ID: DPT-01 (13-5-14.0)

**Lab Sample ID: 480-37943-1**

**Date Collected: 05/06/13 09:15**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 88.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 11:47 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-02 (4.5-5.0)

**Lab Sample ID: 480-37943-2**

**Date Collected: 05/06/13 11:00**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 69.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 117898 | 05/10/13 18:05 | TRF | TAL BUF |
| Total/NA | Analysis | 8260B | | 20 | 118211 | 05/13/13 11:26 | RL | TAL BUF |
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 400 | 119431 | 05/18/13 12:11 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-03 (14.5-15.0)

**Lab Sample ID: 480-37943-3**

**Date Collected: 05/06/13 11:35**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 86.0**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 12:35 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-05 (2.5-3.0)

**Lab Sample ID: 480-37943-4**

**Date Collected: 05/06/13 13:30**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 87.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 12:59 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-05 (22.5-23.0)

**Lab Sample ID: 480-37943-5**

**Date Collected: 05/06/13 13:40**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 91.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 119649 | 05/20/13 15:35 | TRB | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 119655 | 05/20/13 23:42 | PJQ | TAL BUF |
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 13:24 | HTL | TAL BUF |

# Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: DPT-05 (22.5-23.0)

**Lab Sample ID: 480-37943-5**

**Date Collected: 05/06/13 13:40**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-07 (11.0-11.5)

**Lab Sample ID: 480-37943-6**

**Date Collected: 05/07/13 09:30**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 84.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 13:48 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-08 (3.5-4.0)

**Lab Sample ID: 480-37943-7**

**Date Collected: 05/07/13 10:30**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 85.0**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 119649 | 05/20/13 15:35 | TRB | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 119655 | 05/21/13 00:08 | PJQ | TAL BUF |
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 14:12 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-09 (22.5-23.0)

**Lab Sample ID: 480-37943-8**

**Date Collected: 05/07/13 11:10**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 90.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 14:36 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-10 (4.0-4.5)

**Lab Sample ID: 480-37943-9**

**Date Collected: 05/07/13 13:30**

**Matrix: Solid**

**Date Received: 05/09/13 01:30**

**Percent Solids: 91.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118104 | 05/11/13 12:54 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118093 | 05/11/13 19:10 | PJQ | TAL BUF |
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 15:00 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-11 (23.0-23.5)

**Lab Sample ID: 480-37943-10**

**Date Collected: 05/07/13 15:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 82.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 15:24 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-12 (3.5-4.0)

**Lab Sample ID: 480-37943-11**

**Date Collected: 05/08/13 08:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 91.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 5 | 119431 | 05/18/13 15:48 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-13 (7.5-8.0)

**Lab Sample ID: 480-37943-12**

**Date Collected: 05/08/13 09:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 83.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 5 | 119431 | 05/18/13 16:13 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-13 (15.0-15.5)

**Lab Sample ID: 480-37943-13**

**Date Collected: 05/08/13 09:15**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 76.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 16:37 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-14 (6.0-6.5)

**Lab Sample ID: 480-37943-14**

**Date Collected: 05/08/13 11:00**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 92.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 17:01 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-14 (16.0-16.5)

**Lab Sample ID: 480-37943-15**

**Date Collected: 05/08/13 11:30**
**Matrix: Solid**
**Date Received: 05/09/13 01:30**
**Percent Solids: 87.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 117993 | 05/10/13 14:23 | TG | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119431 | 05/18/13 17:25 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 117776 | 05/09/13 16:49 | | TAL BUF |

## Client Sample ID: DPT-20(12.0-12.5)

**Lab Sample ID: 480-38154-1**

**Date Collected: 05/10/13 08:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118445 | 05/14/13 09:16 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118414 | 05/14/13 11:30 | CDC | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 16:08 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-21(3.0-3.5)

**Lab Sample ID: 480-38154-2**

**Date Collected: 05/10/13 09:20**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.4**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118445 | 05/14/13 09:16 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118414 | 05/14/13 11:56 | CDC | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 16:32 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-21(21.5-22.0)

**Lab Sample ID: 480-38154-3**

**Date Collected: 05/10/13 09:40**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 70.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 16:57 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-15(10.0-11.0)

**Lab Sample ID: 480-38154-4**

**Date Collected: 05/10/13 11:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 83.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 119364 | 05/17/13 17:16 | RL | TAL BUF |
| Total/NA | Analysis | 8260B | | 40 | 119378 | 05/18/13 05:00 | TRF | TAL BUF |

## Client Sample ID: DPT-15(10.0-11.0)

**Lab Sample ID: 480-38154-4**

**Date Collected: 05/10/13 11:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 83.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 50 | 119772 | 05/21/13 17:21 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-15(17.0-17.5)

**Lab Sample ID: 480-38154-5**

**Date Collected: 05/10/13 11:10**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 72.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 5 | 119772 | 05/21/13 17:46 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-16(9.5-10.0)

