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SCS ENGINEERS

March 24, 2017

Ms. Amanda Alewine
Brownfields Coordinator
City of Oklahoma City
Planning Department
420 W. Main Street, 9th Floor
Oklahoma City, Oklahoma 73102

RE: Executive Summary - Limited Phase II Environmental Site Assessment
1708 & 1721 NE 23rd Street
Oklahoma City, Oklahoma

Dear Ms. Alewine:

SCS Engineers (SCS) is pleased to submit this Executive Summary to accompany our *Limited Phase II Environmental Site Assessment* (ESA) for the properties addressed as 1708 NE 23rd Street and 1721 NE 23rd Street, Oklahoma City (Properties). This document provides a summary of findings and conclusions presented in the final report.

INTRODUCTION & OBJECTIVES

The property located at 1708 NE 23rd Street consists of 0.8942 acres of commercial land with two single-story buildings totaling 18,313 square feet. Historical sources indicate this parcel was developed as a filling station with onsite automotive repair by the early 1930s. By the mid-1940s, the structure was expanded and the facility appears to have included fuel filling, auto repair, auto body work, and painting.

The property located at 1721 NE 23rd Street consists of 0.6715 acres of vacant commercial land. This parcel was developed as a residential and commercial parcel by the 1930s. The location began to be more commercialized by the 1950s; businesses that have occupied the Property include a motel, an auto service garage, auto body shop and a wrecker service. In the 2000s, a portion of the parcel appeared to store numerous salvaged autos before being removed from the Property before 2010.

The objective of this limited Phase II ESA scope of work was to gather soil, groundwater and subsurface soil vapor assessment information to assess potential environmental concerns and assist in decision-making with respect to future Property redevelopment. A Phase I ESA for the Property was completed by SCS in January 2017. Data collection locations for this limited assessment were developed to assess areas that could be impacted by potential onsite or offsite source areas identified as Recognized Environmental Conditions (RECs) or businesses of environmental interest; refer to Section 1.1 of our report for additional details.

The data collection objectives of this assessment included sampling of soils, groundwater and subsurface soil vapor to provide an inquiry as to the overall potential for environmental impairment to be present. This limited Phase II ESA was conducted in general conformance with the scope and limitations of ASTM Practice E1903-11. The use of ASTM E1903-11 provides a framework for employing good commercial and customary practices in conducting Phase II ESAs.

LIMITATIONS

SCS Engineers does not and cannot represent that the Property contains no hazardous or toxic materials, products, or other latent conditions beyond that observed by SCS Engineers during limited Phase II ESA activities. Further, the services herein shall in no way be construed, designed, or intended to be relied upon as legal interpretation or advice.

This information has been obtained for the City and Pivot Project solely for their use and reliance in the soil, groundwater and subsurface soil vapor sampling of this Property. Reliance on this report by any other party may involve assumptions whose extent and nature lead to a distorted meaning and impact of the findings and opinions related herein. With the consent of the City, Pivot Project and SCS, we may be available to discuss findings and opinions related specifically to other parties' unique risk management concerns related to the Property.

FINDINGS

Refer to Section 3 for a full description of assessment work completed and field procedures applied during the subsurface inquiry. Significant findings and conclusions are provided below.

Geology & Hydrogeology

Soils encountered during this investigation were typically brown silty clays in the surface soils. These surface soils transitioned to lighter colored silty clays to a red silty clay with depth. The red silty clay horizon became harder and more friable from approximately eight to 12 feet bgs. Bedrock consisting of red siltstone was encountered across the drilling area at approximately nine to 15 feet bgs.

Groundwater depths ranged from approximately seven to 18 feet bgs during sampling activities. This information indicates that the first occurrence of groundwater is expected to be primarily present in the upper portion of semi-consolidated bedrock.

Soil Analytical Results – RCRA 8 Metals

Resource Conservation and Recovery Act (RCRA) metals exceeding laboratory detection limits included arsenic, mercury, barium, chromium and lead. In surface soil samples, defined as from surface grade to a depth of approximately 3 feet bgs, arsenic concentrations ranged between 2.59 and 5.53 milligrams per kilograms (mg/kg). For subsurface samples collected from depths ranging between 8 and 13 feet bgs, analytical results varied between 1.51 and 19.5 mg/kg. The maximum concentration was noted in the sample collected from Soil Boring SB-07 at a depth of

approximately 11 to 12 feet bgs. All results exceed the Resident SSL of 0.68 mg/kg with six of ten sample locations exceeding the Industrial SSL of 3.0 mg/kg.

Detectable mercury concentrations ranged between 0.0270 and 0.0292 mg/kg and exceeded the Risk-Based SSL of 0.0033 mg/kg. However, none exceeded the Resident SSL of 0.94 mg/kg. Barium concentrations ranged between 37.3 and 1,130.0 mg/kg, all exceeding the Risk-Based SSL of 16 mg/kg; however, none exceeded the Resident SSL of 1,500 mg/kg. Chromium concentrations ranged between 9.35 and 29.0 mg/kg. There are no established Resident or Industrial SSLs for chromium. The final metal with detectable concentrations was lead, ranging from 4.79 to 17.2 mg/kg. No lead concentrations exceeded the Resident or Industrial SSLs of 400 and 800 mg/kg, respectively.

Soil Analytical Results – VOCs and Petroleum Hydrocarbons

The only VOCs exhibiting a concentration exceeding a Resident SSL were from the sample collected from SB-05 at a depth of approximately 9 to 10 feet bgs. Compounds included ethylbenzene, naphthalene, and 1,2,4-trimethylbenzene (7.4 mg/kg). However, none of these detections exceeded their respective Industrial SSLs. In addition, benzene exceeding laboratory detection limits was primarily noted in samples collected from subsurface soil. The generally low-level detections, ranging between 0.00311 to 0.00947 mg/kg, exceeded the Risk-Based SSL of 0.00023 mg/kg; however, are significantly below the Resident SSL of 1.2 mg/kg. The single benzene detection from a surface sample (0.00167 mg/kg; SB-01 from grade to approximately 1 foot bgs) is also substantially below the Resident SSL. None of the remaining VOCs exceeding laboratory detection limits exceed their respective Industrial SSLs.

Petroleum hydrocarbon-specific laboratory analysis was also completed for soil samples with results shown in Table 1. TPH exceeding laboratory detection limits are noted in samples collected from Soil Borings SB-03, SB-04 and SB-05. TPH low-fraction (gasoline-range hydrocarbons) ranged from 2.87 mg/kg (SB-06 at approximately 9 to 10 feet bgs) to 788 mg/kg in the sample collected from Soil Boring SB-05 (approximately 9 to 10 feet bgs). Sample results from these borings exceed the Resident SSL of 8.2 with samples from SB-03 and SB-05 exceeding the Industrial SSL of 42 mg/kg. Concentrations of TPH medium-fraction (diesel-range hydrocarbons) were notably lower than the low-fraction, with results ranging from 5.74 mg/kg (SB-04 at approximately 11 to 12 feet bgs) 99.8 mg/kg in the sample collected from Soil Boring SB-05 (approximately 9 to 10 feet bgs). Only the sample collected from an approximate depth of 9 to 10 feet bgs exceed the Resident and Industrial SSLs of 11.0 and 60 mg/kg, respectively. Aside from the near surface soil sample collected from SB-01 (4.59 mg/kg), no TPH high-fraction (oil-range hydrocarbons) were exhibited exceeding laboratory detection limits.

Soil Analytical Results – Polycyclic Aromatic Hydrocarbons

PAH concentrations exceeding laboratory detection limits were exhibited in samples collected from four of ten boring locations. Of these, all but one detection was indicated in samples collected from near surface soil. A number of compounds exceeded Risk-Based SSLs; however, only one result, benzo(a)pyrene in the sample from SS-01 (0.0940 mg/kg), exceeded the Resident SSL of 0.016 mg/kg. However, this result is below the Industrial SSL of 0.29 mg/kg.

In addition, laboratory analysis for chlorinated acid herbicides and pesticides were completed for the near surface soil sample collected from SS-01 located in the area of a former greenhouse operation. Neither analysis identified these compounds exceeding laboratory detection limits.

Groundwater Analytical Results – RCRA 8 Metals

RCRA-8 metals exhibited exceeding laboratory results included arsenic, barium and lead. Of these detections, only barium and lead (duplicate sample for SB-05) exceed EPA Tapwater screening levels. However, only the lead detection of 0.0159 milligrams per liter (mg/L) in the SB-05 duplicate slightly exceeds the Maximum Contaminant Level (MCL) of 0.015 mg/L.

Groundwater Analytical Results – VOCs and Petroleum Hydrocarbons

VOCs exceeding laboratory detection limits primarily consist of gasoline-range hydrocarbons, including benzene, toluene, ethylbenzene and xylenes (BTEX) from samples collected in the northern and eastern portion of 1708 NE 23rd Street. All four compounds exceed Tapwater screening levels with benzene and ethylbenzene exceeding MCLs. The remaining VOC detection is acetone in samples from Soil Borings SB-03 and SB-04; neither exceed the Tapwater screening level of 1.4 mg/L. It is noteworthy that no chlorinated solvent concentrations exceeding laboratory detection limits were exhibited.

Both detectable concentrations of TPH low-and medium-fractions were identified in samples collected from six of seven boring locations. Low-fraction (gasoline-range) concentrations ranged from 0.2 mg/L (Boring SB-01) to 23 mg/L (Boring SB-05 and duplicate). Medium-fraction (diesel-range) concentrations ranged from 0.119 mg/L (Boring SB-02) to 4.97 mg/L (Boring SB-05 and duplicate). In addition, TPH high-fraction (oil-range) concentrations of 0.328 and 0.0134 mg/L were exhibited in samples collected from SB-04 and SB-07. All detectable concentrations exceed the EPA Tapwater screening values. As EPA has not established MCLs for the TPH ranges, the results can be compared to ODEQ *Risk-Based Levels for TPH* published in October 2012. The ODEQ generic level of 1.0 mg/L for combined low- medium- and high-fractions is exceeded in the area of Soil Borings SB-03 through SB-06. The maximum combined concentrations are exhibited in two areas, including the eastern portion of 1721 NW 23rd Street and the northern and eastern portion of 1708 NE 23rd Street.

Groundwater Analytical Results – PAHs

Generally low concentrations of PAH compounds exceeding laboratory detection limits were identified in all sampling locations with the exception of Soil Boring SB-07. Results from Soil Borings SB-03 through SB-06 indicated limited compounds have exceeded EPA Tapwater screening levels. These include naphthalene, 1-methylnaphthalene and 2-methylnaphthalene in SB-03 through SB-06. No groundwater MCLs have been established for these compounds.

Subsurface Soil Vapor Results – VOCs

VOCs exceeding laboratory detection limits were identified in all five soil gas samples collected (SV-01 through SV-05). Detectable constituents that exceed calculated Modified Carcinogenic Resident Air Screening Levels (RSL) included benzene at location SV-02, 1.3-butadiene (SV-04), chloroform (SV-04 and SV-05), 1,2-dichloroethane (SV-01 duplicate), 1,4-dioxane (SV-04) and ethylbenzene (all locations). Of these, the chloroform (SV-04 and SV-05) and ethylbenzene (SV-

01 through SV-03) also exceed the Modified Carcinogenic Industrial Air Screening Levels (ISL) of 18.0 and 163.0 ug/m3, respectively.

The ambient air sample (BA-1) exhibited VOCs exceeding laboratory detection limits for nine individual compounds. Of these, acetone, cyclohexane, ethanol, dichlorodifluoromethane, heptane, n-hexane, toluene and 2,2,4-trimethylpentane were also indicated in the subsurface samples, however, at primarily lower concentrations. None of the BA-1 results exceeded either the Modified Carcinogenic RSL or ISLs.

Asbestos Containing Materials- 1708 NE 23rd Street

A National Emission Standard for Hazardous Air Pollutants (NESHAP) Asbestos Inspection of the Former Auto Repair facility was completed. This inspection was conducted on March 7, 2017, by an Asbestos Hazard Emergency Response Act (AHERA) Inspector, licensed by the Oklahoma Department of Labor (ODOL) and under the direction of an AHERA Management Planner and Project Designer. Approximately 20 windows with window pane caulk and approximately 10 linear feet of transite pipe were found to be asbestos containing at the Former Auto Repair located at 1708 NE 23rd Street. In addition, approximately 850 square feet of asbestos containing floor tile was identified.

CONCLUSIONS

Near Surface Soils

Arsenic in near surface soil exceeds both the Resident and Industrial SSLs. However, the observed concentrations for the samples are not unexpected relative to naturally-occurring concentrations found in Central Oklahoma soils. Average naturally-occurring arsenic concentrations for the United States are provided by the United States Geological Survey. The *National Geochemistry Survey* (NGS) – *September 2008* (accessible online) identifies expected metal concentrations by county. For Oklahoma County, the maximum average concentration is 8.356 parts per million. No near surface soil results from either parcel exceed the NGS maximum average concentration. We therefore conclude that arsenic values are likely indicative of background concentrations and do not represent elevated conditions from a source area. Furthermore, none of the remaining RCRA-8 metals with detections of mercury, barium, chromium, and lead in soil exceed either the Residential and Industrial SSLs;

Aside from the benzo(a)pyrene concentration of 0.0940 mg/kg noted in the west-central portion of 1721 NW 23rd Street (Soil Boring SS-01), no PAH concentrations exceed either Resident or Industrial SSLs. The origin of this Resident SSL PAH exceedance may be attributed to a localized release, such as a spill or staining from past business uses. A similar origin is possible for the TPH high-fraction (oil range) petroleum hydrocarbon concentrations identified in soil at Soil Boring SB-01. It is noteworthy that vehicular parking/storage from numerous past auto repair and wrecker service businesses has been observed on aerial photographs immediately east of these detections since at least 1951 through approximately 2010. The soil sample collected from SB-02 has also identified PAH concentrations in near surface soil, albeit at lower concentrations. The overall data

set supports a conclusion that similar additional currently unidentified localized spills may be present in the south-central portion of this parcel.

Subsurface Soils

RCRA-8 Metals: Arsenic in near surface soil exceeds both the Resident and Industrial SSLs. The majority of analytical data indicates that samples collected from subsurface soil exhibit generally higher concentrations than in surface soil. As no overlying source area for elevated arsenic is noted in near surface soil, it is our conclusion it is unlikely that these concentrations represent elevated concentrations and are more likely representative of natural unconsolidated soil and bedrock mineral composition at this depth interval.

PAHs, VOCs & TPH – 1721 NE 23rd Street: No detectable PAH concentrations were identified from the three sampling locations and a limited number of VOCs and petroleum hydrocarbons were indicated in analytical results. Specifically, no VOCs or TPH was noted exceeding detection limits in the west portion of the parcel (SB-01) and only a benzene concentration below Resident and Industrial SSLs in the central parcel (SB-02). Conversely, generally low-level VOC concentrations were noted in Soil Boring SB-03, located in the eastern portion of the parcel. TPH low- (gasoline range) and medium-fraction (diesel-range) hydrocarbons were identified at a depth of approximately 8 to 9 feet bgs. These results indicate that a petroleum hydrocarbon source area could be present in this general area of the parcel or from the east-adjoining property. This property, with an address of 1803 NE 23rd Street, has a state UST listing as Bell Gas. Our conclusion is further supported by groundwater results discussed in Section 5.4.

PAHs, VOCs & TPH – 1708 NE 23rd Street: Multiple VOC compounds and TPH low-fraction (gasoline range) and lesser concentrations of medium-fraction (diesel-range) hydrocarbons were indicated above detection limits in samples collected from the north and northeast portion of this parcel. This is the area of the former retail gasoline storage and dispensing area identified in operation since prior to 1932. The highest concentrations were exhibited in Soil Boring SB-05 located immediately east of the former fuel storage tank and dispenser pump area. Lateral attenuation of the adsorbed-phase hydrocarbons and VOCs was noted to the west and south in samples collected from Soil Borings SB-04 and SB-06. Only a detectable benzene concentration was indicated in the sample collected from SB-07, located south of the building approximately 130 feet southwest of the fueling facilities. These results indicate that an onsite source area is present and there is the potential that petroleum-impacted soil could be present to the east and south extending offsite beneath N Rhode Island Avenue. This conclusion is further supported by groundwater results discussed in Section 5.4.

Although there is extensive history of onsite automotive repair, no VOCs typically associated with these operations, such as chlorinated solvents and common degreasing compounds, have been identified in the area assessed. Furthermore, no detectable concentrations of PAHs, aside from naphthalene, 1-methylnaphthalene and 2-methylnaphthalene at SB-05 are exhibited. It is reasonable to conclude these PAH compounds are associated with medium-fraction petroleum hydrocarbons.

Groundwater

RCRA-8 Metals: Only barium in three samples and lead in one sample exhibit dissolved-phase metals that exceed EPA Tapwater screening levels. More importantly, no concentrations exceed the applicable MCLs established by EPA for RCRA-8 metals. We therefore conclude that no elevated concentrations from point source contamination appear to be present, and no further assessment of these COC are warranted at either parcel.

PAHs, VOCs & TPH – 1708 NE 23rd Street: A number of detectable PAH concentrations have been identified in groundwater samples collected from the eastern portion of this parcel with three compounds exceeding EPA Tapwater screening levels (no MCLs have been established for these compounds). Because of the physical properties and relative size of these compounds, they do not readily dissolve in groundwater, and if present, typically do not extensively migrate laterally from source areas through groundwater flow. Based on the observed concentrations and professional experience with dissolved-phase PAH compounds, it is our conclusion that additional assessment for PAHs to the north, east or south is not warranted. The conclusion is supported by data obtained west at Soil Boring SB-02, which indicated only acenaphthene above the laboratory detection limit.