**Lab Sample ID: 480-38154-6**

**Date Collected: 05/10/13 13:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 73.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 119364 | 05/17/13 17:16 | RL | TAL BUF |
| Total/NA | Analysis | 8260B | | 40 | 119378 | 05/18/13 05:23 | TRF | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 50 | 119772 | 05/21/13 18:10 | HTL | TAL BUF |
| Total/NA | Prep | 3550B | DL | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | DL | 250 | 119996 | 05/22/13 12:26 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-17(18.5-19.0)

**Lab Sample ID: 480-38154-7**

**Date Collected: 05/10/13 13:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 79.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 18:35 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-18(3.5-4.0)

**Lab Sample ID: 480-38154-8**

**Date Collected: 05/10/13 14:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 119364 | 05/17/13 17:16 | RL | TAL BUF |
| Total/NA | Analysis | 8260B | | 40 | 119378 | 05/18/13 05:45 | TRF | TAL BUF |

## Client Sample ID: DPT-18(3.5-4.0)

**Lab Sample ID: 480-38154-8**

**Date Collected: 05/10/13 14:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 10 | 119772 | 05/21/13 18:59 | HTL | TAL BUF |
| Total/NA | Prep | 3550B | DL | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | DL | 50 | 119996 | 05/22/13 14:03 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-19(15.5-16.0)

**Lab Sample ID: 480-38154-9**

**Date Collected: 05/10/13 15:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 19:23 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-22(13.5-14.0)

**Lab Sample ID: 480-38154-10**

**Date Collected: 05/10/13 10:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 75.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118263 | 05/13/13 10:13 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118255 | 05/13/13 19:25 | PJQ | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 5 | 119996 | 05/22/13 14:28 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-23(2.5-3.0)

**Lab Sample ID: 480-38154-11**

**Date Collected: 05/10/13 11:15**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 83.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 20:12 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-24(9.0-10.0)

**Lab Sample ID: 480-38154-12**

**Date Collected: 05/10/13 12:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 70.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 119364 | 05/17/13 17:16 | RL | TAL BUF |
| Total/NA | Analysis | 8260B | | 40 | 119378 | 05/18/13 06:08 | TRF | TAL BUF |

## Client Sample ID: DPT-24(9.0-10.0)

**Lab Sample ID: 480-38154-12**

**Date Collected: 05/10/13 12:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 70.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 50 | 119772 | 05/21/13 20:36 | HTL | TAL BUF |
| Total/NA | Prep | 3550B | DL | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | DL | 250 | 119996 | 05/22/13 14:53 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-25(22.0-23.0)

**Lab Sample ID: 480-38154-13**

**Date Collected: 05/10/13 13:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 61.2**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 10 | 119772 | 05/21/13 21:01 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-26(17.0-17.5)

**Lab Sample ID: 480-38154-14**

**Date Collected: 05/10/13 13:30**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 84.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119772 | 05/21/13 21:25 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-27(12.0-13.0)

**Lab Sample ID: 480-38154-15**

**Date Collected: 05/10/13 14:15**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 84.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 20 | 119996 | 05/22/13 15:17 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-27(22.0-22.5)

**Lab Sample ID: 480-38154-16**

**Date Collected: 05/10/13 14:25**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 85.3**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119996 | 05/22/13 15:41 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

# Lab Chronicle

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Client Sample ID: SPT-29(1.0-2.0)

**Lab Sample ID: 480-38154-17**

**Date Collected: 05/10/13 15:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118263 | 05/13/13 10:13 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118255 | 05/13/13 20:16 | PJQ | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 5 | 119772 | 05/21/13 14:55 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: DPT-29(6.0-7.0)

**Lab Sample ID: 480-38154-18**

**Date Collected: 05/10/13 15:15**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 88.1**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118263 | 05/13/13 10:13 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118414 | 05/14/13 19:34 | CDC | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119996 | 05/22/13 16:06 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

## Client Sample ID: FD051013

**Lab Sample ID: 480-38154-19**

**Date Collected: 05/10/13 00:00**
**Matrix: Solid**
**Date Received: 05/11/13 02:00**
**Percent Solids: 86.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 5035 | | | 118263 | 05/13/13 10:13 | PJQ | TAL BUF |
| Total/NA | Analysis | 8260B | | 1 | 118414 | 05/14/13 19:59 | CDC | TAL BUF |
| Total/NA | Prep | 3550B | | | 118555 | 05/14/13 14:43 | ND | TAL BUF |
| Total/NA | Analysis | 8270C | | 1 | 119996 | 05/22/13 16:30 | HTL | TAL BUF |
| Total/NA | Analysis | Moisture | | 1 | 118106 | 05/11/13 13:06 | | TAL BUF |

**Laboratory References:**

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Certification Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

## Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Arkansas DEQ | State Program | 6 | 88-0686 | 07-06-13 |
| California | NELAP | 9 | 1169CA | 09-30-13 |
| Connecticut | State Program | 1 | PH-0568 | 09-30-14 |
| Florida | NELAP | 4 | E87672 | 06-30-13 |
| Georgia | State Program | 4 | N/A | 03-31-14 |
| Georgia | State Program | 4 | 956 | 06-30-13 |
| Georgia | State Program | 4 | 956 | 03-31-14 |
| Illinois | NELAP | 5 | 200003 | 09-30-13 |
| Iowa | State Program | 7 | 374 | 03-15-15 |
| Kansas | NELAP | 7 | E-10187 | 01-31-14 |
| Kentucky | State Program | 4 | 90029 | 12-31-13 |
| Kentucky (UST) | State Program | 4 | 30 | 04-01-14 |
| Louisiana | NELAP | 6 | 02031 | 06-30-13 |
| Maine | State Program | 1 | NY00044 | 12-04-13 |
| Maryland | State Program | 3 | 294 | 03-31-14 |
| Massachusetts | State Program | 1 | M-NY044 | 06-30-13 |
| Michigan | State Program | 5 | 9937 | 04-01-13 * |
| Minnesota | NELAP | 5 | 036-999-337 | 12-31-13 |
| New Hampshire | NELAP | 1 | 2973 | 09-11-13 |
| New Hampshire | NELAP | 1 | 2337 | 11-17-13 |
| New Jersey | NELAP | 2 | NY455 | 06-30-13 |
| New York | NELAP | 2 | 10026 | 04-01-14 |
| North Dakota | State Program | 8 | R-176 | 03-31-14 |
| Oklahoma | State Program | 6 | 9421 | 08-31-13 |
| Oregon | NELAP | 10 | NY200003 | 06-09-13 |
| Pennsylvania | NELAP | 3 | 68-00281 | 07-31-13 |
| Rhode Island | State Program | 1 | LAO00328 | 12-31-13 |
| Tennessee | State Program | 4 | TN02970 | 04-01-14 |
| Texas | NELAP | 6 | T104704412-11-2 | 07-31-13 |
| USDA | Federal | | P330-11-00386 | 11-22-14 |
| Virginia | NELAP | 3 | 460185 | 09-14-13 |
| Washington | State Program | 10 | C784 | 02-10-14 |
| West Virginia DEP | State Program | 3 | 252 | 09-30-13 |
| Wisconsin | State Program | 5 | 998310390 | 08-31-13 |

* Expired certification is currently pending renewal and is considered valid.

# Method Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8260B | Volatile Organic Compounds (GC/MS) | SW846 | TAL BUF |
| 8270C | Semivolatile Organic Compounds (GC/MS) | SW846 | TAL BUF |
| Moisture | Percent Moisture | EPA | TAL BUF |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

# Sample Summary

Client: TRC Solutions, Inc.
Project/Site: Troy Chevron Asphalt Terminal - 194098

TestAmerica Job ID: 480-37943-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 480-37943-1 | DPT-01 (13-5-14.0) | Solid | 05/06/13 09:15 | 05/09/13 01:30 |
| 480-37943-2 | DPT-02 (4.5-5.0) | Solid | 05/06/13 11:00 | 05/09/13 01:30 |
| 480-37943-3 | DPT-03 (14.5-15.0) | Solid | 05/06/13 11:35 | 05/09/13 01:30 |
| 480-37943-4 | DPT-05 (2.5-3.0) | Solid | 05/06/13 13:30 | 05/09/13 01:30 |
| 480-37943-5 | DPT-05 (22.5-23.0) | Solid | 05/06/13 13:40 | 05/09/13 01:30 |
| 480-37943-6 | DPT-07 (11.0-11.5) | Solid | 05/07/13 09:30 | 05/09/13 01:30 |
| 480-37943-7 | DPT-08 (3.5-4.0) | Solid | 05/07/13 10:30 | 05/09/13 01:30 |
| 480-37943-8 | DPT-09 (22.5-23.0) | Solid | 05/07/13 11:10 | 05/09/13 01:30 |
| 480-37943-9 | DPT-10 (4.0-4.5) | Solid | 05/07/13 13:30 | 05/09/13 01:30 |
| 480-37943-10 | DPT-11 (23.0-23.5) | Solid | 05/07/13 15:00 | 05/09/13 01:30 |
| 480-37943-11 | DPT-12 (3.5-4.0) | Solid | 05/08/13 08:30 | 05/09/13 01:30 |
| 480-37943-12 | DPT-13 (7.5-8.0) | Solid | 05/08/13 09:00 | 05/09/13 01:30 |
| 480-37943-13 | DPT-13 (15.0-15.5) | Solid | 05/08/13 09:15 | 05/09/13 01:30 |
| 480-37943-14 | DPT-14 (6.0-6.5) | Solid | 05/08/13 11:00 | 05/09/13 01:30 |
| 480-37943-15 | DPT-14 (16.0-16.5) | Solid | 05/08/13 11:30 | 05/09/13 01:30 |
| 480-38154-1 | DPT-20(12.0-12.5) | Solid | 05/10/13 08:30 | 05/11/13 02:00 |
| 480-38154-2 | DPT-21(3.0-3.5) | Solid | 05/10/13 09:20 | 05/11/13 02:00 |
| 480-38154-3 | DPT-21(21.5-22.0) | Solid | 05/10/13 09:40 | 05/11/13 02:00 |
| 480-38154-4 | DPT-15(10.0-11.0) | Solid | 05/10/13 11:00 | 05/11/13 02:00 |
| 480-38154-5 | DPT-15(17.0-17.5) | Solid | 05/10/13 11:10 | 05/11/13 02:00 |
| 480-38154-6 | DPT-16(9.5-10.0) | Solid | 05/10/13 13:00 | 05/11/13 02:00 |
| 480-38154-7 | DPT-17(18.5-19.0) | Solid | 05/10/13 13:30 | 05/11/13 02:00 |
| 480-38154-8 | DPT-18(3.5-4.0) | Solid | 05/10/13 14:30 | 05/11/13 02:00 |
| 480-38154-9 | DPT-19(15.5-16.0) | Solid | 05/10/13 15:30 | 05/11/13 02:00 |
| 480-38154-10 | DPT-22(13.5-14.0) | Solid | 05/10/13 10:00 | 05/11/13 02:00 |
| 480-38154-11 | DPT-23(2.5-3.0) | Solid | 05/10/13 11:15 | 05/11/13 02:00 |
| 480-38154-12 | DPT-24(9.0-10.0) | Solid | 05/10/13 12:00 | 05/11/13 02:00 |
| 480-38154-13 | DPT-25(22.0-23.0) | Solid | 05/10/13 13:00 | 05/11/13 02:00 |
| 480-38154-14 | DPT-26(17.0-17.5) | Solid | 05/10/13 13:30 | 05/11/13 02:00 |
| 480-38154-15 | DPT-27(12.0-13.0) | Solid | 05/10/13 14:15 | 05/11/13 02:00 |
| 480-38154-16 | DPT-27(22.0-22.5) | Solid | 05/10/13 14:25 | 05/11/13 02:00 |
| 480-38154-17 | SPT-29(1.0-2.0) | Solid | 05/10/13 15:00 | 05/11/13 02:00 |
| 480-38154-18 | DPT-29(6.0-7.0) | Solid | 05/10/13 15:15 | 05/11/13 02:00 |
| 480-38154-19 | FD051013 | Solid | 05/10/13 00:00 | 05/11/13 02:00 |

# Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

| Client | Project Manager | Date | Chain of Custody Number |
|---|---|---|---|
| TRC Env | Rich Totino | 5/10/13 | 223865 |
| **Address** | **Telephone Number (Area Code)/Fax Number** | **Lab Number** | **Page 1 of 2** |
| 10 Maxwell Dr | 518-281-5436 | | |
| **City** / **State** / **Zip Code** | **Site Contact** | **Lab Contact** | |
| Clifton Park / NY / 12065 | R. Totino | M. Deyo | |
| **Project Name and Location (State)** | **Carrier/Waybill Number** | | |
| Troy Chevron, Troy, NY | | | |
| **Contract/Purchase Order/Quote No.** | | | |

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | Analysis: PAHs | VOC 8260 | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DPT-20 (12.0-12.5) | 5/10/13 | 08:30 | | | | | | | | | | | X | X | |
| DPT-21 (3.0-3.5) | ↓ | 09:20 | | | | | | | | | | | X | X | |
| DPT-21 (21.5-22.0) | | 09:40 | | | | | | | | | | | X | | |
| DPT-15 (10.0-11.0) | | 11:00 | | | | | | | | | | | X | X | |
| DPT-15 (17.0-17.5) | | 11:10 | | | | | | | | | | | X | | |
| DPT-16 (9.5-10.0) | | 13:00 | | | | | | | | | | | X | X | |
| DPT-17 (18.5-19.0) | | 13:30 | | | | | | | | | | | X | | |
| DPT-18 (3.5-4.0) | | 14:30 | | | | | | | | | | | X | X | |
| DPT-19 (15.5-16.0) | | 15:30 | | | | | | | | | | | X | | |
| DPT-22 (13.5-14.0) | | 10:00 | | | | | | | | | | | X | X | |
| DPT-23 (2.5-3.0) | | 11:15 | | | | | | | | | | | X | | |
| DPT-24 (9.0-10.0) | | 12:00 | | | | ↓ | | | | | | | X | X | |

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

**Sample Disposal**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

**Turn Around Time Required**
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

**QC Requirements (Specify)**

| | Date | Time | | Date | Time |
|---|---|---|---|---|---|
| 1. Relinquished By | 5/10/13 | 16:00 | 1. Received By | 5/10/13 | 16:00 |
| 2. Relinquished By | 5/10/13 | | 2. Received By | | |
| 3. Relinquished By | 5/11/13 | 2:00 | 3. Received By | 5/11/13 | 2:00 |