The only VOC detection in groundwater samples collected from the northern parcel was acetone at 0.07 mg/L (SB-03). This concentration is significantly below the EPA Tapwater screening level of 1.4 mg/L. Conversely, TPH low-fraction and medium-fraction concentrations exceeding laboratory limits were noted in all three sampling locations with the maximum concentrations present in the east portion of the parcel (2.21/2.24 mg/L [duplicate] and 2.44 mg/L), respectively. All three sample concentrations for both fractions exceed their Tapwater screening levels and also exceed the ODEQ generic level of 1.0 mg/L for combined low- medium- and high-fractions at SB-03. The concentration and general lateral distribution of dissolved-phase hydrocarbons indicate a source area for both gasoline and diesel fuels in the area of SB-03, or from the east-adjoining property. However, it is possible there could be an additional source area located to the west of Boring SB-01 as groundwater is expected to flow primarily from north-northwest to the south-southeast. A former gasoline filling station was formerly located at 1615 NE 23rd Street, approximately 120 feet west of the parcel boundary. This could account for the presence of petroleum hydrocarbons in the west and central portions of 1721 NE 23rd Street (SB-01 and SB-02).

PAHs, VOCs & TPH – 1721 NE 23rd Street: A number of detectable PAH concentrations have been identified in groundwater samples collected from the north and east portion of this parcel with naphthalene, 1-methylnaphthalene and 2-methylnaphthalene exceeding EPA Tapwater screening levels; no MCLs have been established. These compounds are commonly present as degraded petroleum hydrocarbons or in association with diesel fuel (medium-fraction hydrocarbons).

A limited number of VOCs exceeded laboratory detection limits and include acetone, benzene, ethylbenzene, toluene and xylenes. Aside from acetone, these compounds are present as a component of gasoline-range fuel. Benzene exceeds the MCL of 0.005 mg/L in samples collected

from SB-04 through SB-06, located in the north and east portions of the parcel. Ethylbenzene also exceeds the MCL of 0.07 at Boring SB-05. Importantly, no VOCs typically associated with automotive repair and body work businesses, such as chlorinated solvents and common degreasing compounds, have been identified in the area assessed.

Similarly, TPH low- and medium fractions are also present in this portion of the parcel. Concentrations for both fractions noted in these locations exceed their Tapwater screening levels and also exceed the ODEQ generic level of 1.0 mg/L for combined low- and medium-fractions. Also of note, TPH medium-fraction and high-fraction (oil range) hydrocarbons are present in the groundwater sample collected south of the building (SB-07) and exceed their respective Tapwater screening levels. However, when the results are combined it is below the ODEQ generic level of 1.0 mg/L for combined low- medium- and high-fractions.

The concentration and general lateral distribution of dissolved-phase VOCs and petroleum hydrocarbons suggest that the source area for this subsurface impact is the former fuel storage and dispensing facilities in the northeast portion of the parcel. Considering an expected south-southeast primary groundwater flow direction, we conclude the approximate lateral extent of dissolved-phase petroleum hydrocarbons is adequately assessed to the south and southwest; however, impacted groundwater is expected to be present offsite to the east and southeast. Groundwater data collected by SCS at the east-adjoining property (1742 NE 23rd Street) in 2016 indicated the presence of TPH low-fraction hydrocarbons at concentrations exceeding Tapwater screening levels but below the ODEQ generic level of 1.0 mg/L. These two data points, located adjacent to N Rhode Island Avenue and approximately 40 to 150 feet to the east and southeast of the former fueling facilities, provides adequate assessment of dissolved-phase hydrocarbons in the downgradient direction. Similarly, a groundwater sample recently collected at the east property boundary of the west-adjoining property (southeast corner of NE 23rd Street and Kelham Avenue) did not indicate detectable concentrations of VOCs or all fractions of TPH; this location provides assessment of the dissolved-phase plume to the west. Finally, the petroleum hydrocarbon impact is expected to extend northerly to a lesser extent, beneath NE 23rd Street. However, it is our conclusion that the groundwater impact on the eastern portion of the northern parcel represents an individual release and should not be reflective of migration from the southern parcel.

Soil Gas

1721 NE 23rd Street: VOCs exceeding laboratory detection limits were identified in both soil gas samples collected including low-fraction petroleum hydrocarbon compounds such as benzene, toluene, ethylbenzene and xylenes. The benzene concentration exceeds the Modified Resident Carcinogenic RSLs and ethylbenzene exceeds both the Modified Resident RSL and Industrial ISL in the east portion of the parcel (Sample SV-02). Lesser benzene and ethylbenzene soil gas concentrations were noted in the western portion of the parcel with ethylbenzene greater than both the Modified Resident RSL and Industrial ISL.

Soil gas concentrations can serve as indicators for the location of source areas and relative differences in lateral contaminant concentrations in the subsurface. This data indicates that vapor-phase petroleum hydrocarbons are present across the parcel with a potential source area in the east near N Rhode Island Avenue. There is also a possibility that vapor-phase hydrocarbons could be

migrating from an offsite source area located to the west (former gasoline service station at 1615 NE 23rd Street). This possibility is further supported by groundwater analytical data discussed in the preceding section.

1708 NE 23rd Street: VOCs exceeding laboratory detection limits were identified in all three soil gas samples collected including low-fraction petroleum hydrocarbon compounds such as benzene, ethylbenzene and xylenes. In general, highest concentrations were exhibited in Sample SV-03 located north of the existing building west and in close proximity to the former fueling facilities. Results from Sample SV-04 are similar as would be expected as also in close proximity to the former fuel storage and dispensing equipment. Individual compounds in these two samples that exceed Modified Resident Carcinogenic RSLs include 1,3-butadiene, chloroform, 1,4-dioxane and ethylbenzene; both chloroform and ethylbenzene also exceed the Modified Carcinogenic Industrial

Air ISL. The majority of individual compound results from Sample SV-05, located south of the building, are noticeably lower than the more northern located samples. This data indicates that vapor-phase petroleum hydrocarbons have likely originated from a release in the northeastern portion of the parcel. Furthermore, the results indicate that vapor-phase COC could potentially pose an exposure concern assuming the vapor can migrate through the building foundation and floor slabs.

Asbestos Containing Materials- 1708 NE 23rd Street

The window pane caulk and transite pipe must be abated prior to the commencement of certain renovation/demolition activities. The floor tile can be left in place during demolition, provided that the demolition contractor does not render the material friable. If the building is to be renovated, the floor tile will also require abatement. The ACM Survey and Project Design (Appendix E) should be provided to the demolition or renovation contractor prior to the commencement of demolition and renovation activities.

SCS appreciates the opportunity to support the City with this project. If you have any questions or require additional information, do not hesitate to contact us at (405) 264-3624.

Sincerely,
SCS ENGINEERS

Amy Dzialowski,
Senior Project Manager

SCS ENGINEERS

1708 and 1721 NE 23rd Street
Oklahoma City, Oklahoma

Limited Phase II Environmental Site Assessment

Presented to:

The City of Oklahoma City

420 W Main Street, 9th Floor
Oklahoma City, OK 73102

Presented by:

SCS ENGINEERS
1817 Commons Circle, Suite 1
Yukon, OK 73099

March 24, 2017
File No. 27217022.00

1708 and 1721 NE 23rd Street
Oklahoma City, Oklahoma
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The City of Oklahoma City
420 W Main Street, 9th Floor
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March 24, 2017
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Appendices

1 INTRODUCTION

SCS Engineers (SCS) has completed a limited Phase II Environmental Site Assessment (ESA) for the properties located at 1708 and 1721 NE 23rd Street in Oklahoma City, Oklahoma (Properties). The property located at 1708 NE 23rd Street consists of 0.8942 acres of commercial land with two single-story buildings totaling 18,313 square feet. The property located at 1721 NE 23rd Street consists of 0.6715 acres of vacant commercial land (**Figure 1**).

The objective of this limited Phase II ESA scope of work was to gather soil, groundwater and subsurface soil vapor assessment information to assess potential environmental conditions and assist in decision-making with respect to future redevelopment of the Properties. Phase I ESAs of the Properties were completed by SCS in January 2017. Data collection locations for the Limited Phase II ESA were established to assess areas that could be impacted by potential onsite and offsite source areas. Additional information regarding these potential Recognized Environmental Conditions (RECs) is provided in **Section 1.1**.

1.1 PROPERTY HISTORY & BACKGROUND

1.1.1 Phase I ESA

Phase I ESAs for the Properties were completed by SCS for the City of Oklahoma City (City) and the Pivot Project on January 5, 2017, in conformance with the scope and limitations of the ASTM International (ASTM) Practice E1527-13. Findings pertaining to the Properties include:

1708 NE 23rd Street

Historical sources indicate this parcel was developed as a filling station with onsite automotive repair by the early 1930s. By the mid-1940s, the structure was expanded and the facility appears to have included fuel filling, auto repair, auto body work, and painting.

Development of the area surrounding the Property began to be developed by the 1930s. The surrounding properties are primarily residential with commercial businesses along the NE 23rd Street corridor. Further investigation of historical records indicated that some adjacent addresses were listed in environmental databases and associated with historic automotive filling and repair. The assessment conducted by SCS revealed the following RECs with respect to the Property:

- The parcel is listed in the Environmental Data Resources (EDR) Historic Auto Stations database.
- An automotive repair facility operated west adjacent to the parcel.
- A total of 11 offsite properties were identified in the EDR Historic Auto Stations database within 0.1-mile of the parcel.
- A total of five offsite properties were identified in the EDR Historic Cleaners database within approximately 0.1-mile of the parcel.

1721 NE 23rd Street

The property at 1721 NE 23rd Street was developed as a residential and commercial parcel by the 1930s. The location began to be more commercialized by the 1950s; businesses that have occupied the Property include a motel, an auto service garage, auto body shop and a wrecker service. In the 2000s, a portion of the parcel appeared to store numerous salvaged autos before being removed from the Property before 2010.

Development of the area surrounding the parcel began to be developed by the 1930s. The surrounding properties are primarily residential with commercial businesses along the NE 23rd Street corridor. Further investigation of historical records indicated that some adjacent addresses were listed in environmental databases and associated with historic automotive filling and repair. The assessment conducted by SCS revealed the following RECs with respect to the parcel:

- Historic parcel uses have included an auto repair facility, an auto body shop, and a wrecker service and salvage yard.
- The parcel is listed in the EDR Historic Auto Stations database.
- An automotive filling and repair station historically operated south adjacent to the parcel; this former business is also listed in the EDR Historic Auto Stations database.
- A former filling station operated west and in close proximity to the parcel.
- The east adjacent property is listed in the UST database and although this facility is not identified as a Leaking UST (LUST) site, this does not preclude the possibility of a currently unidentified release being present at this site.
- A total of 11 offsite properties were identified in the EDR Historic Auto Stations database within 0.1-mile of the parcel.
- A total of five offsite properties were identified in the EDR Historic Cleaners database within approximately 0.1-mile of the parcel.

1.2 INVESTIGATION OBJECTIVES

The objectives of this assessment included sampling of soils, groundwater and subsurface soil vapor to provide an inquiry as to the overall potential for environmental impairment to the Properties. This limited Phase II ESA was conducted in general conformance with the scope and limitations of ASTM Practice E1903-11. The use of ASTM E1903-11 provides a framework for employing good commercial and customary practices in conducting Phase II ESAs.

Regulatory screening levels were used when comparing soil and groundwater concentrations present at the Properties. These levels serve as indicators of potential problems that generally require further investigation.

The Oklahoma Department of Environmental Quality (ODEQ) uses the United States Environmental Protection Agency (EPA) Regional Maximum Contaminant Level (MCL) –Based Soil Screening Levels (SSLs), Risk-Based SSLs, Residential SSLs, and Industrial SSLs for soil, and MCLs and Tapwater Screening Level values for drinking water as initial screening tools for soil and groundwater quality.

Subsurface soil vapor sampling was conducted using generally accepted industry practices including the *Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air*, published by EPA (June 2015) and the Interstate Technology & Regulatory Council's *Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management* published in October 2014. The soil gas and ambient air analytical results were compared to the EPA Regional Screening Level (RSL) Resident and Industrial Ambient Air Tables (May 2016).

1.3 LIMITATIONS

SCS does not and cannot represent that the Properties contain no hazardous or toxic materials, products, or other latent conditions beyond that observed by SCS during limited Phase II ESA activities. Further, the services herein shall in no way be construed, designed, or intended to be relied upon as legal interpretation or advice.

This information has been obtained for the City and Pivot Project solely for their use and reliance in the soil, groundwater and subsurface soil vapor sampling of these Properties. Reliance on this report by any other party may involve assumptions whose extent and nature lead to a distorted meaning and impact of the findings and opinions related herein. With the consent of the City, Pivot Project and SCS, we may be available to discuss findings and opinions related specifically to other parties' unique risk management concerns related to the Properties.

2 PHYSICAL SETTING INFORMATION

2.1 TOPOGRAPHY AND SURFACE WATER CHARACTERISTICS

The 2012 7.5-Minute United States Geological Survey (USGS) Topographic Quadrangle Map of the Oklahoma City Quadrangle indicates the land in the vicinity of the Properties generally slopes to the south. Both Properties gently slope to the north. The elevation of the Property at 1708 NE 23rd Street is approximately 1,219 feet above mean sea level and 1,215 feet above mean sea level at 1721 NE 23rd Street. No surface water bodies are located on the Properties or adjoining tracts.

2.2 REGIONAL GEOLOGY

According to the Oklahoma Geological Survey, geology in the vicinity of the Properties consists of the Permian-age sedimentary rock formation known as the Hennessey Shale. The Hennessey Shale is typified by predominantly muddy siltstone, silty shale, and minor very fine-grained sandstone characteristic of shallow-marine, deltaic, and alluvial deposits. The bright red color of the formation comes from the mineral hematite which was deposited along with the sand and shale

in the deltaic and near-shore marine settings commonly found during the Permian. Once deposited, the hematite became oxidized and turned the surrounding rock red.

2.3 REGIONAL GROUNDWATER CONDITIONS

The groundwater aquifer in this area is the Garber Sandstone and Wellington Formation. The Garber Wellington Aquifer consists of massive to cross-bedded and fine-grained sandstone, which is also interbedded with mudstone and siltstone. There is a maximum thickness of 1,000 feet with a saturated thickness from 150 to 650 feet and a base for freshwater found between 500 and 1,000 feet. The upper 200 feet of the aquifer is unconfined and becomes partly confined or confined as one reaches greater depths. Generally, the aquifer yields calcium magnesium carbonate-bicarbonate type water that contains less than 500 milligrams per liter (mg/L) of dissolved solids. At greater depths the water begins to become more mineralized. Wells in the aquifer can yield 100 to 300 gallons per minute, and locally they are capable of more than 500 gallons per minute.

3 FIELD ACTIVITIES

3.1 BORING ADVANCEMENT AND SOIL SAMPLING

Prior to initiating intrusive investigation activities, the Properties were cleared for underground utilities using the Oklahoma One Call System (Call-OKIE). Drilling activities were conducted on February 21 and 22, 2017, using a combination of direct-push and solid-stem auger services provided by Associated Environmental Industries (AEI) of Norman, Oklahoma. Soil borings (SB-01 through SB-07; **Figure 2**) were advanced to an approximate depth of nine to 15 feet below ground surface (bgs) using a Geoprobe 3370DT direct-push rig. After sampler refusal was achieved using the direct-push unit, the Geoprobe rig was retooled to accommodate 4.5-inch outside diameter solid-stem augers and the boreholes were advanced to approximately 20 to 30 feet bgs. Three additional single-rod, direct-push locations (SS-01 through SS-03) were advanced to a total depth of five feet bgs.

Soil cores from the direct-push unit were collected using a two-inch diameter core barrel fitted with disposable acetate liners. Once retrieved, soil was described by the field scientist in accordance with the Unified Soil Classification System. Field boring logs from the sampling event are included in **Appendix A**.

Representative soil samples were collected for laboratory analysis. Soils were collected from the near surface at all boring and single-rod, direct-push locations. Soils were also collected at a deeper soil interval corresponding to the area with the highest Organic Vapor Monitor (OVM) readings at each boring location. In the absence of OVM detections, deeper soil interval samples were taken from the soils immediately above the consolidated bedrock. Collected soils were transferred into clean, unused containers provided by the analytical laboratory. Samples were immediately placed on ice and stored at approximately 4° Celsius (C) until analysis. Nitrile gloves used during sampling were disposed of following sample collection. Samples collected from surface soils as well as those collected at the depth were analyzed for polyaromatic hydrocarbons (PAHs) using EPA Method 8270C, Resource Conservation Recovery Act (RCRA) 8 Metals using EPA Method 6010, total petroleum hydrocarbons (TPH) high-fraction, medium-fraction, and low -fraction hydrocarbons using EPA Method 8015 and volatile organic compounds (VOCs) using EPA Method 8260. Because one single-rod, direct-push location (SS-01) was positioned at the location of a former greenhouse, surface soils at this sample point were also analyzed for herbicides using EPA Method 8151 and pesticides using EPA Method 8081.

Quality Assurance/Quality Control (QA/QC) sampling included collection of duplicate soil samples for each analysis. A separate duplicate sample was collected for each Property. Trip blanks were included with each sample shipment that contained VOC samples. An equipment blank was collected for soil at the end of the drilling event and a field blank was collected prior to leaving the site.

The samples and coolers were transported to Environmental Science Corporation (ESC) for subsequent analysis. All samples were analyzed and handled according to the laboratory's QA/QC Plan. Laboratory results for soil samples are presented in **Table 1.** The ESC analytical laboratory report and chain of custody documentation are provided in **Appendix B**.

3.2 GROUNDWATER SAMPLING

After borehole advancement, one-inch diameter PVC temporary piezometers were installed to collect a groundwater sample from each deeper boring location. Prior to collecting a sample, Borings SB-01, SB-03, SB-04, SB-05, and SB-06 were purged by removing approximately three borehole volumes of water with a bailer dedicated to each individual location. Boring SB-02 had a low volume of water within the piezometer and therefore was sampled without purging and Boring SB-07 was purged until empty then sampled. Groundwater samples were collected using the dedicated disposable 0.5-inch bailers. Groundwater depths ranged from approximately seven to 18 feet bgs during sampling activities.