Comments

5.7 A1

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy



5/28/2013

# Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

| Client | Project Manager | Date | Chain of Custody Number |
|---|---|---|---|
| TRC Env | Rich Totino | 5/10/13 | 223864 |
| **Address** | **Telephone Number (Area Code)/Fax Number** | **Lab Number** | **Page 2 of 2** |
| 10 Maxwell | 518-281-5436 | | |
| **City** / **State** / **Zip Code** | **Site Contact** | **Lab Contact** | |
| Clifton Park / NY / 12065 | R. Totino | | |
| **Project Name and Location (State)** | **Carrier/Waybill Number** | | |
| Troy Clinton Troy, NY | | | |
| **Contract/Purchase Order/Quote No.** | | | |

| Sample I.D. No. and Description (Containers for each sample may be combined on one line) | Date | Time | Matrix: Air | Aqueous | Sed. | Soil | Containers & Preservatives: Unpres. | H2SO4 | HNO3 | HCl | NaOH | ZnAc/NaOH | Analysis: PAH | VOC 8260 | Special Instructions/ Conditions of Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DPT-25 (22.0-23.0) | 5/10/13 | 13:00 | | | | | | | | | | | X | | |
| DPT-26 (17.0-17.5) | | 13:30 | | | | | | | | | | | X | | |
| DPT-27 (12.0-13.0) | | 14:15 | | | | | | | | | | | X | | |
| DPT-27 (22.0-22.5) | | 14:25 | | | | | | | | | | | X | | |
| DPT-29 (1.0-2.0) | | 15:00 | | | | | | | | | | | X | X | MS/MSD |
| DPT-29 (6.0-7.0) | | 15:15 | | | | | | | | | | | X | X | |

5/10/13

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

**Sample Disposal**
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

**Turn Around Time Required**
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

**QC Requirements (Specify)**

| | Relinquished By | Date | Time | Received By | Date | Time |
|---|---|---|---|---|---|---|
| 1. | | 5/10/13 | 16:00 | | 5/10/13 | 16:00 |
| 2. | | 5/10/13 | | | | |
| 3. | | 5/11/13 | 2:00 | | 5/11/13 | 2:00 |

Comments

3.7 #1

**DISTRIBUTION:** WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

**TestAmerica Albany**
25 Kraft Road
Albany, NY 12205

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: R. Totino | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-35410-9070.1 |
|---|---|---|---|---|
| Client Contact: Mr. Richard Totino | Phone: (518) 281-5436 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 2 |
| Company: TRC Environmental Corp-Payne Firm | | | | Job #: 194098 |
| Address: 10 Maxwell Drive Suite 200 | Due Date Requested: | | | |
| City: Clifton Park | TAT Requested (days): standard | | | |
| State, Zip: NY, 12065 | PO #: TRC job number:109273.0000.0000.000014 | | | |
| Phone: 518-281-5436(Tel) | WO #: | | | |
| Email: ~~rst@peynofirm.com~~ rtotino@trcsolutions.com | Project #: 48005173 | | | |
| Project Name: ~~West Nyack O&M - Monthly System Sampling~~ Troy, NY Chevron | SSOW#: | | | |
| Site: | | | | |

**Analysis Requested**

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify), Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PAHs | VOCs (8260) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code | | | | | | | |
| DPT-01 (13.5-14.0) | 5/6/13 | 9:15 | G | S | | | X | | | |
| DPT-02 (4.5-5.0) | | 11:00 | | | | | X | X | | |
| DPT-03 (14.5-15.0) | | 11:35 | | | | | X | | | |
| DPT-05 (2.5-3.0) | | 13:30 | | | | | X | | | |
| DPT-05 (22.5-23.0) | | 13:40 | | | | | X | X | | |
| DPT-07 (11.0-11.5) | 5/7/13 | 9:30 | | | | | X | | | |
| DPT-08 (3.5-4.0) | | 10:30 | | | | | X | X | | |
| DPT-09 (22.5-23.0) | | 11:10 | | | | | X | | | |
| DPT-10 (4.0-4.5) | | 13:30 | | | | | X | X | | |
| DPT-11 (23.0-23.5) | | 15:00 | | | | | X | | | |
| DPT-12 (3.5-4.0) | 5/8/13 | 8:30 | | | | | X | | | |

480-37943 Chain of Custody

**Possible Hazard Identification**
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Category B data package *

Special Instructions/QC Requirements: Additional samples will be included

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Empty Kit Relinquished by: | | Date: | | Time: | | Method of Shipment: | |
| Relinquished by: R.S. Totino | Date/Time: 5/8/13 15:00 | Company TRC | Received by: | Date/Time: 5/8/13 25:10 | Company TA | | |
| Relinquished by: | Date/Time: 5/8/13 | Company TA | Received by: | Date/Time: | Company | | |
| Relinquished by: | Date/Time: 5/9/13 0130 | Company | Received by: | Date/Time: 5/9/13 0130 | Company TA Buf. | | |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.4 #1

**TestAmerica Albany**
25 Kraft Road
Albany, NY 12205

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: R. Totino | Lab PM: Deyo, Melissa L | Carrier Tracking No(s): | COC No: 480-35410-9070.1 |
|---|---|---|---|---|
| Client Contact: Mr. Richard Totino | Phone: (518) 281-5436 | E-Mail: melissa.deyo@testamericainc.com | | Page: Page 1 of 1 |
| Company: TRC Environmental Corp-Payne Firm | | | | Job #: 194098 |

| | | |
|---|---|---|
| Address: 10 Maxwell Drive Suite 200 | Due Date Requested: | |
| City: Clifton Park | TAT Requested (days): Standard | |
| State, Zip: NY, 12065 | | |
| Phone: 518-281-5436(Tel) | PO #: TRC job number:109273.0000.0000.000014 | |
| Email: rtotino@trcsolutions.com ~~rst@paynefirm.com~~ | WO #: | |
| Project Name: Troy, NY Chevron ~~West Nyack O&M - Monthly System Sampling~~ | Project #: 48005173 | |
| Site: | SSOW#: | |

**Analysis Requested**

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | PAHs | VOCs (8260) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | |
| DPT-13 (7.5-8.0) | 5/8/13 | 9:00 | G | S | | | X | | | |
| DPT-13 (15.0-15.5) | | 9:15 | | | | | X | | | |
| DPT-14 (6.0-6.5) | | 11:00 | | | | | X | | | |
| DPT-14 (16.0-16.5) | | 11:30 | | | | | X | | | |

5/9/13

| | |
|---|---|
| ***Possible Hazard Identification*** ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological | ***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)*** ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months |
| Deliverable Requested: I, II, III, IV, Other (specify) X | Special Instructions/QC Requirements: |

| | | | |
|---|---|---|---|
| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: |
| Relinquished by: | Date/Time: 5/8/13 15:00 | Company | Received by: Date/Time: 5/8/13 15:10 Company TA |
| Relinquished by: | Date/Time: 5/8/13 | Company TA | Received by: Date/Time: Company |
| Relinquished by: | Date/Time: 5/9/13 0130 | Company | Received by: Date/Time: 5/9/13 0130 Company TA BSA |

| | | |
|---|---|---|
| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.4 #1 |



5/28/2013

# Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 480-37943-1

**Login Number: 37943**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Wienke, Robert**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | TRC |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

# Login Sample Receipt Checklist

Client: TRC Solutions, Inc.

Job Number: 480-37943-1

**Login Number: 38154**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Stau, Brandon**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | True | |
| The cooler's custody seal, if present, is intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | True | |
| If necessary, staff have been informed of any short hold time or quick TAT needs | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Sampling Company provided. | True | trc |
| Samples received within 48 hours of sampling. | True | |
| Samples requiring field filtration have been filtered in the field. | N/A | |
| Chlorine Residual checked. | N/A | |

# APPENDIX E

## New York State Department of Environmental Conservation comment letter dated June 20, 2014

**New York State Department of Environmental Conservation**
**Division of Environmental Remediation**
**Remedial Bureau C, 11th Floor**
625 Broadway, Albany, New York 12233-7014
**Phone:** (518) 402-9662 • **Fax:** (518) 402-9679
Website: www.dec.ny.gov

Joe Martens
Commissioner

June 26, 2014

Brian Connors
Construction Project Manager
Chevron Environmental Management Company
1200 State Street
Perth Amboy, New Jersey 08861

RE: Chevron Asphalt Terminal, Water Street, Troy, Rensselaer County
Site 442029b
RI Report

Dear Mr. Connors:

Thank you and TRC Raviv Associates for the October 30, 2013 "Remedial Investigation Report, Former Chevron Asphalt Company, Troy Asphalt Facility" (Report). As we discussed, the New York State Department of Environmental Conservation (Department) found the following deficiencies in the report:

1. Tables and Figure 3. According to the Department's *DER-10 Technical Guidance for Site Investigation and Remediation* (DER-10), all sampling results which exceed the unrestricted soil cleanup objectives (SCO) should be summarized in tables and include the sample location, depth, results and the applicable unrestricted SCO for comparison. Specifically then, the sample values exceeding the unrestrictive use soil cleanup objectives should be highlighted. Figure 3 or a separate figure should illustrate the locations of the exceedances. As we discussed, exceedances of the restricted use – industrial SCO may also be presented.

2. Section 7. The Report must recommend that a feasibility study be undertaken to develop and evaluate, using the factors in 375-1.8(f), alternatives for all contaminated media identified by the investigation of the site.

3. Section 6.2. The thickness of the surface tar along the bank should be reported to resolve the question of the tar's full extent.

4. Section 3.2. The Department recommends adding "or its predecessor company" after "Niagara Mohawk Power Corporation" in the second paragraph since the corporation was formed in 1950.

5. Section 2.4. Burden's Creek is more commonly known as the Wynants Kill.

6. Section 4.1. The semivolatile organic compounds acenaphthene and fluoranthene are mistakenly reported as VOCs.

7. A certification consistent with DER-10, section 1.5(b)2 will be required for the final report.

The Department is evaluating the need for additional groundwater analytical data. As we discussed, groundwater sampling will not be needed for approval of the Report but groundwater data may be needed to confirm the effectiveness of a future implemented remedy.

Please be reminded of the Order on Consent's requirement to submit all data generated in an electronic format following the approval of a report. I will send you guidance regarding the submittal of data to the Department's database under separate cover.

If you have any questions or would like to discuss please contact me at (518) 402-9686.