Laboratory analyses for collected groundwater included PAHs (EPA Method 8270C), RCRA 8 Metals (EPA Method 6010-filtered), TPH high-fraction, medium-fraction, and low-fraction (EPA Method 8015) and VOCs (EPA Method 8260). Samples were immediately placed on ice and stored at approximately 4°C until analysis. Nitrile gloves used during sampling were disposed of following sample collection at each location. Field notes for sampling activities are included in **Appendix C**.

QA/QC sampling included collection of duplicate groundwater samples for each analysis. A separate duplicate sample was collected for each Property. Trip blanks were included with each sample shipment that contained VOC samples. Equipment and field blanks were also collected during the sampling event.

The samples and coolers were transported to ESC for subsequent analysis. All samples were analyzed and handled according to the laboratory's QA/QC Plan. Laboratory results for groundwater samples are presented in **Table 2.** The ESC analytical laboratory report and chain of custody documentation are provided in **Appendix B**.

3.3 SUBSURFACE SOIL VAPOR SAMPLING

Five boreholes were advanced using the direct-push technology drilling method for collection of subsurface soil vapor samples on the Properties (**Figure 2**). The borings were advanced to an approximate depth of five feet bgs. During installation of vapor implant SV-03, located on the north portion of the 1708 NE 23rd Street parcel, water was noted in the borehole at an approximate depth of three feet bgs. Therefore, a second borehole located within one foot of the first, was driven to a final depth of two feet bgs. Sacrificial drive points and six-inch long soil vapor filters (implant) were installed at the described depths; disposable poly-tubing was then connected to each implant. Once the sampling collection devices were constructed, glass beads were placed in the area surrounding the drill rod around each implant and outside of the tubing; a bentonite seal mixture was then poured to grade to seal the boreholes from ambient air.

Subsurface soil vapor sampling proceeded on February 24 and again on February 27, 2017, providing the minimum two hour equilibration time to allow the beads and bentonite mixture to properly seal. Air was purged from poly tubing and vapor well prior to sample collection to ensure that ambient air from the sampling system was removed. Samples were collected through the poly tubing into 1-liter summa canisters connected to a flow regulator using a quick-connect fitting.

Subsurface soil vapor samples were collected at a flow rate of 100-150 milliliters per minute. Following soil vapor sampling, one outdoor (ambient) air sample was collected directly into an identical summa canister using a six-inch stainless steel sample inlet fitted to a flow regulator with a flow rate of 100-150 milliliters (ml) per minute.

No trip blank was utilized for shipment of the subsurface soil vapor and air samples as the samples were fully contained within the summa canister. As requested by the analytical laboratory, samples were resealed in their original shipping box and not placed on ice. In addition, no equipment blank sample was collected as the subsurface sampling apparatus were dedicated per location.

The soil vapor and ambient air samples were transported to ESC for subsequent VOC analysis using EPA Method TO-15; the samples were analyzed and handled according to the laboratory's QA/QC Plan. Laboratory results are presented in **Table 3**. The ESC analytical laboratory report and chain of custody documentation are provided in **Appendix B**.

3.4 INVESTIGATION-DERIVED WASTE

Soil cuttings generated during advancement of borings were containerized in 55-gallon drums labeled as non-hazardous waste and temporarily staged along the east side of the building located at 1708 NE 23rd Street. Five drums were dedicated for soil cuttings and one to containerize decontamination and sampling purge water from the groundwater piezometers. Pending completion of the assessment activities, waste disposal options will be provided to the City with disposal to follow.

4 FINDINGS

4.1 GEOLOGY & HYDROGEOLOGY

In general, the geology in the vicinity of the Properties consists of predominantly muddy siltstone, silty shale, and minor very fine-grained sandstone characteristic of shallow-marine, deltaic, and alluvial deposits. According to the Natural Resources Conservation Service (NRCS) the Properties are both classified as urban land. Urban land is defined as areas where more than 85 percent of the surface is covered by pavement, driveways and buildings (impervious cover). Because most areas that are classified as urban land have been extensively reshaped by cutting and filling, there can be extreme variability in surface soil characteristics across sites.

Soils encountered during this investigation were typically brown silty clays in the surface soils (**Appendix A**). These surface soils transitioned to lighter colored silty clays to a red silty clay with depth. The red silty clay horizon became harder and more friable from approximately eight to 12 feet bgs. Bedrock consisting of red siltstone was encountered across the drilling area at approximately nine to 15 feet bgs.

Groundwater depths ranged from approximately seven to 18 feet bgs during sampling activities. This information indicates that the first occurrence of groundwater is expected to be primarily present in the upper portion of semi-consolidated bedrock.

4.2 SOIL ANALYTICAL RESULTS

4.2.1 RCRA 8 Metals

Table 1 provides laboratory results for RCRA-8 metals in soil samples. Metals exceeding laboratory detection limits included arsenic, mercury, barium, chromium and lead. In surface soil samples, defined as from surface grade to a depth of approximately 3 feet bgs, arsenic concentrations ranged between 2.59 and 5.53 milligrams per kilograms (mg/kg). For subsurface samples collected from depths ranging between 8 and 13 feet bgs, analytical results varied between 1.51 and 19.5 mg/kg. The maximum concentration was noted in the sample collected from Soil Boring SB-07 at a depth of approximately 11 to 12 feet bgs. All results exceed the Resident SSL of 0.68 mg/kg with six of ten sample locations exceeding the Industrial SSL of 3.0 mg/kg.

Detectable mercury concentrations ranged between 0.0270 and 0.0292 mg/kg and exceeded the Risk-Based SSL of 0.0033 mg/kg. However, none exceeded the Resident SSL of 0.94 mg/kg. Barium concentrations ranged between 37.3 and 1,130.0 mg/kg, all exceeding the Risk-Based SSL of 16 mg/kg; however, none exceeded the Resident SSL of 1,500 mg/kg. Chromium concentrations ranged between 9.35 and 29.0 mg/kg. There are no established Resident or Industrial SSLs for chromium. The final metal with detectable concentrations was lead, ranging from 4.79 to 17.2 mg/kg. No lead concentrations exceeded the Resident or Industrial SSLs of 400 and 800 mg/kg, respectively.

4.2.2 Volatile Organic Compounds & Petroleum Hydrocarbons

VOC and TPH analytical results are shown in **Table 1.** The only VOCs exhibiting a concentration exceeding a Resident SSL were from the sample collected from SB-05 at a depth of approximately 9 to 10 feet bgs. Compounds included ethylbenzene, naphthalene, and 1,2,4-trimethylbenzene (7.4 mg/kg). However, none of these detections exceeded their respective Industrial SSLs. In addition, benzene exceeding laboratory detection limits was primarily noted in samples collected from subsurface soil. The generally low-level detections, ranging between 0.00311 to 0.00947 mg/kg, exceeded the Risk-Based SSL of 0.00023 mg/kg; however, are significantly below the Resident SSL of 1.2 mg/kg. The single benzene detection from a surface sample (0.00167 mg/kg; SB-01 from grade to approximately 1 foot bgs) is also substantially below the Resident SSL. None of the remaining VOCs exceeding laboratory detection limits exceed their respective Industrial SSLs.

Petroleum hydrocarbon-specific laboratory analysis was also completed for soil samples with results shown in Table 1. TPH exceeding laboratory detection limits are noted in samples collected from Soil Borings SB-03, SB-04 and SB-05. TPH low-fraction (gasoline-range hydrocarbons) ranged from 2.87 mg/kg (SB-06 at approximately 9 to 10 feet bgs) to 788 mg/kg in the sample collected from Soil Boring SB-05 (approximately 9 to 10 feet bgs). Sample results from these borings exceed the Resident SSL of 8.2 with samples from SB-03 and SB-05 exceeding the Industrial SSL of 42 mg/kg. Concentrations of TPH medium-fraction (diesel-range hydrocarbons) were notably lower than the low-fraction, with results ranging from 5.74 mg/kg (SB-04 at approximately 11 to 12 feet bgs) 99.8 mg/kg in the sample collected from Soil Boring SB-05 (approximately 9 to 10 feet bgs). Only the sample collected from an approximate depth of 9 to 10 feet bgs exceed the Resident and Industrial SSLs of 11.0 and 60 mg/kg, respectively. Aside from the near surface soil sample collected from SB-01 (4.59 mg/kg), no TPH high-fraction (oil-range hydrocarbons) were exhibited exceeding laboratory detection limits.

4.2.3 Polycyclic Aromatic Hydrocarbon, Herbicides and Pesticides

PAH concentrations exceeding laboratory detection limits were exhibited in samples collected from four of ten boring locations (**Table 1**). Of these, all but one detection was indicated in samples collected from near surface soil. A number of compounds exceeded Risk-Based SSLs; however, only one result, benzo(a)pyrene in the sample from SS-01 (0.0940 mg/kg), exceeded the Resident SSL of 0.016 mg/kg. However, this result is below the Industrial SSL of 0.29 mg/kg.

In addition, as shown on **Table 1**, laboratory analysis for chlorinated acid herbicides and pesticides were completed for the near surface soil sample collected from SS-01 located in the area of a former greenhouse operation. Neither analysis identified these compounds exceeding laboratory detection limits.

4.3 GROUNDWATER ANALYTICAL RESULTS

4.3.1 RCRA 8 Metals

Table 2 provides laboratory results for groundwater samples collected during this assessment. RCRA-8 metals exhibited exceeding laboratory results included arsenic, barium and lead. Of these detections, only barium and lead (duplicate sample for SB-05) exceed EPA Tapwater screening

levels. However, only the lead detection of 0.0159 milligrams per liter (mg/L) in the SB-05 duplicate slightly exceeds the Maximum Contaminant Level (MCL) of 0.015 mg/L.

4.3.2 Volatile Organic Compounds & Petroleum Hydrocarbons

As shown on **Table 2,** VOCs exceeding laboratory detection limits primarily consist of gasoline-range hydrocarbons, including benzene, toluene, ethylbenzene and xylenes (BTEX) from samples collected in the northern and eastern portion of 1708 NE 23rd Street (**Figure 5**). All four compounds exceed Tapwater screening levels with benzene and ethylbenzene exceeding MCLs. The remaining VOC detection is acetone in samples from Soil Borings SB-03 and SB-04; neither exceed the Tapwater screening level of 1.4 mg/L. It is noteworthy that no chlorinated solvent concentrations exceeding laboratory detection limits were exhibited.

Both detectable concentrations of TPH low-and medium-fractions were identified in samples collected from six of seven boring locations. Low-fraction (gasoline-range) concentrations ranged from 0.2 mg/L (Boring SB-01) to 23 mg/L (Boring SB-05 and duplicate). Medium-fraction (diesel-range) concentrations ranged from 0.119 mg/L (Boring SB-02) to 4.97 mg/L (Boring SB-05 and duplicate). In addition, TPH high-fraction (oil-range) concentrations of 0.328 and 0.0134 mg/L were exhibited in samples collected from SB-04 and SB-07. All detectable concentrations exceed the EPA Tapwater screening values. As EPA has not established MCLs for the TPH ranges, the results can be compared to ODEQ *Risk-Based Levels for TPH* published in October 2012. The ODEQ generic level of 1.0 mg/L for combined low- medium- and high-fractions is exceeded in the area of Soil Borings SB-03 through SB-06. The maximum combined concentrations are exhibited in two areas, including the eastern portion of 1721 NW 23rd Street and the northern and eastern portion of 1708 NE 23rd Street.

4.3.3 Polycyclic Aromatic Hydrocarbons

Generally low concentrations of PAH compounds exceeding laboratory detection limits were identified in all sampling locations with the exception of Soil Boring SB-07 (**Table 3**). Results from Soil Borings SB-03 through SB-06 indicated limited compounds have exceeded EPA Tapwater screening levels. These include naphthalene, 1-methylnaphthalene and 2-methylnaphthalene in SB-03 through SB-06. No groundwater MCLs have been established for these compounds.

4.4 SOIL GAS ANALYTICAL RESULTS

Table 3 provides laboratory results for the soil gas and ambient air sampling conducted during this assessment. VOCs exceeding laboratory detection limits were identified in all five soil gas samples collected (SV-01 through SV-05). Detectable constituents that exceed calculated Modified Carcinogenic Resident Air Screening Levels (RSL) included benzene at location SV-02, 1.3-butadiene (SV-04), chloroform (SV-04 and SV-05), 1,2-dichloroethane (SV-01 duplicate), 1,4-dioxane (SV-04) and ethylbenzene (all locations). Of these, the chloroform (SV-04 and SV-05) and ethylbenzene (SV-01 through SV-03) also exceed the Modified Carcinogenic Industrial Air Screening Levels (ISL) of 18.0 and 163.0 ug/m3, respectively.

The ambient air sample (BA-1) exhibited VOCs exceeding laboratory detection limits for nine individual compounds. Of these, acetone, cyclohexane, ethanol, dichlorodifluoromethane, heptane, n-hexane, toluene and 2,2,4-trimethylpentane were also indicated in the subsurface samples, however, at primarily lower concentrations. None of the BA-1 results exceeded either the Modified Carcinogenic RSL or ISLs.

4.5 ASBESTOS CONTAINING MATERIALS-1708 NE 23RD STREET

A National Emission Standard for Hazardous Air Pollutants (NESHAP) Asbestos Inspection of the Former Auto Repair facility was completed. This inspection was conducted on March 7, 2017, by an Asbestos Hazard Emergency Response Act (AHERA) Inspector, licensed by the Oklahoma Department of Labor (ODOL) and under the direction of an AHERA Management Planner and Project Designer. Approximately 20 windows with window pane caulk and approximately 10 linear feet of transite pipe were found to be asbestos containing at the Former Auto Repair located at 1708 NE 23rd Street. In addition, approximately 850 square feet of asbestos containing floor tile was identified (Appendix E).

4.6 QUALITY CONTROL ANALYTICAL RESULTS AND DATA VALIDATION

QC analytical results from this assessment are included in **Tables 1** through **4**. A summary of results by sample type are discussed below.

Soil Duplicate (**Table 1**): A duplicate sample was collected from each of the Properties. For the 1721 NE 23rd Street parcel, the duplicate sample was collected from Boring SB-01 at an approximate depth of eight to nine feet bgs. The sample was collected from the 1708 NE 23rd Street parcel from Boring SB-07 at an approximate depth of approximately 11 to 12 feet bgs. Results are summarized below:

- RCRA-8 Metals: Detectable concentrations included arsenic, barium, chromium and lead. In general, a goal of Relative Percent Differences (RPDs) less than 20% is desirable. The RPDs presented are for the 1721 and 1708 NE 23rd Street Properties, respectively. The RPDs for the detected metals were arsenic (38.9% and 15.5%), barium (114.4% and 1.6%), chromium (48.5% and 6.8%) and lead (39.1% and 4.9%). Some of these RPDs are considerably over the desired value; however, as the highest concentrations noted in the primary sample do not exceed Resident SSLs (except arsenic noted as within an expected background concentration), our conclusions as to significance of the data do not change.

- VOCs: On the 1708 NE 23rd Street Property, the duplicate benzene concentration is 0.00788 mg/kg with the primary sample concentration of 0.00947 mg/kg. The RPD is approximately 21.1 %, and although this is slightly above the desired value, concentrations in both the primary and duplicate sample do not exceed Residential SSLs.

Groundwater Duplicate (**Table 2**): For the 1721 NE 23rd Street Property, the duplicate sample was collected from Boring SB-03. The sample was collected from the 1708 NE 23rd Street Property from Boring SB-05. Results are summarized below:

- RCRA-8 Metals: Detectable concentrations included arsenic, barium, chromium, and lead. The RPDs presented are for the 1721 and 1708 NE 23rd Street Propereties, respectively. The RPDs for the detected metals were barium (34.3% and 7.6%) and lead at the 1721 NE 23rd Street Property (18.5%). The duplicate sample for the 1708 NE 23rd Street Property had detections of arsenic and lead that could not be compared to primary sample levels, which were below reporting limits. As with soil results, RPDs of less than 20% are desirable. Although the barium RPD exceeds 20% for the 1721 NE 23rd Street Property, it is our assessment that this value is not significant to our overall findings and conclusions.

- VOCs: Detectable concentrations included acetone, benzene, ethylbenzene, toluene, and xylene. The RPDs for the detected VOCs at the 1708 NE 23rd Street Property were benzene (0.6%) ethylbenzene (1.0%) toluene (1.2%) and xylene (2.6%). The duplicate sample for the 1721 NE 23rd Street Property had detections of acetone that could not be compared to primary sample levels, which were below reporting limits. The reported RPDs are within the desired RPD of less than 20%.

- TPH: Detectable concentrations of TPH included low- and medium-fractions. The RPDs presented are for the 1721 and 1708 NE 23rd Street parcels, respectively. The RPDs for the detected TPH low-fraction (13.7% and 4.4%) and TPH medium-fraction (9.9% and 31.2%). Although the TPH medium-fraction RPD exceeds 20% for the 1708 NE 23rd Street parcel, it is our assessment that this value is not significant to our overall findings and conclusions.

- PAH: A total of 10 and a total of seven compounds in both the primary sample and duplicate were identified above laboratory detection limits at 1721 and 1708 NE 23rd Street, respectively. The RPDs for the detected PAHs were anthracene (12.5%) acenaphthene (4.7% and 6.9%), acenaphthylene (9.1% and 0.5%), fluoranthene (46.8%), fluorene (8.5% and 11.7%), naphthalene (5.4% and 4.9%), phenanthrene (14.1% and 6.1%), pyrene (54.7%), 1-methylnapththalene (3.4% and 3.3%) and 2-methylnapththalene (9.1% and 15.4%). Only fluoranthene and pyrene at the 1721 NE 23rd Street location were outside the desired RPD of 20%, however, we do not believe these influence our overall conclusions regarding the Properties.