Sincerely,

John Spellman, P.E.
Project Manager
Division of Environmental Remediation

ec: K. Seit – TRC
J. Potenza – TRC

bec: M. Sergott – NYSDOH
J. Quinn – R4
A. Omorogbe
J. Spellman

# Appendix F

# Ecology and Fish and Wildlife Impact Analysis

# Appendix F
## Ecology and Fish and Wildlife Impact Analysis

TRC conducted a review of the U.S. Fish and Wildlife Service's Information, Planning, and Conservation System (IPAC) and NYSDEC Enviromapper databases for the site and surrounding vicinity. The project area defined for the study was defined as the site boundary. The USFWS IPAC report and NYSDEC Enviromapper results are included at the end of this Appendix.

Based on the IPAC report no federally-endangered species were identified as potentially being present in the project area and no critical habitats were identified at the site.

Based on the IPAC report the only mammal potentially present in the project area with a Critical Habitat is the Northern long-eared Bat (*Myotis septentrionalis*), a federally-proposed endangered species. However, no critical habitats were identified at the site location that would impact this species.

The USFWS IPAC report additional provided fifteen (15) birds on the Migratory Birds of Concern list for the project area. These bird species are protected under the Migratory Bird Treaty Act of 1918. No nesting behavior of any migratory bird species were identified within the project area.

An NYSDEC Enviromapper query was run for the project area and included four (4) state-threatened plants '*in the vicinity*' of the project area. These plants are not documented to exist in the project area and have not been observed since at least 1940.

The site consists of a flat upland area and a slope to the Hudson River. The underlying fill is comprised predominantly of slag material with little or no organic material present; therefore vegetation on the upland portion is minimal, limiting potential habitat for migratory birds and/or state-threatened plants. The slope to the Hudson River is wooded with six (6) to eighteen (18)-inch diameter deciduous trees with little underbrush, which could potentially provide habitat for migratory bird species.

The adjacent Hudson River is tidal at the project location, but is not subject to erosional deposition from the site due to a berm at the top of the slope and the stabilized slope. The beach of the river is comprised of glacially derived cobbles and boulders and shale outcrops.

The goals of the Remedial Action for the site will include removal of small isolated areas of asphalt- related impacts from the surface of the upland area which will prevent the exposure of any potential wildlife to site-related impacts. The goal of the Remedial Action on the slope area will include removal of localized asphalt-related impacts, stabilization of the slope and re-vegetation; which will protect the ecosystem from potential site-related impacts and provide habitat for migratory bird species.

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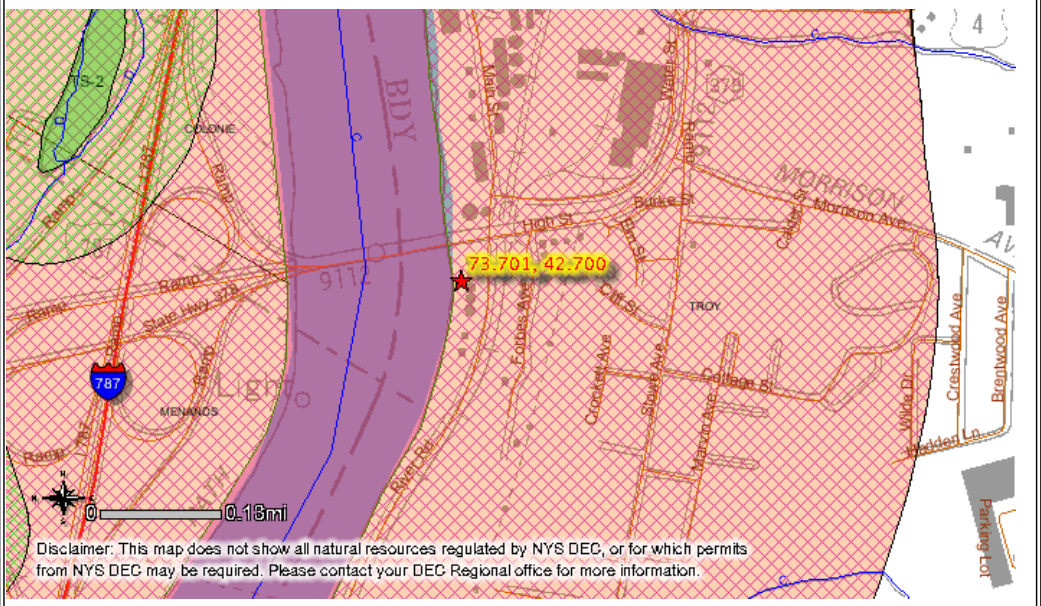
**Please set your printer orientation to "Landscape".**

## Identify Map




MinX: 605625, MaxX: 607304, MinY: 4728782, MaxY: 4727911

### Visible Layers

- Classified Streams
- Classified Ponds
- State-Regulated Freshwater Wetlands
- Wetland Checkzone
- State-Regulated Freshwater Wetlands
- Rare Plants and Rare Animals
- Significant Natural Communities Buffered
- Natural Communities Nearby
- Significant Natural Communities
- Interstate Highways
- Adirondack Park Boundary
- Counties

Disclaimer:This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.