Soil Gas Duplicate (**Table 3**): A duplicate sample was collected from each of the parcels. For the 1721 NE 23rd Street parcel, the duplicate sample was collected from SV-01 at an approximate depth of five feet bgs. The sample was collected from the 1708 NE 23rd Street parcel the SV-03 location at an approximate depth of two feet bgs. Results are summarized below:

- VOCs: A total of 16 and 12 compounds were identified above laboratory detection limits in Samples SV-01 and SV-03, respectively . A total of 13 VOCs exceeded detection limits in the Duplicate for SV-01 and 12 VOCs exceeded detection limits for the duplicate for SV-03. For ethylbenzene, the compound exceeding the Modified RSL in each sample, the

RPD was 134.4% and 44.9%, above the desired range of 20%. As both the primary sample and duplicate exceed the Modified RSLs, it is our assessment that this value is not significant to our overall findings and conclusions.

Field Blanks (**Table 4**): Field blanks were collected on February 21, 22 and 24, 2017. The samples were analyzed for RCRA-8 metals, TPH high-, medium- and low-fractions, VOCs and PAHs. No concentrations exceeding laboratory detection limits were indicated.

Equipment Blanks (**Table 4**): Equipment blanks were collected on February 21 and 24, 2017. The samples were analyzed for RCRA-8 metals, TPH high-, medium- and low-fractions, VOCs and PAHs. No concentrations exceeding laboratory detection limits were indicated.

Trip Blanks: A total of two trip blanks were provided by ESC, included in coolers containing soil and groundwater samples to be analyzed for VOCs and TPH. Resulting VOC analyses for the trip blanks indicated no compounds exceeding laboratory detection limits.

5.0 CONCLUSIONS

5.1 Geology & Hydrogeology

As discussed in the findings section, the subsurface consists of unconsolidated brown to light brown and red silty clays underlain by semi-consolidated to consolidated red siltstone bedrock. Groundwater, present at depths ranging from approximately seven to 18 feet bgs, appears to be present within the bedrock and was also observed in boreholes at a depth interval between and above the unconsolidated soil and bedrock interface. Information obtained during completion of the Phase I ESA and review of Phase II ESA data obtained for the localized area suggests that the primary groundwater flow direction is to the south-southeast.

5.2 Near Surface Soil

Arsenic in near surface soil exceeds both the Resident and Industrial SSLs. However, the observed concentrations for the samples are not unexpected relative to naturally-occurring concentrations found in Central Oklahoma soils. Average naturally-occurring arsenic concentrations for the United States are provided by the United States Geological Survey. The *National Geochemistry Survey* (NGS) – *September 2008* (accessible online) identifies expected metal concentrations by county. For Oklahoma County, the maximum average concentration is 8.356 parts per million. No near surface soil results from either parcel exceed the NGS maximum average concentration. We therefore conclude that arsenic values are likely indicative of background concentrations and do not represent elevated conditions from a source area. Furthermore, none of the remaining RCRA-8 metals with detections of mercury, barium, chromium, and lead in soil exceed either the Residential and Industrial SSLs;

Aside from the benzo(a)pyrene concentration of 0.0940 mg/kg noted in the west-central portion of 1721 NW 23rd Street (Soil Boring SS-01), no PAH concentrations exceed either Resident or Industrial SSLs. The origin of this Resident SSL PAH exceedance may be attributed to a localized release, such as a spill or staining from past business uses. A similar origin is possible for the TPH high-fraction (oil range) petroleum hydrocarbon concentrations identified in soil at Soil Boring

SB-01. It is noteworthy that vehicular parking/storage from numerous past auto repair and wrecker service businesses has been observed on aerial photographs immediately east of these detections since at least 1951 through approximately 2010. The soil sample collected from SB-02 has also identified PAH concentrations in near surface soil, albeit at lower concentrations. The overall data set supports a conclusion that similar additional currently unidentified localized spills may be present in the south-central portion of this parcel.

5.3 Subsurface Soil

RCRA-8 Metals: Arsenic in near surface soil exceeds both the Resident and Industrial SSLs. The majority of analytical data indicates that samples collected from subsurface soil exhibit generally higher concentrations than in surface soil. As no overlying source area for elevated arsenic is noted in near surface soil, it is our conclusion it is unlikely that these concentrations represent elevated concentrations and are more likely representative of natural unconsolidated soil and bedrock mineral composition at this depth interval.

PAHs, VOCs & TPH – 1721 NE 23rd Street: No detectable PAH concentrations were identified from the three sampling locations and a limited number of VOCs and petroleum hydrocarbons were indicated in analytical results. Specifically, no VOCs or TPH was noted exceeding detection limits in the west portion of the parcel (SB-01) and only a benzene concentration below Resident and Industrial SSLs in the central parcel (SB-02). Conversely, generally low-level VOC concentrations were noted in Soil Boring SB-03, located in the eastern portion of the parcel. TPH low- (gasoline range) and medium-fraction (diesel-range) hydrocarbons were identified at a depth of approximately 8 to 9 feet bgs. These results indicate that a petroleum hydrocarbon source area could be present in this general area of the parcel or from the east-adjoining property. This property, with an address of 1803 NE 23rd Street, has a state UST listing as Bell Gas. Our conclusion is further supported by groundwater results discussed in Section 5.4.

PAHs, VOCs & TPH – 1708 NE 23rd Street: Multiple VOC compounds and TPH low-fraction (gasoline range) and lesser concentrations of medium-fraction (diesel-range) hydrocarbons were indicated above detection limits in samples collected from the north and northeast portion of this parcel. This is the area of the former retail gasoline storage and dispensing area identified in operation since prior to 1932. The highest concentrations were exhibited in Soil Boring SB-05 located immediately east of the former fuel storage tank and dispenser pump area. Lateral attenuation of the adsorbed-phase hydrocarbons and VOCs was noted to the west and south in samples collected from Soil Borings SB-04 and SB-06. Only a detectable benzene concentration was indicated in the sample collected from SB-07, located south of the building approximately 130 feet southwest of the fueling facilities. These results indicate that an onsite source area is present and there is the potential that petroleum-impacted soil could be present to the east and south extending offsite beneath N Rhode Island Avenue. This conclusion is further supported by groundwater results discussed in Section 5.4.

Although there is extensive history of onsite automotive repair, no VOCs typically associated with these operations, such as chlorinated solvents and common degreasing compounds, have been identified in the area assessed. Furthermore, no detectable concentrations of PAHs, aside from naphthalene, 1-methylnaphthalene and 2-methylnaphthalene at SB-05 are exhibited. It is

reasonable to conclude these PAH compounds are associated with medium-fraction petroleum hydrocarbons.

5.4 Groundwater

RCRA-8 Metals: Only barium in three samples and lead in one sample exhibit dissolved-phase metals that exceed EPA Tapwater screening levels. More importantly, no concentrations exceed the applicable MCLs established by EPA for RCRA-8 metals. We therefore conclude that no elevated concentrations from point source contamination appear to be present, and no further assessment of these COC are warranted at either parcel.

PAHs, VOCs & TPH – 1708 NE 23rd Street: A number of detectable PAH concentrations have been identified in groundwater samples collected from the eastern portion of this parcel with three compounds exceeding EPA Tapwater screening levels (no MCLs have been established for these compounds). Because of the physical properties and relative size of these compounds, they do not readily dissolve in groundwater, and if present, typically do not extensively migrate laterally from source areas through groundwater flow. Based on the observed concentrations and professional experience with dissolved-phase PAH compounds, it is our conclusion that additional assessment for PAHs to the north, east or south is not warranted. The conclusion is supported by data obtained west at Soil Boring SB-02, which indicated only acenaphthene above the laboratory detection limit.

The only VOC detection in groundwater samples collected from the northern parcel was acetone at 0.07 mg/L (SB-03). This concentration is significantly below the EPA Tapwater screening level of 1.4 mg/L. Conversely, TPH low-fraction and medium-fraction concentrations exceeding laboratory limits were noted in all three sampling locations with the maximum concentrations present in the east portion of the parcel (2.21/2.24 mg/L [duplicate] and 2.44 mg/L), respectively. All three sample concentrations for both fractions exceed their Tapwater screening levels and also exceed the ODEQ generic level of 1.0 mg/L for combined low- medium- and high-fractions at SB-03. The concentration and general lateral distribution of dissolved-phase hydrocarbons indicate a source area for both gasoline and diesel fuels in the area of SB-03, or from the east-adjoining property. However, it is possible there could be an additional source area located to the west of Boring SB-01 as groundwater is expected to flow primarily from north-northwest to the south-southeast. A former gasoline filling station was formerly located at 1615 NE 23rd Street, approximately 120 feet west of the parcel boundary. This could account for the presence of petroleum hydrocarbons in the west and central portions of 1721 NE 23rd Street (SB-01 and SB-02).

PAHs, VOCs & TPH – 1721 NE 23rd Street: A number of detectable PAH concentrations have been identified in groundwater samples collected from the north and east portion of this parcel with naphthalene, 1-methylnaphthalene and 2-methylnaphthalene exceeding EPA Tapwater screening levels; no MCLs have been established. These compounds are commonly present as degraded petroleum hydrocarbons or in association with diesel fuel (medium-fraction hydrocarbons).

A limited number of VOCs exceeded laboratory detection limits and include acetone, benzene, ethylbenzene, toluene and xylenes. Aside from acetone, these compounds are present as a

component of gasoline-range fuel. Benzene exceeds the MCL of 0.005 mg/L in samples collected from SB-04 through SB-06, located in the north and east portions of the parcel. Ethylbenzene also exceeds the MCL of 0.07 at Boring SB-05. Importantly, no VOCs typically associated with automotive repair and body work businesses, such as chlorinated solvents and common degreasing compounds, have been identified in the area assessed.

Similarly, TPH low- and medium fractions are also present in this portion of the parcel. Concentrations for both fractions noted in these locations exceed their Tapwater screening levels and also exceed the ODEQ generic level of 1.0 mg/L for combined low- and medium-fractions. Also of note, TPH medium-fraction and high-fraction (oil range) hydrocarbons are present in the groundwater sample collected south of the building (SB-07) and exceed their respective Tapwater screening levels. However, when the results are combined it is below the ODEQ generic level of 1.0 mg/L for combined low- medium- and high-fractions.

The concentration and general lateral distribution of dissolved-phase VOCs and petroleum hydrocarbons suggest that the source area for this subsurface impact is the former fuel storage and dispensing facilities in the northeast portion of the parcel. Considering an expected south-southeast primary groundwater flow direction, we conclude the approximate lateral extent of dissolved-phase petroleum hydrocarbons is adequately assessed to the south and southwest; however, impacted groundwater is expected to be present offsite to the east and southeast. Groundwater data collected by SCS at the east-adjoining property (1742 NE 23rd Street) in 2016 indicated the presence of TPH low-fraction hydrocarbons at concentrations exceeding Tapwater screening levels but below the ODEQ generic level of 1.0 mg/L. These two data points, located adjacent to N Rhode Island Avenue and approximately 40 to 150 feet to the east and southeast of the former fueling facilities, provides adequate assessment of dissolved-phase hydrocarbons in the downgradient direction. Similarly, a groundwater sample recently collected at the east property boundary of the west-adjoining property (southeast corner of NE 23rd Street and Kelham Avenue) did not indicate detectable concentrations of VOCs or all fractions of TPH; this location provides assessment of the dissolved-phase plume to the west. Finally, the petroleum hydrocarbon impact is expected to extend northerly to a lesser extent, beneath NE 23rd Street. However, it is our conclusion that the groundwater impact on the eastern portion of the northern parcel represents an individual release and should not be reflective of migration from the southern parcel.

5.5 Soil Gas

Table 3 presents published carcinogenic and noncarcinogenic RSLs for Resident and Industrial Air. The table also presents "screening level" concentrations calculated by applying the EPA recommended and conservative attention factor of 0.03 to account for sampling results being obtained at a depth of approximately five feet bgs.

1721 NE 23rd Street: VOCs exceeding laboratory detection limits were identified in both soil gas samples collected including low-fraction petroleum hydrocarbon compounds such as benzene, toluene, ethylbenzene and xylenes. The benzene concentration exceeds the Modified Resident Carcinogenic RSLs and ethylbenzene exceeds both the Modified Resident RSL and Industrial ISL in the east portion of the parcel (Sample SV-02). Lesser benzene and ethylbenzene soil gas concentrations were noted in the western portion of the parcel with ethylbenzene greater than both the Modified Resident RSL and Industrial ISL.

Soil gas concentrations can serve as indicators for the location of source areas and relative differences in lateral contaminant concentrations in the subsurface. This data indicates that vapor-phase petroleum hydrocarbons are present across the parcel with a potential source area in the east near N Rhode Island Avenue. There is also a possibility that vapor-phase hydrocarbons could be migrating from an offsite source area located to the west (former gasoline service station at 1615 NE 23rd Street). This possibility is further supported by groundwater analytical data discussed in the preceding section.

1708 NE 23rd Street: VOCs exceeding laboratory detection limits were identified in all three soil gas samples collected including low-fraction petroleum hydrocarbon compounds such as benzene, ethylbenzene and xylenes. In general, highest concentrations were exhibited in Sample SV-03 located north of the existing building west and in close proximity to the former fueling facilities. Results from Sample SV-04 are similar as would be expected as also in close proximity to the former fuel storage and dispensing equipment. Individual compounds in these two samples that exceed Modified Resident Carcinogenic RSLs include 1,3-butadiene, chloroform, 1,4-dioxane and ethylbenzene; both chloroform and ethylbenzene also exceed the Modified Carcinogenic Industrial Air ISL. The majority of individual compound results from Sample SV-05, located south of the building, are noticeably lower than the more northern located samples. This data indicates that vapor-phase petroleum hydrocarbons have likely originated from a release in the northeastern portion of the parcel. Furthermore, the results indicate that vapor-phase COC could potentially pose an exposure concern assuming the vapor can migrate through the building foundation and floor slabs.

5.6 Asbestos Containing Materials- 1708 NE 23rd Street

The window pane caulk and transite pipe must be abated prior to the commencement of certain renovation/demolition activities. The floor tile can be left in place during demolition, provided that the demolition contractor does not render the material friable. If the building is to be renovated, the floor tile will also require abatement. The ACM Survey and Project Design (Appendix E) should be provided to the demolition or renovation contractor prior to the commencement of demolition and renovation activities.

5 REFERENCES

ASTM International. 2013. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-13).* ASTM International, West Conshohocken, Pennsylvania.

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United States Environmental Protection Agency. June 2015. *Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air*.

FIGURES

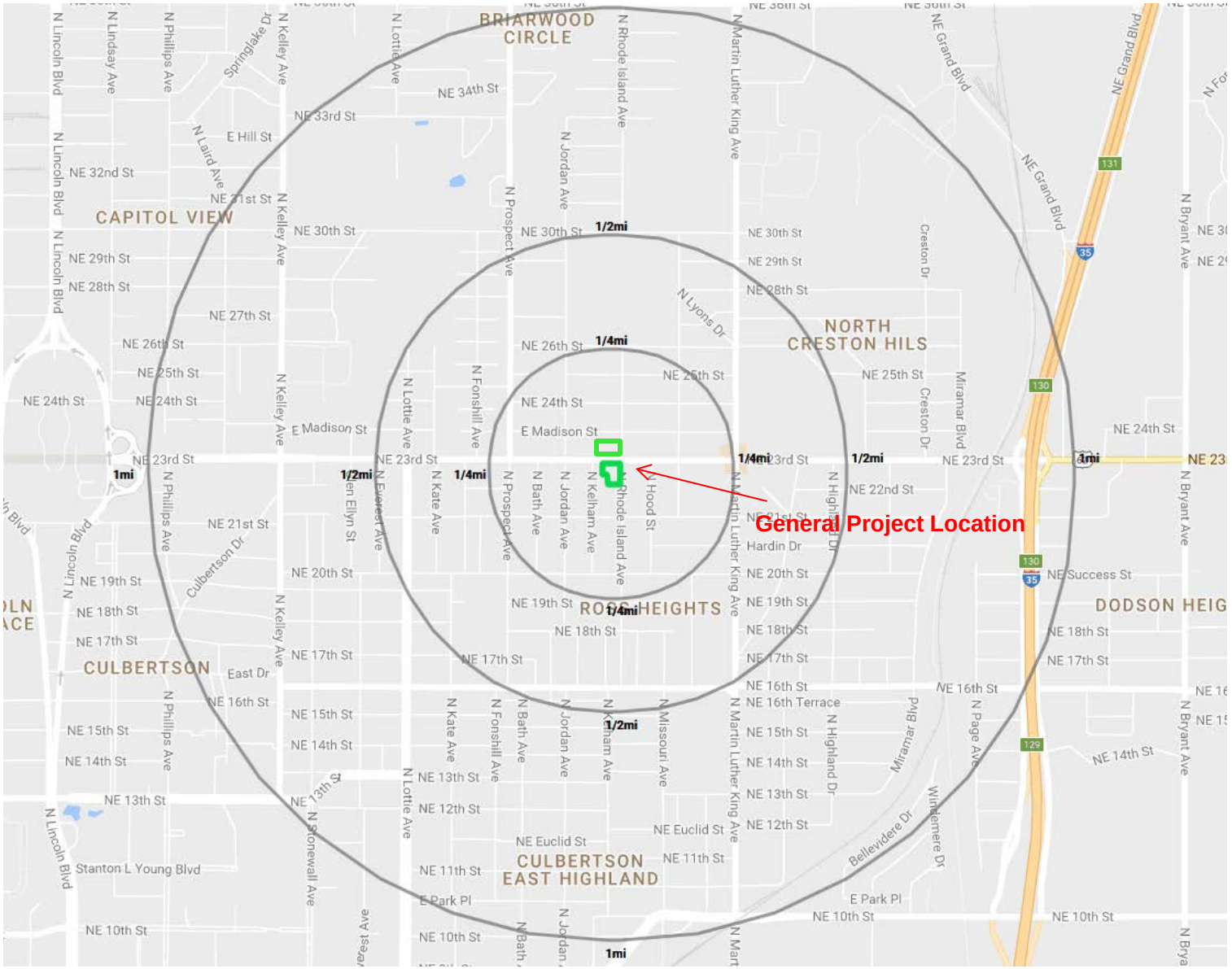

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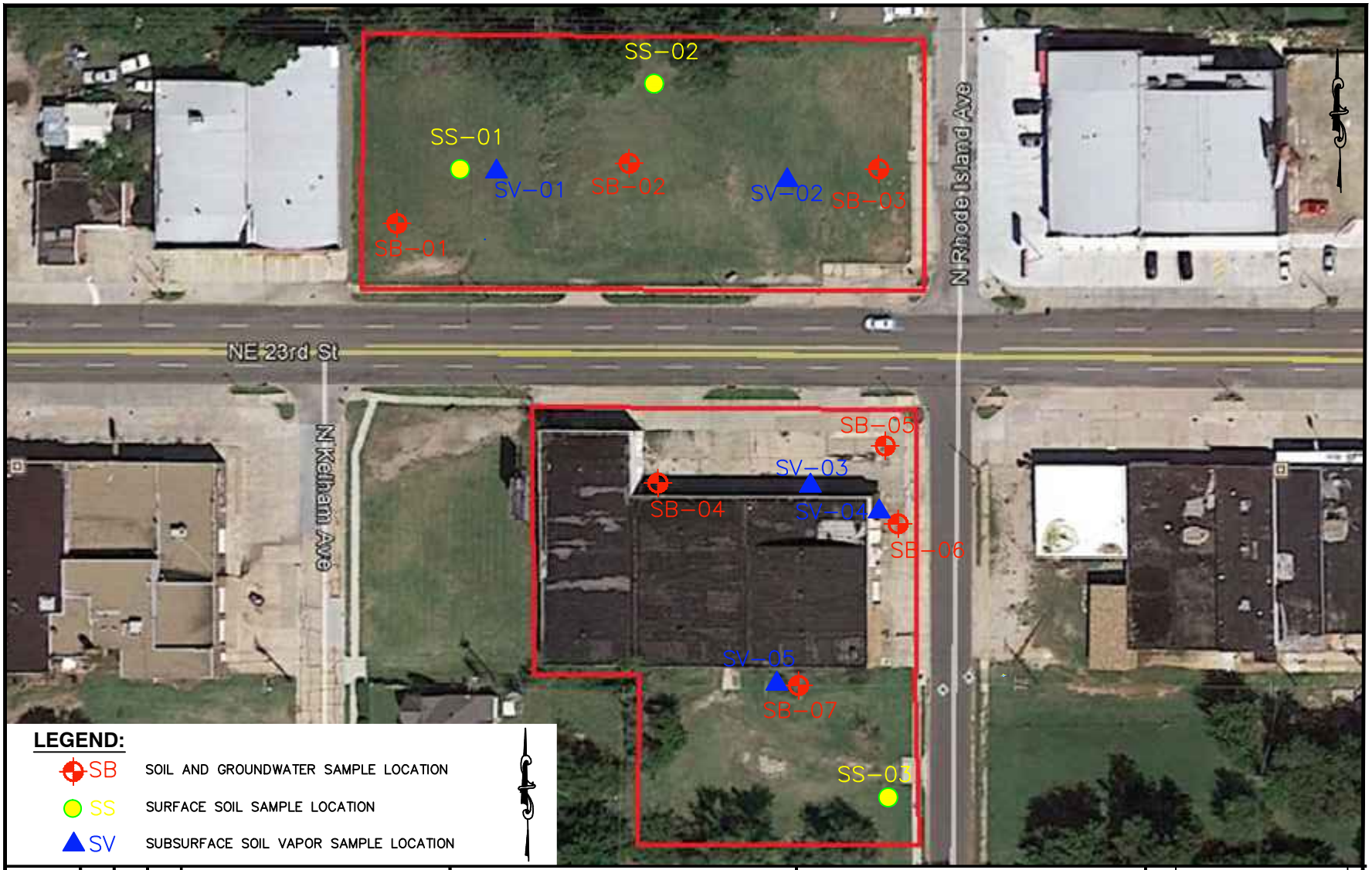
Figure 1 of 6: Properties Vicinity Map
1708 and 1721 NE 23rd Street
Limited Phase II Environmental Site Assessment
Source: Google Earth Scale: NTS

N



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1708 and 1721 NE 23rd Street
OKLAHOMA CITY, OK 73111

Boring and Vapor Location Map

LIMITED PHASE II ESA

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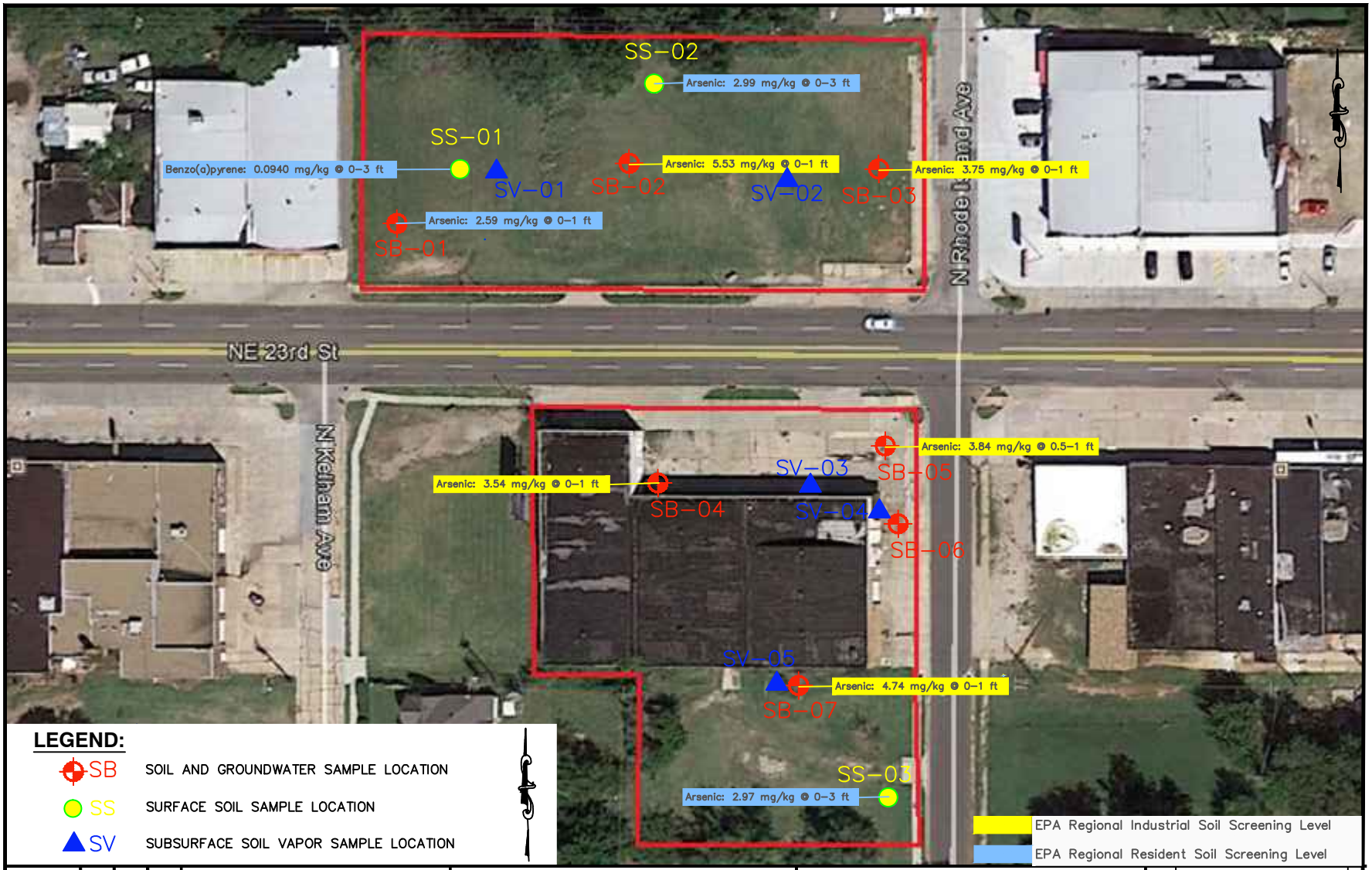

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OKLAHOMA CITY, OK 73111

Surface Soil Contaminants Map

LIMITED PHASE II ESA

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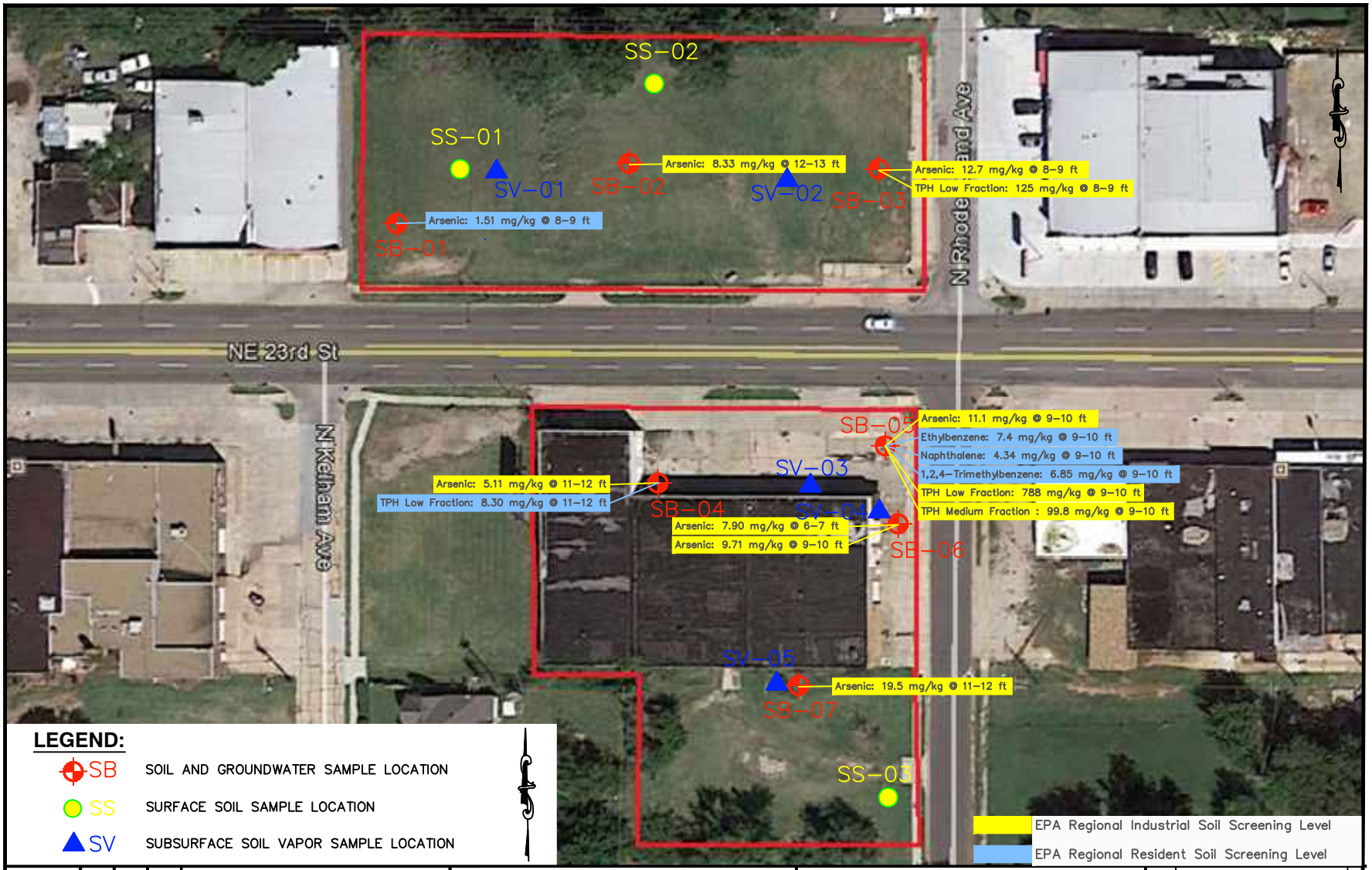

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Contaminants in Deeper Soil Horizons Map

LIMITED PHASE II ESA

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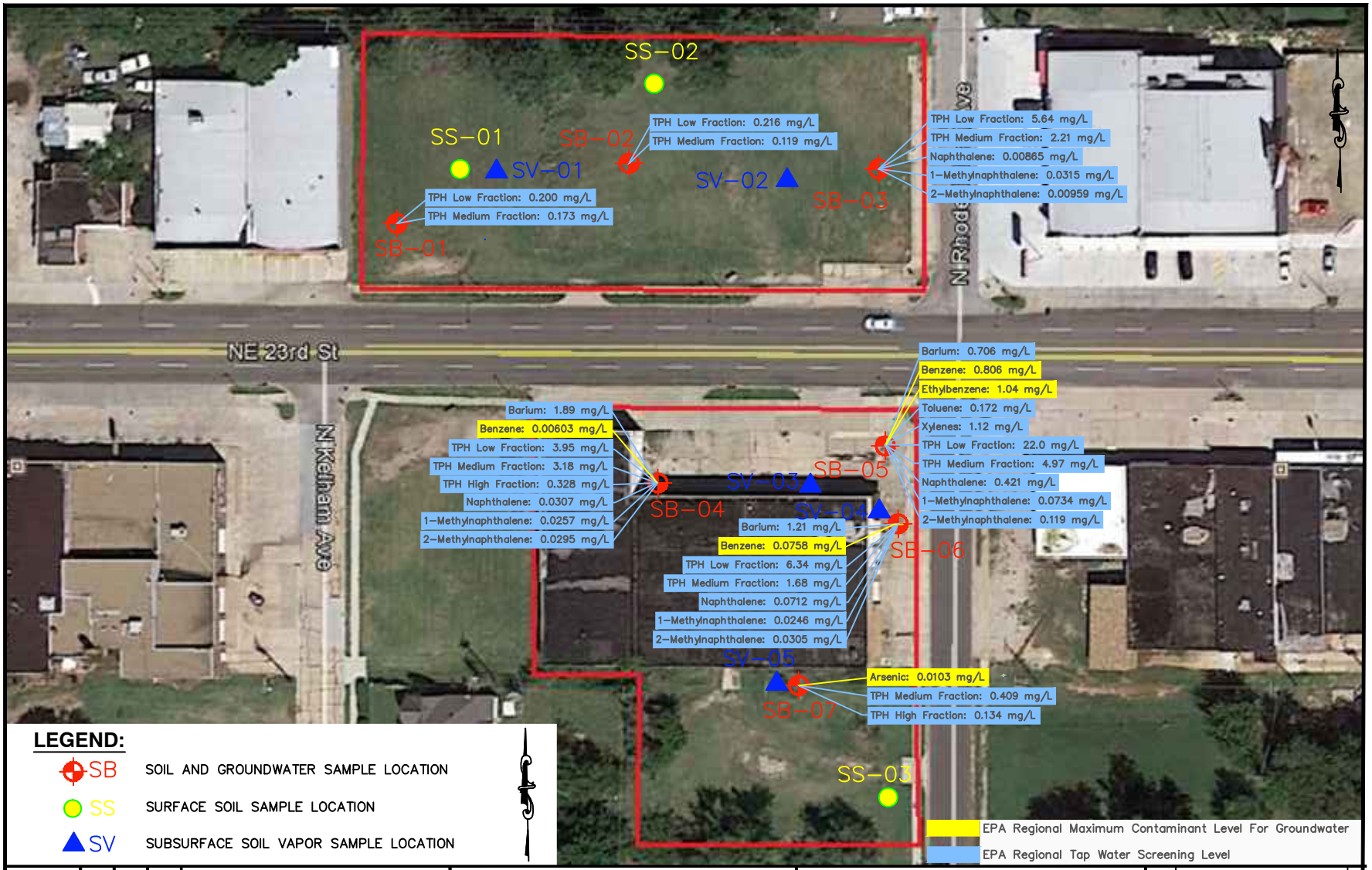

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1708 and 1721 NE 23rd Street OKLAHOMA CITY, OK 73111