[print page] [close window]

**The Coordinates of the point you clicked on are:**

| | | | |
|---|---|---|---|
| NYTM | E : 606383 | Longitude/Latitude | W : 73.701 |
| | N : 4728384 | | N : 42.700 |

## Rare Plants and Rare Animals

| This location is in the vicinity of one or more : |
|---|
| Rare Animals and/or Rare Plants |

## Natural Communities Near This Location:

| Natural Community Name | Location | Ecological System |
|---|---|---|
| Tidal river | Hudson River Estuary | Tidal Wetlands (Estuary) |

## Old or Potential Records (these records are not displayed on the map)

| Common Name | Scientific Name | Date Last Documented | Location | Habitat Where Last Seen | Animal, Plant, or other | NYS Protected Status |
|---|---|---|---|---|---|---|
| Troublesome Sedge | Carex molesta | 1940-07-09 | North Albany | Waste land. | Rare Plant | Threatened |
| Green Rock-cress | Boechera missouriensis | 1817-06 | Troy | | Rare Plant | Threatened |
| Handsome Sedge | Carex formosa | no date | Troy | | Rare Plant | Threatened |
| Carey's Smartweed | Persicaria careyi | 1937-08-30 | Loudonville | Thickets. Border of swamp. | Rare Plant | Threatened |

## USGS Quadrangle

| USGS Quadrangle Name |
|---|
| TROY SOUTH |

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

**Disclaimer**:If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

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# Trust Resources List

## *Endangered Species Act Species List (USFWS Endangered Species Program).*

There are a total of **1** threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section below for critical habitat that lies within your project area. Please contact the designated FWS office if you have questions.

**Species that should be considered in an effects analysis for your project:**

| Mammals | Status | | Has Critical Habitat | Contact |
|---|---|---|---|---|
| northern long-eared Bat (*Myotis septentrionalis*) Population: | Proposed Endangered | species info | | New York Ecological Services Field Office |

**Critical habitats within your project area:**

*There are no critical habitats within your project area.*

## *FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).*

*There are no refuges found within the vicinity of your project.*

## *FWS Migratory Birds (USFWS Migratory Bird Program).*

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. For more information regarding these Acts see: http://www.fws.gov/migratorybirds/RegulationsandPolicies.html.

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without

additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html.

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tool links in the Bird Conservation Tools section at: http://www.fws.gov/migratorybirds/CCMB2.htm.

For information about conservation measures that help avoid or minimize impacts to birds, please visit: http://www.fws.gov/migratorybirds/CCMB2.htm.

**Migratory birds of concern that may be affected by your project:**
There are **15** birds on your Migratory birds of concern list. The underlying data layers used to generate the migratory bird list of concern will continue to be updated regularly as new and better information is obtained. User feedback is one method of identifying any needed improvements. Therefore, users are encouraged to submit comments about any questions regarding species ranges (e.g., a bird on the USFWS BCC list you know does not occur in the specified location appears on the list, or a BCC species that you know does occur there is not appearing on the list). Comments should be sent to the ECOS Help Desk.

| Species Name | Bird of Conservation Concern (BCC) | Species Profile | Seasonal Occurrence in Project Area |
|---|---|---|---|
| American bittern (*Botaurus lentiginosus*) | Yes | species info | Breeding |
| Bald eagle (*Haliaeetus leucocephalus*) | Yes | species info | Year-round |
| Black-billed Cuckoo (*Coccyzus erythropthalmus*) | Yes | species info | Breeding |
| Black-crowned Night-Heron (*Nycticorax nycticorax*) | Yes | species info | Breeding |
| Blue-winged Warbler (*Vermivora pinus*) | Yes | species info | Breeding |
| Canada Warbler (*Wilsonia canadensis*) | Yes | species info | Breeding |
| Golden-Winged Warbler (*Vermivora chrysoptera*) | Yes | species info | Breeding |
| Least Bittern (*Ixobrychus exilis*) | Yes | species info | Breeding |

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| | | | |
|---|---|---|---|
| Peregrine Falcon (*Falco peregrinus*) | Yes | species info | Breeding |
| Pied-billed Grebe (*Podilymbus podiceps*) | Yes | species info | Breeding |
| Prairie Warbler (*Dendroica discolor*) | Yes | species info | Breeding |
| Red-headed Woodpecker (*Melanerpes erythrocephalus*) | Yes | species info | Breeding |
| Short-eared Owl (*Asio flammeus*) | Yes | species info | Wintering |
| Upland Sandpiper (*Bartramia longicauda*) | Yes | species info | Breeding |
| Wood Thrush (*Hylocichla mustelina*) | Yes | species info | Breeding |

## *NWI Wetlands (USFWS National Wetlands Inventory).*

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

**Data Limitations, Exclusions and Precautions**
The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

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Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

**Exclusions** - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

**Precautions** - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

**The following wetland types intersect your project area in one or more locations:**

| Wetland Types | NWI Classification Code | Total Acres |
|---|---|---|
| Riverine | R1UBV | 25166.7776 |