Groundwater Contaminants Map

LIMITED PHASE II ESA

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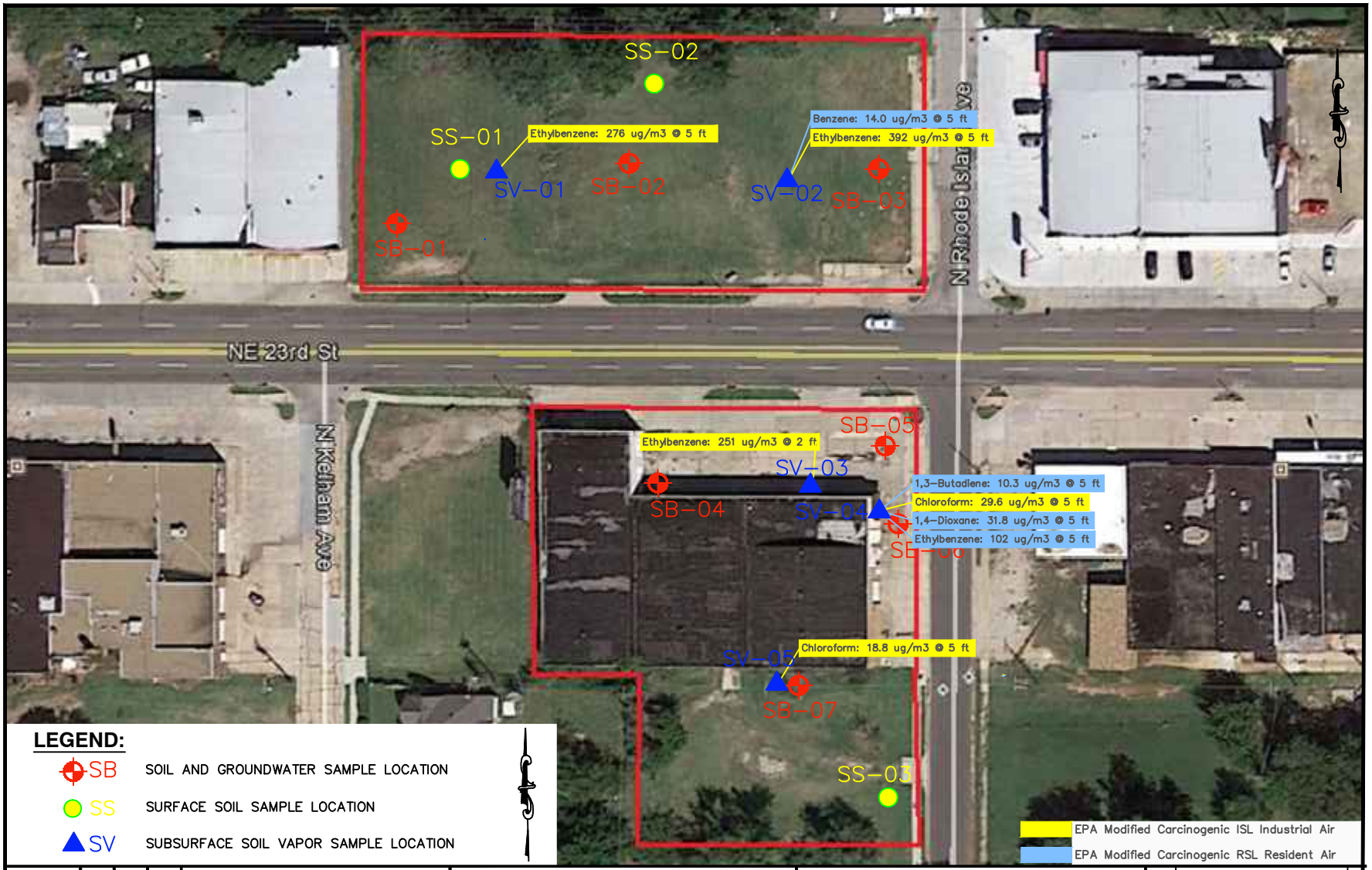

LEGEND:

- SB — SOIL AND GROUNDWATER SAMPLE LOCATION
- SS — SURFACE SOIL SAMPLE LOCATION
- SV — SUBSURFACE SOIL VAPOR SAMPLE LOCATION

DRAWING NO. 6 of 6

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1708 and 1721 NE 23rd Street OKLAHOMA CITY, OK 73111

Subsurface Soil Vapor Contaminants Map

LIMITED PHASE II ESA

NO.	REVISION

TABLES

TABLE 1 - SOIL ANALYTICAL RESULTS
1708-1721 NE 23rd Street, Oklahoma City, Oklahoma

	Industrial Soil Screening Level	Resident Soil Screening Level	Risk-based Soil Screening Level	Units	SB-01		Duplicate	SB-02		SB-03		SB-04		SB-05		SB-06		SB-07		Duplicate	SS-01		SS-02	SS-03
Sample Date					2/22/17	2/22/17	2/22/17	2/22/17	2/22/17	2/22/17	2/22/17	2/21/17	2/21/17	2/21/17	2/21/17	2/21/17	2/21/17	2/21/17	2/21/17	2/21/17	2/22/17	2/22/17	2/22/17	2/22/17
Soil Depth Interval					0-1	8-9	-	0-1	12-13	0-1	8-9	0-1	11-12	0.5-1	9-10	6-7	9-10	0-1	11-12	-	0-1	0-3	0-3	0-3
ANALYTE																								
Mercury - Method 7471A	4.0	0.94	0.0033	mg/kg	BRL	BRL	BRL	**0.0270**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	BRL	**0.0292**	BRL
Metals - Method 6010B																								
Arsenic	3.0	0.68	0.0015	mg/kg	**2.59**	**1.51**	**2.24**	**5.53**	**8.33**	**3.75**	**12.7**	**3.54**	**5.11**	**3.84**	**11.1**	**7.90**	**9.71**	**4.74**	**19.5**	**16.7**	NA	BRL	**2.99**	**2.97**
Barium	22000	1500	16	mg/kg	**73.0**	**330**	**89.8**	**146**	**771**	**1130**	**335**	**471**	**432**	**131**	**277**	**364**	**120**	**128**	**37.3**	**37.9**	NA	**85.5**	**122**	**103**
Cadmium	98	7.1	No Value	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	BRL	BRL	BRL
Chromium	No Value	No Value	No Value	mg/kg	**9.35**	**17.5**	**28.7**	**11.5**	**41.5**	**20.9**	**25.1**	**19.9**	**29.0**	**15.5**	**28.3**	**25.5**	**19.4**	**16.5**	**25.9**	**24.2**	NA	**10.4**	**13.6**	**22.9**
Selenium	580	39	0.052	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	BRL	BRL	BRL
Silver	580	39	0.08	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	BRL	BRL	BRL
Lead	800	400	No Value	mg/kg	**17.2**	**4.79**	**7.12**	**16.0**	**16.2**	**10.2**	**8.97**	**9.15**	**11.1**	**11.5**	**9.25**	**14.1**	**4.89**	**32.7**	**6.42**	**6.11**	NA	**10.5**	**15.7**	**9.10**
Volatile Organic Compounds - Method 8260B																								
Acetone	67000	6100	0.29	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.0952**	BRL	BRL	BRL	**0.109**	BRL	BRL	BRL	NA	NA	NA	NA
Benzene	5.1	1.2	0.00023	mg/kg	**0.00167**	BRL	BRL	BRL	**0.00311**	BRL	BRL	BRL	**0.00727**	BRL	BRL	BRL	BRL	BRL	**0.00947**	**0.00788**	NA	NA	NA	NA
n-Butylbenzene	5800	390	0.32	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	**0.197**	BRL	**0.00575**	**0.00161**	**1.47**	BRL	**0.00844**	BRL	BRL	BRL	NA	NA	NA	NA
sec-Butylbenzene	12000	780	0.59	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	**0.0912**	BRL	**0.00272**	**0.00178**	BRL	BRL	**0.00351**	BRL	BRL	BRL	NA	NA	NA	NA
Ethylbenzene	25	5.8	0.0017	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**7.40**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
Isopropylbenzene	990	190	0.074	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.00163**	BRL	**0.666**	BRL	**0.00272**	BRL	BRL	BRL	NA	NA	NA	NA
p-Isopropyltoluene	No Value	No Value	No Value	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.00105**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
2-Butanone (MEK)	19000	2700	0.12	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.0233**	BRL	BRL	BRL	BRL	NA	NA	NA	NA
Naphthalene	17	3.8	0.00054	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**4.34**	BRL	**0.00903**	BRL	BRL	BRL	NA	NA	NA	NA
n-Propylbenzene	2400	380	0.12	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	**0.132**	BRL	**0.00355**	**0.00316**	**3.67**	BRL	**0.0134**	BRL	BRL	BRL	NA	NA	NA	NA
1,2,4-Trimethylbenzene	24	5.8	0.0021	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**6.85**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
1,2,3-Trimethylbenzene	21	4.9	0.0015	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**4.08**	BRL	**0.00125**	BRL	BRL	BRL	NA	NA	NA	NA
1,3,5-Trimethylbenzene	1200	78	0.017	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**7.23**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
Xylenes, Total	250	58	0.019	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**6.54**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
Total Petroleum Hydrocarbons (TPH) - Method 8015D/GRO																								
TPH Low Fraction	42	8.2	0.0017	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	**125**	BRL	**8.30**	**3.24**	**788**	BRL	**2.87**	BRL	BRL	BRL	NA	NA	NA	NA
Total Petroleum Hydrocarbons (TPH) - Method 8015																								
TPH Medium Fraction	60	11	0.0023	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	**10.7**	BRL	**5.74**	BRL	**99.8**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
TPH High Fraction	3300	250	8.10	mg/kg	**4.59**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
Polycyclic Aromatic Hydrocarbons - Method 8270C-SIM																								
Anthracene	23000	1800	5.8	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.0385**	BRL	BRL
Acenaphthene	4500	360	0.55	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	BRL	BRL	BRL
Benzo(a)anthracene	2.9	0.16	0.0042	mg/kg	BRL	BRL	BRL	**0.0103**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.116**	BRL	BRL
Benzo(a)pyrene	0.29	0.016	0.004	mg/kg	BRL	BRL	BRL	**0.00926**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.0940**	BRL	BRL
Benzo(g,h,i)perylene	No Value	No Value	No Value	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.0762**	BRL	BRL
Benzo(b)fluoranthene	2.9	0.16	0.041	mg/kg	BRL	BRL	BRL	**0.0141**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.121**	BRL	BRL
Benzo(k)fluoranthene	29	1.6	0.4	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.0430**	BRL	BRL
Chrysene	290	16	1.2	mg/kg	BRL	BRL	BRL	**0.00959**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.112**	BRL	BRL
Fluoranthene	3000	240	8.9	mg/kg	BRL	BRL	BRL	**0.0197**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.286**	BRL	BRL
Fluorene	3000	240	0.54	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	BRL	BRL	BRL
Indeno(1,2,3-cd)pyrene	2.9	0.16	0.13	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.0594**	BRL	BRL
Naphthalene	17	3.8	0.00054	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.0206**	**1.63**	BRL	BRL	BRL	BRL	BRL	NA	BRL	BRL	BRL
Phenanthrene	No Value	No Value	No Value	mg/kg	BRL	BRL	BRL	**0.00837**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.231**	BRL	BRL
Pyrene	2300	180	1.3	mg/kg	BRL	BRL	BRL	**0.0171**	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	NA	**0.218**	BRL	BRL
1-Methylnaphthalene	73	18	0.006	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.0421**	**0.653**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
2-Methylnaphthalene	30	24	0.019	mg/kg	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**0.0624**	**1.46**	BRL	BRL	BRL	BRL	BRL	NA	NA	NA	NA
Chlorinated Acid Herbicides - Method 8151																								
2,4-D	960	70	0.0045	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
Dicamba	2500	190	0.015	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
2,4,5-T	820	63	0.0068	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
Pesticides - Method 8081																								
Aldrin	0.18	0.039	0.00015	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
Chlordane	7.7	1.7	0.0027	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
4,4-DDT	8.5	1.9	0.077	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
Endosulfan I	700	47	0.14	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA
Toxaphene	2.1	0.49	0.011	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	BRL	NA	NA	NA

Notes:
1. MCL = Maximum Contaminant Level
2. mg/kg = milligrams per kilogram
3. BRL = Below Reporting Limit- concentration not detected above laboratory reporting limits
4. NA = Not Analyzed
5. Yellow shaded values indicate concentration exceeded EPA Regional Industrial Soil Screening Levels; May 2016
6. Blue shaded values indicate concentration exceeded EPA Regional Resident Soil Screening Level; May 2016
7. Green shaded values indicate concentrations exceeded EPA Regional Risk-based Soil Screening Levels; May 2016

Environmental Protection Agency (EPA) Regional Screening Levels for Risk Assessments accessed at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016.

TABLE 2 - GROUNDWATER ANALYTICAL RESULTS
1708-1721 NE 23rd Street, Oklahoma City, Oklahoma

Parameter	Groundwater MCL	Tap Water Screening Level	Units	SB-01	SB-02	SB-03	Duplicate	SB-04	SB-05	Duplicate	SB-06	SB-07
Sample Date				2/24/2017	2/24/2017	2/24/2017	2/24/2017	2/27/2017	2/27/2017	2/27/2017	2/27/2017	2/24/2017
ANALYTE												
Mercury - Method 7470A	0.002	0.000063	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Metals - Method 6010B												
Arsenic, Dissolved	0.01	0.000052	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	**0.0156**	BRL	**0.0103**
Barium, Dissolved	2	0.38	mg/l	**0.271**	**0.293**	**0.335**	**0.237**	**1.89**	**0.706**	**0.654**	**1.21**	**0.0534**
Cadmium,Dissolved	0.005	0.00092	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Chromium, Dissolved	0.1	0.000035	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Lead, Dissolved	0.015	0.015	mg/l	BRL	BRL	**0.0094**	**0.00781**	BRL	BRL	**0.0159**	BRL	BRL
Selenium,Dissolved	0.05	0.01	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Silver,Dissolved	No Value	0.0094	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Volatile Organic Compounds - Method 8260												
Acetone	No Value	1.4	mg/l	BRL	BRL	**0.07**	BRL	**0.405**	BRL	BRL	BRL	BRL
Benzene	0.005	0.00046	mg/l	BRL	BRL	BRL	BRL	**0.00603**	**0.806**	**0.801**	**0.0758**	BRL
Ethylbenzene	0.07	0.0015	mg/l	BRL	BRL	BRL	BRL	BRL	**1.04**	**1.05**	BRL	BRL
Toluene	1.0	0.11	mg/l	BRL	BRL	BRL	BRL	BRL	**0.172**	**0.174**	**0.00877**	BRL
Xylenes	10	0.019	mg/l	BRL	BRL	BRL	BRL	BRL	**1.12**	**1.15**	**0.016**	BRL
Total Petroleum Hydrocarbons (TPH) - Method 8015D/GRO												
TPH Low Fraction	No Value	0.0033	mg/l	**0.2**	**0.216**	**5.64**	**6.47**	**3.95**	**22**	**23**	**6.34**	BRL
Total Petroleum Hydrocarbons (TPH) - Method SV8015												
TPH Medium Fraction	No Value	0.00055	mg/l	**0.173**	**0.119**	**2.21**	**2.44**	**3.18**	**4.97**	**3.63**	**1.68**	**0.409**
TPH High Fraction	No Value	0.08	mg/l	BRL	BRL	BRL	BRL	**0.328**	BRL	BRL	BRL	**0.134**
Semi-volatile Organic Compounds (including PAHs) - Method 8270C-SIM												
Anthracene	No Value	0.18	mg/l	BRL	BRL	**0.0000613**	**0.0000695**	BRL	BRL	BRL	BRL	BRL
Acenaphthene	No Value	0.053	mg/l	**0.000114**	**0.000113**	**0.000524**	**0.000549**	**0.000156**	**0.00032**	**0.000343**	**0.00022**	BRL
Acenaphthylene	No Value	0.029	mg/l	BRL	BRL	**0.000137**	**0.00015**	BRL	**0.000056**	**0.0000557**	BRL	BRL
Fluoranthene	No Value	0.08	mg/l	BRL	BRL	**0.0000956**	**0.000154**	BRL	BRL	BRL	BRL	BRL
Fluorene	No Value	0.029	mg/l	BRL	BRL	**0.000147**	**0.00016**	**0.0000605**	**0.000242**	**0.000272**	**0.000115**	BRL
Naphthalene	No Value	0.00017	mg/l	BRL	BRL	**0.00865**	**0.00913**	**0.0307**	**0.421**	**0.401**	**0.0712**	BRL
Phenanthrene	No Value	No Value	mg/l	BRL	BRL	**0.000211**	**0.000243**	**0.0000525**	**0.000127**	**0.000135**	**0.0000812**	BRL
Pyrene	No Value	0.012	mg/l	BRL	BRL	**0.0000593**	**0.000104**	BRL	BRL	BRL	BRL	BRL
1-Methylnaphthalene	No Value	0.0011	mg/l	BRL	BRL	**0.0315**	**0.0326**	**0.0257**	**0.0734**	**0.071**	**0.0246**	BRL
2-Methylnaphthalene	No Value	0.0036	mg/l	BRL	BRL	**0.00959**	**0.0105**	**0.0295**	**0.119**	**0.102**	**0.0305**	BRL

Notes:
1. MCL = Maximum Contaminant Level
2. mg/l = milligrams per liter
3. BRL = Below Reporting Limit-concentration not detected above laboratory reporting limits
4. Yellow shaded values indicate concentration exceeded EPA Regional Maximum Contaminant Levels for Groundwater; May 2016
5. Blue shaded values indicate concentration exceeded EPA Regional Tap Water Screening Level; May 2016

Environmental Protection Agency (EPA) Regional Screening Levels for Risk Assessments accessed at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016.

TABLE 3 - SOIL GAS AND AIR SAMPLE
1708-1721 NE 23rd Street, Oklahoma City, Oklahoma

	RSL Resident Air		Modified RSLs Resident Air		ISL Industrial Air		Modified ISLs Industrial Air										
	Carcinogenic	Noncarcinogenic	Carcinogenic	Noncarcinogenic	Carcinogenic	Noncarcinogenic	Carcinogenic	Noncarcinogenic	Units	SV-01	Duplicate	SV-02	SV-03	Duplicate	SV-04	SV-05	BA-1
Sample Date										2/24/17	2/27/17	2/24/17	2/27/17	2/27/17	2/27/17	2/27/17	2/27/17
Soil Depth Interval										5 Ft	-	5 Ft	2 Ft	-	5 Ft	5 Ft	-
VOCs - Method TO-15																	
Acetone	No Value	32,000	No Value	1,066,667	No Value	140,000	No Value	4,666,667	µg/m3	**41.4**	**36.8**	**186**	**757**	**1830**	**54.7**	**35.8**	**17.1**
Benzene	0.36	31	12	1,033	1.6	130	53	4,333	µg/m3	**3.99**	BRL	**14.0**	BRL	BRL	**9.58**	**3.14**	BRL
1,3-Butadiene	0.094	2.1	3	70	0.41	8.8	14	293	µg/m3	BRL	BRL	BRL	BRL	BRL	**10.3**	BRL	BRL
Carbon Disulfide	No Value	730	No Value	24,333	No Value	3,100	No Value	103,333	µg/m3	**10.2**	**6.24**	**8.98**	**78.5**	**94.6**	**34.7**	**17.6**	BRL
Chloroform	0.12	100	4	3,333	0.53	430	18	14,333	µg/m3	BRL	BRL	BRL	BRL	BRL	**29.6**	**18.8**	BRL
Chloromethane	No Value	94	No Value	3,133	No Value	390	No Value	13,000	µg/m3	BRL	BRL	BRL	BRL	BRL	BRL	BRL	**1.66**
Cyclohexane	No Value	6,300	No Value	210,000	No Value	2,600,000	No Value	86,666,667	µg/m3	BRL	**317**	**30.4**	**48900**	**39900**	**12.2**	**8.79**	**9.13**
1,2-Dichloroethane	0.11	7.3	4	243	0.47	31	16	1,033	µg/m3	BRL	**4.01**	BRL	BRL	BRL	BRL	BRL	BRL
1,4-Dioxane	0.56	31	19	1,033	2.5	130	83	4,333	µg/m3	BRL	BRL	BRL	BRL	BRL	**31.8**	BRL	BRL
Ethanol	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	**20.5**	**14.9**	**15.7**	**248**	**373**	**26.3**	**48.4**	**6.75**
Ethylbenzene	1.1	1,000	37	33,333	4.9	4,400	163	146,667	µg/m3	**276**	**54.1**	**392**	**251**	**159**	**102**	**2.07**	BRL
4-Ethyltoluene	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	BRL	BRL	BRL	**112**	**107**	BRL	BRL	BRL
Trichlorofluoromethane	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	BRL	BRL	BRL	BRL	BRL	**2.31**	**2.69**	BRL
Dichlorodifluoromethane	No Value	100	No Value	3,333	No Value	440	No Value	14,667	µg/m3	BRL	BRL	BRL	BRL	BRL	**2.09**	**2.44**	**2.4**
Heptane	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	**7.41**	BRL	**33.9**	BRL	BRL	**35.6**	BRL	**4.24**
n-Hexane	No Value	730	No Value	24,333	No Value	3,100	No Value	103,333	µg/m3	**2.67**	**98.1**	**80.4**	**10900**	**11300**	**61.7**	**4.68**	**8.46**
Isopropylbenzene	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	**3.95**	BRL	BRL	**217**	**189**	BRL	BRL	BRL
Methylene Chloride	100	630	3,333	21,000	1,200	2,600	40,000	86,667	µg/m3	BRL	BRL	BRL	BRL	BRL	**2.09**	BRL	BRL
Methyl Butyl Ketone	No Value	31	No Value	1,033	No Value	130	No Value	4,333	µg/m3	BRL	BRL	BRL	BRL	BRL	**12.4**	BRL	BRL
2-Butanone (MEK)	No Value	5,200	No Value	173,333	No Value	22,000	No Value	733,333	µg/m3	**9.62**	BRL	BRL	BRL	BRL	**13.9**	BRL	BRL
MTBE	11	3,100	367	103,333	47	13,000	1,567	433,333	µg/m3	BRL	BRL	BRL	**161**	**305**	BRL	BRL	BRL
2-Propanol	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	BRL	BRL	BRL	BRL	BRL	**7.10**	BRL	BRL
Propene	No Value	3,100	No Value	103,333	No Value	13,000	No Value	433,333	µg/m3	BRL	**3.39**	BRL	BRL	BRL	**477**	**249**	BRL
Tetrahydrofuran	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	**5.89**	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Toluene	No Value	5,200	No Value	173,333	No Value	22,000	No Value	733,333	µg/m3	**153**	**29.5**	**138**	BRL	BRL	**30.0**	**7.03**	**2.14**
1,2,4-Trimethylbenzene	No Value	7.3	No Value	243	No Value	31	No Value	1,033	µg/m3	**6.38**	**22.9**	**14.7**	BRL	BRL	**7.20**	BRL	BRL
1,3,5-Trimethylbenzene	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	**2.51**	BRL	BRL	BRL	BRL	BRL	BRL	BRL
2,2,4-Trimethylpentane	No Value	No Value	No Value	No Value	No Value	No Value	No Value	No Value	µg/m3	**2.98**	**409**	**16.9**	**46800**	**41900**	**6.51**	**4.10**	**8.33**
m&p-Xylene	No Value	100	No Value	3,333	No Value	440	No Value	14,667	µg/m3	**604**	**209**	**1340**	**805**	**450**	**354**	**7.04**	BRL
o-Xylene	No Value	100	No Value	3,333	No Value	440	No Value	14,667	µg/m3	**266**	**74.0**	**388**	**371**	**217**	**113**	**2.25**	BRL

Notes:
1. MCL = Maximum Contaminant Level
2. µg/m3 = micrograms per cubic meter
3. BRL = Below Reporting Limit- concentration not reported above laboratory detection limits
4. Blue highlighted cells indicate a detection above Modified Carcinogenic RSL Resident Air
5. Yellow highlighted cells indicate a detection above Modified Carcinogenic ISL Industrial Air
6. Modified Regional Screening Levels for Resident and Industrial Air were obtained by applying the EPA default attenuation factor for deep soil vapor (RSL/0.03=Modified RSL)
Environmental Protection Agency (EPA) Regional Screening Levels for Risk Assessments accessed at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016.
Environmental Protection Agency (EPA) attenuation factor for deep soil vapor is based on EPA Final VI Guidance 2013 accessed at https://www.epa.gov/vaporintrusion.

TABLE 4 - QUALITY ASSURANCE/QUALITY CONTROL SAMPLES
1708-1721 NE 23rd Street, Oklahoma City, Oklahoma

Parameter	Groundwater MCL	Tap Water Screening Level	Units	Soil Equipment Blank	Soil Field Blank	Soil Field Blank	Groundwater Equipment Blank	Groundwater Field Blank	Trip Blank	Trip Blank
Sample Date				2/21/17	2/21/17	2/22/17	2/24/17	2/24/17	-	-
Analyte										
Metals - Method 6010B										
Arsenic, Dissolved	0.01	0.000052	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Barium, Dissolved	2	0.38	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Cadmium, Dissolved	0.005	0.00092	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Chromium, Dissolved	No Value	0.000035	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Selenium, Dissolved	0.05	0.01	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Silver, Dissolved	No Value	0.0094	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Lead, Dissolved	0.015	0.015	mg/l	NA	NA	NA	BRL	BRL	NA	NA
Volatile Organic Compounds - Method 8260										
Benzene	0.005	0.00046	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Toluene	1	0.11	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Ethylbenzene	0.7	0.0015	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Xylenes, Total	10	0.019	mg/l	BRL	BRL	BRL	BRL	BRL	BRL	BRL
Total Petroleum Hydrocarbons - Method 8015D/GRO										
TPH Low Fraction	No Value	0.0033	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Total Petroleum Hydrocarbons - Method SV8015										
TPH Medium Fraction	No Value	0.00055	mg/l	NA	NA	BRL	BRL	BRL	NA	NA
TPH High Fraction	No Value	0.08	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Semi-volatile Organic Compounds (including PAHs) - Method 8270C-SIM										
Anthracene	No Value	0.18	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Acenaphthene	No Value	0.053	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Fluorene	No Value	0.029	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Benzo(a)anthracene	No Value	0.000033	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Benzo(a)pyrene	0.0002	0.0000034	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Benzo(b)fluoranthene	No Value	0.000034	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Chrysene	No Value	0.0034	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA
Fluoranthene	No Value	0.08	mg/l	BRL	BRL	BRL	BRL	BRL	NA	NA

Notes:
1. MCL = Maximum Contaminant Level
2. mg/l = milligrams per liter
3. NA = Not Analyzed
4. BRL = Below Reporting Limit-concentration not detected above laboratory reporting limits
5. Yellow shaded values indicate concentration exceeded EPA Regional Maximum Contaminant Levels for Groundwater; May 2016
6. Blue shaded values indicate concentration exceeded EPA Regional Tap Water Screening Level; May 2016

Environmental Protection Agency (EPA) Regional Screening Levels for Risk Assessments accessed at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables-may-2016.

APPENDICES

APPENDIX A: FIELD BORING LOGS

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-01** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1721 NE 23rd St
BORING LOCATION:	SB-01
GEOLOGIST:	DD
START DATE:	02/22/17 FINISH DATE: 02/22/17
START TIME:	1200 FINISH TIME: 1300

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	20	FT TOC
SCREEN LENGTH:	10	FT
RISER LENGTH:	10	FT
TOP OF SCREEN:	10	FT BGS
BOTTOM OF SCREEN:	20	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0	2.5	1–5			Dark brown silty clay	Samples taken at 0-1
	5-10	0,0,0,0	4.0	6–10			Transitioning to a red silty clay Red silty clay Becoming hard and friable	Samples taken at 8-9 (duplicate) Refusal at 9'
	10-15			11–15				
	15-20			16–20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-02** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1721 NE 23rd St
BORING LOCATION:	SB-02
GEOLOGIST:	DD
START DATE:	02/22/17 FINISH DATE: 02/22/17
START TIME:	1100 FINISH TIME: 1200

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	20	FT TOC
SCREEN LENGTH:	10	FT
RISER LENGTH:	10	FT
TOP OF SCREEN:	10	FT BGS
BOTTOM OF SCREEN:	20	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0,0	4.0	1–5			Dark brown silty clay	Samples taken at 0-1'
	5-10	0,0,0,0	5.0	6–10			Red silty clay Decreasing clay, becoming hard and friable	
	10-13	0,0,0	3.0	11–13				Samples taken at 12-13' Refusal at 13'
	15-20			16–20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-03** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1721 NE 23rd St
BORING LOCATION:	SB-03
GEOLOGIST:	DD
START DATE:	02/22/17 FINISH DATE: 02/22/17
START TIME:	1000 FINISH TIME: 1100

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	20	FT TOC
SCREEN LENGTH:	10	FT
RISER LENGTH:	10	FT
TOP OF SCREEN:	10	FT BGS
BOTTOM OF SCREEN:	20	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0	2.5	1–5			Dark brown topsoil White gravel Dark brown silty clay	Samples taken at 0-1'
	5-10	0,0,0,0	4.0	6–10			Red silty clay	
	10-15			11–15				
	15-20			16–20			Red clay with greysish/white reduction zone	Samples taken at 8-9' Refusal at 9'

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-04** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1708 NE 23rd St
BORING LOCATION:	SB-04
GEOLOGIST:	DD
START DATE:	02/21/17 FINISH DATE: 02/21/17
START TIME:	800 FINISH TIME: 1100

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	29	FT TOC
SCREEN LENGTH:	15	FT
RISER LENGTH:	14	FT
TOP OF SCREEN:	14	FT BGS
BOTTOM OF SCREEN:	29	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	7.9,15.7,12.1,14.1	4.0	1 2 3 4 5			Silty clay, medium brown, red flecks, interspersed gravel Dark brown silty clay	Samples taken at 0-1'
	5-10	30.4,104,135,141	4.0	6 7 8 9 10			Red clay mottled with reyish/white reductions Transitioning to a red silty clay	
	10-15	342,322,565,425	4.0	11 12 13 14 15			Red silty clay, compact, friable	Samples taken at 11-12' Refusal at 15'
	15-20			16 17 18 19 20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-05**

SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1708 NE 23rd St
BORING LOCATION:	SB-05
GEOLOGIST:	DD
START DATE:	02/21/17 FINISH DATE: 02/21/17
START TIME:	1100 FINISH TIME: 1230

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	25	FT TOC
SCREEN LENGTH:	10	FT
RISER LENGTH:	15	FT
TOP OF SCREEN:	15	FT BGS
BOTTOM OF SCREEN:	25	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
							Concrete	Samples taken at 0.5-1'
	0-5	10.9,52.5	1.5	1 2 3 4 5			Dark brown silty clay	
	5-10	55.6,82,102,494,97	5.0	6 7 8 9 10			Transitioning to red silty clay Red silty clay	Samples taken at 9-10'
	10-15	17.9,22.1,27.8	3.5	11 12 13 14 15			Decreasing clay Red clayey silt, very compact, hard, friable	Refusal at 15'
	15-20			16 17 18 19 20				

LEGEND:

SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-06** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1708 NE 23rd St
BORING LOCATION:	SB-06
GEOLOGIST:	DD
START DATE:	02/21/17 FINISH DATE: 02/21/17
START TIME:	1300 FINISH TIME: 1500

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	20	FT TOC
SCREEN LENGTH:	10	FT
RISER LENGTH:	10	FT
TOP OF SCREEN:	10	FT BGS
BOTTOM OF SCREEN:	20	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	X	>1	1–5				Possible rock in sampler. Could not collect surface sample
	5-10	0,0,0,10,5,392	5.0	6–10			Red silty clay	Samples taken at 6-7'
	10-11	22	1.0	10–11			Greyish/white reducing zone	Samples taken at 9-10' Refusal at 11'
	15-20			15–20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SB-07** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd St
PROJECT NUMBER:	
PROJECT LOCATION:	1708 NE 23rd St
BORING LOCATION:	SB-07
GEOLOGIST:	DD
START DATE:	02/21/17 FINISH DATE: 02/21/17
START TIME:	1500 FINISH TIME: 1600

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	PVC	
DIAMETER:	1	IN
WELL TOTAL DEPTH:	20	FT TOC
SCREEN LENGTH:	10	FT
RISER LENGTH:	10	FT
TOP OF SCREEN:	10	FT BGS
BOTTOM OF SCREEN:	20	FT BGS
SCREEN SLOT:	0.010	IN
TOP OF FILTER PACK:		FT BGS
TOP OF SEAL:		FT BGS
TYPE OF SEAL:		
TYPE OF FILTER PACK:		

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0,0	3.5	1–5			Dark brown silty clay	Samples taken at 0-1'
	5-10	0,0,0,10.5,392	5.0	6–10			Red silty clay	Samples taken at 9-10'
	10-12	0,0	2.0	11–12			Becoming hard, friable, compact	Refusal at 12'
	15-20			16–20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SS-01** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd
PROJECT NUMBER:	
PROJECT LOCATION:	1721 NE 23rd St
BORING LOCATION:	SS-01
GEOLOGIST:	DD
START DATE:	02/22/17 FINISH DATE: 02/22/17
START TIME:	1300 FINISH TIME: 1330

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT TOC
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0,0,0	5.0	1 2 3 4 5			Dark brown silty clay	Samples taken at 0-3'
				6 7 8 9 10				
				11 12 13 14 15				
				16 17 18 19 20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SS-02** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd
PROJECT NUMBER:	
PROJECT LOCATION:	1721 NE 23rd St
BORING LOCATION:	SS-02
GEOLOGIST:	DD
START DATE:	02/22/17 FINISH DATE: 02/22/17
START TIME:	1400 FINISH TIME: 1415

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT TOC
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0,0,0	5.0	1 2 3 4 5			Dark brown silty clay	Samples taken at 0-3'
				6 7 8 9 10				
				11 12 13 14 15				
				16 17 18 19 20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

SCS ENGINEERS
1817 Commons Cr. Suite 1
Oklahoma City, OK

LOG OF BORING NO.: **SS-03** SHEET NUMBER 1 of 1

CLIENT:	City of OKC
PROJECT NAME:	1708-1721 NE 23rd
PROJECT NUMBER:	
PROJECT LOCATION:	1708 NE 23rd St
BORING LOCATION:	SS-03
GEOLOGIST:	DD
START DATE:	02/22/17 FINISH DATE: 02/22/17
START TIME:	930 FINISH TIME: 1000

DRILLING CONTRACTOR:	AEI
DRILLER:	
DRILLING RIG:	
DRILLING METHOD:	Direct-push
SAMPLING METHOD:	
BORING DIAMETER:	2
WELL DIAMETER:	
WELL COMPLETION:	
SURFACE ELEVATION:	
TOC ELEVATION:	
WATER LEVEL:	
WATER ELEVATION:	
DATE:	

WELL CONSTRUCTION DETAILS

MATERIAL:	
DIAMETER:	IN
WELL TOTAL DEPTH:	FT TOC
SCREEN LENGTH:	FT
RISER LENGTH:	FT
TOP OF SCREEN:	FT BGS
BOTTOM OF SCREEN:	FT BGS
SCREEN SLOT:	IN
TOP OF FILTER PACK:	FT BGS
TOP OF SEAL:	FT BGS
TYPE OF SEAL:	
TYPE OF FILTER PACK:	

SAMPLE TYPE	SAMPLE DEPTH	PID (PPM)	RECOVERY (FT)	DEPTH IN FEET	USCS CLASS	C I	SOIL DESCRIPTION AND DRILLING CONDITIONS	NOTES AND WELL CONSTRUCTION
	0-5	0,0,0,0,0	5.0	1 2 3 4 5			Dark brown silty clay	Samples taken at 0-3'
				6 7 8 9 10				
				11 12 13 14 15				
				16 17 18 19 20				

LEGEND:
SS - Split Spoon
CS - 5 foot CME Sampler
ST - Shelby Tube
PID - Photoionization Detector
PP - Pocket Penetrometer
HSA - Hollow Stem Augers
HA - Hand Auger
WB - Wash Bore
RB - Rock Bit
NX - Rock Core

THE STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY LINES BETWEEN SOIL AND ROCK TYPES: ACTUAL TRANSITIONS MAY BE GRADUAL.

APPENDIX B: ANALYTICAL LABORATORY RESULTS

ANALYTICAL REPORT

March 07, 2017

SCS Engineers - OK

Sample Delivery Group:	L892546
Samples Received:	02/24/2017
Project Number:	
Description:	1721 NE 23rd Street
Report To:	Mr. Dale Daniel 1817 Commons Circle, Suite 1 Yukon, OK 73099

Entire Report Reviewed By:

Craig Cothron
Technical Service Representative

SB-04 0-1 L892546-01 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 08:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957053	1	03/02/17 09:25	03/02/17 09:33	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:11	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 10:50	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 11:19	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 03:36	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/04/17 02:19	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 01:43	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 13:44	CLG

SB-04 11-12 L892546-02 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 08:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957053	1	03/02/17 09:25	03/02/17 09:33	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:21	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 10:53	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 11:36	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 03:57	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/03/17 23:26	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 01:59	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 16:33	CLG

SB-05 0.5-1 L892546-03 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 11:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957053	1	03/02/17 09:25	03/02/17 09:33	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:24	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:02	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 11:46	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 04:18	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/03/17 23:47	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 02:14	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 16:54	CLG

SB-05 9-10 L892546-04 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 11:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957053	1	03/02/17 09:25	03/02/17 09:33	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:26	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:05	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 11:50	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	500	03/02/17 21:49	03/03/17 04:40	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	500	03/02/17 21:49	03/04/17 00:09	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 06:07	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 17:15	CLG

SB-06 6-7 L892546-05 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 13:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957054	1	03/02/17 09:14	03/02/17 09:23	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:29	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:07	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 11:53	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 05:01	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/04/17 00:31	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 02:30	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 17:37	CLG

SB-06 9-10 L892546-06 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 13:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957054	1	03/02/17 09:14	03/02/17 09:23	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:31	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:10	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 11:57	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 15:08	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/04/17 00:52	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 02:45	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 17:58	CLG

SB-07 0-1 L892546-07 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 15:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957054	1	03/02/17 09:14	03/02/17 09:23	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:34	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:13	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:00	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 05:43	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/04/17 01:13	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 06:22	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 18:19	CLG

SB-07 11-12 L892546-08 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 15:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957054	1	03/02/17 09:14	03/02/17 09:23	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:36	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:16	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:04	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 06:04	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/04/17 01:35	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 03:01	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 18:40	CLG

DUPLICATE L892546-09 Solid

Collected by: Dale Daniel
Collected date/time: 02/21/17 00:00
Received date/time: 02/24/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957054	1	03/02/17 09:14	03/02/17 09:23	KDW
Mercury by Method 7471A	WG956419	1	02/28/17 19:55	03/01/17 16:39	NJB
Metals (ICP) by Method 6010B	WG956306	1	03/02/17 13:23	03/03/17 11:19	LTB
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:07	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957489	1	03/02/17 21:49	03/03/17 06:25	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957558	1	03/02/17 21:49	03/04/17 01:57	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 04:19	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/03/17 19:01	CLG

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Technical Service Representative

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.7		1	03/02/2017 09:33	WG957053

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:11	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	471		0.500	1	03/03/2017 10:50	WG956306
Cadmium	ND		0.500	1	03/03/2017 10:50	WG956306
Chromium	19.9		1.00	1	03/03/2017 10:50	WG956306
Lead	9.15		0.500	1	03/03/2017 10:50	WG956306
Selenium	ND		2.00	1	03/03/2017 10:50	WG956306
Silver	ND		1.00	1	03/03/2017 10:50	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.54		0.500	5	03/02/2017 11:19	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/03/2017 03:36	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*99.3*		*77.0-120*		*03/03/2017 03:36*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/04/2017 02:19	WG957558
Acrylonitrile	ND		0.0100	1	03/04/2017 02:19	WG957558
Benzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Bromobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Bromodichloromethane	ND		0.00100	1	03/04/2017 02:19	WG957558
Bromoform	ND		0.00100	1	03/04/2017 02:19	WG957558
Bromomethane	ND		0.00500	1	03/04/2017 02:19	WG957558
n-Butylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
sec-Butylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
tert-Butylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Carbon tetrachloride	ND		0.00100	1	03/04/2017 02:19	WG957558
Chlorobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Chlorodibromomethane	ND		0.00100	1	03/04/2017 02:19	WG957558
Chloroethane	ND		0.00500	1	03/04/2017 02:19	WG957558
Chloroform	ND		0.00500	1	03/04/2017 02:19	WG957558
Chloromethane	ND		0.00250	1	03/04/2017 02:19	WG957558
2-Chlorotoluene	ND		0.00100	1	03/04/2017 02:19	WG957558
4-Chlorotoluene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/04/2017 02:19	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/04/2017 02:19	WG957558
Dibromomethane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/04/2017 02:19	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/04/2017 02:19	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 02:19	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/04/2017 02:19	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 02:19	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 02:19	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/04/2017 02:19	WG957558
Di-isopropyl ether	ND		0.00100	1	03/04/2017 02:19	WG957558
Ethylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/04/2017 02:19	WG957558
Isopropylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/04/2017 02:19	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/04/2017 02:19	WG957558
Methylene Chloride	ND		0.00500	1	03/04/2017 02:19	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/04/2017 02:19	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/04/2017 02:19	WG957558
Naphthalene	ND		0.00500	1	03/04/2017 02:19	WG957558
n-Propylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Styrene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
Tetrachloroethene	ND		0.00100	1	03/04/2017 02:19	WG957558
Toluene	ND		0.00500	1	03/04/2017 02:19	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/04/2017 02:19	WG957558
Trichloroethene	ND		0.00100	1	03/04/2017 02:19	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/04/2017 02:19	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/04/2017 02:19	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/04/2017 02:19	WG957558
Vinyl chloride	ND		0.00100	1	03/04/2017 02:19	WG957558
Xylenes, Total	ND		0.00300	1	03/04/2017 02:19	WG957558
(S) Toluene-d8	*100*		*80.0-120*		*03/04/2017 02:19*	WG957558
(S) Dibromofluoromethane	*112*		*74.0-131*		*03/04/2017 02:19*	WG957558
(S) 4-Bromofluorobenzene	*91.0*		*64.0-132*		*03/04/2017 02:19*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 01:43	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 01:43	WG956513
(S) o-Terphenyl	*86.1*		*18.0-148*		*03/03/2017 01:43*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 13:44	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 13:44	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 13:44	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 13:44	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 13:44	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 13:44	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 13:44	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 13:44	WG956926
Chrysene	ND		0.00600	1	03/03/2017 13:44	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 13:44	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 13:44	WG956926
Fluorene	ND		0.00600	1	03/03/2017 13:44	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 13:44	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 13:44	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 13:44	WG956926
Pyrene	ND		0.00600	1	03/03/2017 13:44	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 13:44	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 13:44	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 13:44	WG956926
(S) p-Terphenyl-d14	*80.4*		*23.0-120*		*03/03/2017 13:44*	WG956926
(S) Nitrobenzene-d5	*74.5*		*14.0-149*		*03/03/2017 13:44*	WG956926
(S) 2-Fluorobiphenyl	*71.3*		*34.0-125*		*03/03/2017 13:44*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	03/02/2017 09:33	WG957053

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:21	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	432		0.500	1	03/03/2017 10:53	WG956306
Cadmium	ND		0.500	1	03/03/2017 10:53	WG956306
Chromium	29.0		1.00	1	03/03/2017 10:53	WG956306
Lead	11.1		0.500	1	03/03/2017 10:53	WG956306
Selenium	ND		2.00	1	03/03/2017 10:53	WG956306
Silver	ND		1.00	1	03/03/2017 10:53	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	5.11		0.500	5	03/02/2017 11:36	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	8.30		0.100	1	03/03/2017 03:57	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*92.8*		*77.0-120*		*03/03/2017 03:57*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0952		0.0500	1	03/03/2017 23:26	WG957558
Acrylonitrile	ND		0.0100	1	03/03/2017 23:26	WG957558
Benzene	0.00727		0.00100	1	03/03/2017 23:26	WG957558
Bromobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
Bromodichloromethane	ND		0.00100	1	03/03/2017 23:26	WG957558
Bromoform	ND		0.00100	1	03/03/2017 23:26	WG957558
Bromomethane	ND		0.00500	1	03/03/2017 23:26	WG957558
n-Butylbenzene	0.00575		0.00100	1	03/03/2017 23:26	WG957558
sec-Butylbenzene	0.00272		0.00100	1	03/03/2017 23:26	WG957558
tert-Butylbenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
Carbon tetrachloride	ND		0.00100	1	03/03/2017 23:26	WG957558
Chlorobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
Chlorodibromomethane	ND		0.00100	1	03/03/2017 23:26	WG957558
Chloroethane	ND		0.00500	1	03/03/2017 23:26	WG957558
Chloroform	ND		0.00500	1	03/03/2017 23:26	WG957558
Chloromethane	ND		0.00250	1	03/03/2017 23:26	WG957558
2-Chlorotoluene	ND		0.00100	1	03/03/2017 23:26	WG957558
4-Chlorotoluene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/03/2017 23:26	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 23:26	WG957558
Dibromomethane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 23:26	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 23:26	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 23:26	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 23:26	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 23:26	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 23:26	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 23:26	WG957558
Di-isopropyl ether	ND		0.00100	1	03/03/2017 23:26	WG957558
Ethylbenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 23:26	WG957558
Isopropylbenzene	0.00163		0.00100	1	03/03/2017 23:26	WG957558
p-Isopropyltoluene	0.00105		0.00100	1	03/03/2017 23:26	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 23:26	WG957558
Methylene Chloride	ND		0.00500	1	03/03/2017 23:26	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 23:26	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 23:26	WG957558
Naphthalene	ND		0.00500	1	03/03/2017 23:26	WG957558
n-Propylbenzene	0.00355		0.00100	1	03/03/2017 23:26	WG957558
Styrene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
Tetrachloroethene	ND		0.00100	1	03/03/2017 23:26	WG957558
Toluene	ND		0.00500	1	03/03/2017 23:26	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 23:26	WG957558
Trichloroethene	ND		0.00100	1	03/03/2017 23:26	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 23:26	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 23:26	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 23:26	WG957558
Vinyl chloride	ND		0.00100	1	03/03/2017 23:26	WG957558
Xylenes, Total	ND		0.00300	1	03/03/2017 23:26	WG957558
(S) Toluene-d8	*102*		*80.0-120*		*03/03/2017 23:26*	WG957558
(S) Dibromofluoromethane	*114*		*74.0-131*		*03/03/2017 23:26*	WG957558
(S) 4-Bromofluorobenzene	*89.8*		*64.0-132*		*03/03/2017 23:26*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.74		4.00	1	03/03/2017 01:59	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 01:59	WG956513
(S) o-Terphenyl	*95.2*		*18.0-148*		*03/03/2017 01:59*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 16:33	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 16:33	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 16:33	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 16:33	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 16:33	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 16:33	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 16:33	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 16:33	WG956926
Chrysene	ND		0.00600	1	03/03/2017 16:33	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 16:33	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 16:33	WG956926
Fluorene	ND		0.00600	1	03/03/2017 16:33	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 16:33	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 16:33	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 16:33	WG956926
Pyrene	ND		0.00600	1	03/03/2017 16:33	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 16:33	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 16:33	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 16:33	WG956926
(S) p-Terphenyl-d14	*71.5*		*23.0-120*		*03/03/2017 16:33*	WG956926
(S) Nitrobenzene-d5	*83.1*		*14.0-149*		*03/03/2017 16:33*	WG956926
(S) 2-Fluorobiphenyl	*65.5*		*34.0-125*		*03/03/2017 16:33*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	76.6		1	03/02/2017 09:33	WG957053

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:24	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	131		0.500	1	03/03/2017 11:02	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:02	WG956306
Chromium	15.5		1.00	1	03/03/2017 11:02	WG956306
Lead	11.5		0.500	1	03/03/2017 11:02	WG956306
Selenium	ND		2.00	1	03/03/2017 11:02	WG956306
Silver	ND		1.00	1	03/03/2017 11:02	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.84		0.500	5	03/02/2017 11:46	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	3.24		0.100	1	03/03/2017 04:18	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*97.1*		*77.0-120*		*03/03/2017 04:18*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 23:47	WG957558
Acrylonitrile	ND		0.0100	1	03/03/2017 23:47	WG957558
Benzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Bromobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Bromodichloromethane	ND		0.00100	1	03/03/2017 23:47	WG957558
Bromoform	ND		0.00100	1	03/03/2017 23:47	WG957558
Bromomethane	ND		0.00500	1	03/03/2017 23:47	WG957558
n-Butylbenzene	0.00161		0.00100	1	03/03/2017 23:47	WG957558
sec-Butylbenzene	0.00178		0.00100	1	03/03/2017 23:47	WG957558
tert-Butylbenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Carbon tetrachloride	ND		0.00100	1	03/03/2017 23:47	WG957558
Chlorobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Chlorodibromomethane	ND		0.00100	1	03/03/2017 23:47	WG957558
Chloroethane	ND		0.00500	1	03/03/2017 23:47	WG957558
Chloroform	ND		0.00500	1	03/03/2017 23:47	WG957558
Chloromethane	ND		0.00250	1	03/03/2017 23:47	WG957558
2-Chlorotoluene	ND		0.00100	1	03/03/2017 23:47	WG957558
4-Chlorotoluene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/03/2017 23:47	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 23:47	WG957558
Dibromomethane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 23:47	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 23:47	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 23:47	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 23:47	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 23:47	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 23:47	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 23:47	WG957558
Di-isopropyl ether	ND		0.00100	1	03/03/2017 23:47	WG957558
Ethylbenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 23:47	WG957558
Isopropylbenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 23:47	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 23:47	WG957558
Methylene Chloride	ND		0.00500	1	03/03/2017 23:47	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 23:47	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 23:47	WG957558
Naphthalene	ND		0.00500	1	03/03/2017 23:47	WG957558
n-Propylbenzene	0.00316		0.00100	1	03/03/2017 23:47	WG957558
Styrene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
Tetrachloroethene	ND		0.00100	1	03/03/2017 23:47	WG957558
Toluene	ND		0.00500	1	03/03/2017 23:47	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 23:47	WG957558
Trichloroethene	ND		0.00100	1	03/03/2017 23:47	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 23:47	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 23:47	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 23:47	WG957558
Vinyl chloride	ND		0.00100	1	03/03/2017 23:47	WG957558
Xylenes, Total	ND		0.00300	1	03/03/2017 23:47	WG957558
(S) Toluene-d8	*96.8*		*80.0-120*		*03/03/2017 23:47*	WG957558
(S) Dibromofluoromethane	*107*		*74.0-131*		*03/03/2017 23:47*	WG957558
(S) 4-Bromofluorobenzene	*95.0*		*64.0-132*		*03/03/2017 23:47*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 02:14	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 02:14	WG956513
(S) o-Terphenyl	*90.1*		*18.0-148*		*03/03/2017 02:14*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 16:54	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 16:54	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 16:54	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 16:54	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 16:54	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 16:54	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 16:54	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 16:54	WG956926
Chrysene	ND		0.00600	1	03/03/2017 16:54	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 16:54	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 16:54	WG956926
Fluorene	ND		0.00600	1	03/03/2017 16:54	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 16:54	WG956926
Naphthalene	0.0206		0.0200	1	03/03/2017 16:54	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 16:54	WG956926
Pyrene	ND		0.00600	1	03/03/2017 16:54	WG956926
1-Methylnaphthalene	0.0421		0.0200	1	03/03/2017 16:54	WG956926
2-Methylnaphthalene	0.0624		0.0200	1	03/03/2017 16:54	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 16:54	WG956926
(S) p-Terphenyl-d14	*85.6*		*23.0-120*		*03/03/2017 16:54*	WG956926
(S) Nitrobenzene-d5	*74.4*		*14.0-149*		*03/03/2017 16:54*	WG956926
(S) 2-Fluorobiphenyl	*69.7*		*34.0-125*		*03/03/2017 16:54*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.6		1	03/02/2017 09:33	WG957053

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:26	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	277		0.500	1	03/03/2017 11:05	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:05	WG956306
Chromium	28.3		1.00	1	03/03/2017 11:05	WG956306
Lead	9.25		0.500	1	03/03/2017 11:05	WG956306
Selenium	ND		2.00	1	03/03/2017 11:05	WG956306
Silver	ND		1.00	1	03/03/2017 11:05	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	11.1		0.500	5	03/02/2017 11:50	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	788		50.0	500	03/03/2017 04:40	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*104*		*77.0-120*		*03/03/2017 04:40*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		25.0	500	03/04/2017 00:09	WG957558
Acrylonitrile	ND		5.00	500	03/04/2017 00:09	WG957558
Benzene	ND		0.500	500	03/04/2017 00:09	WG957558
Bromobenzene	ND		0.500	500	03/04/2017 00:09	WG957558
Bromodichloromethane	ND		0.500	500	03/04/2017 00:09	WG957558
Bromoform	ND		0.500	500	03/04/2017 00:09	WG957558
Bromomethane	ND		2.50	500	03/04/2017 00:09	WG957558
n-Butylbenzene	1.47		0.500	500	03/04/2017 00:09	WG957558
sec-Butylbenzene	ND		0.500	500	03/04/2017 00:09	WG957558
tert-Butylbenzene	ND		0.500	500	03/04/2017 00:09	WG957558
Carbon tetrachloride	ND		0.500	500	03/04/2017 00:09	WG957558
Chlorobenzene	ND		0.500	500	03/04/2017 00:09	WG957558
Chlorodibromomethane	ND		0.500	500	03/04/2017 00:09	WG957558
Chloroethane	ND		2.50	500	03/04/2017 00:09	WG957558
Chloroform	ND		2.50	500	03/04/2017 00:09	WG957558
Chloromethane	ND		1.25	500	03/04/2017 00:09	WG957558
2-Chlorotoluene	ND		0.500	500	03/04/2017 00:09	WG957558
4-Chlorotoluene	ND		0.500	500	03/04/2017 00:09	WG957558
1,2-Dibromo-3-Chloropropane	ND		2.50	500	03/04/2017 00:09	WG957558
1,2-Dibromoethane	ND		0.500	500	03/04/2017 00:09	WG957558
Dibromomethane	ND		0.500	500	03/04/2017 00:09	WG957558
1,2-Dichlorobenzene	ND		0.500	500	03/04/2017 00:09	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.500	500	03/04/2017 00:09	WG957558
1,4-Dichlorobenzene	ND		0.500	500	03/04/2017 00:09	WG957558
Dichlorodifluoromethane	ND		2.50	500	03/04/2017 00:09	WG957558
1,1-Dichloroethane	ND		0.500	500	03/04/2017 00:09	WG957558
1,2-Dichloroethane	ND		0.500	500	03/04/2017 00:09	WG957558
1,1-Dichloroethene	ND		0.500	500	03/04/2017 00:09	WG957558
cis-1,2-Dichloroethene	ND		0.500	500	03/04/2017 00:09	WG957558
trans-1,2-Dichloroethene	ND		0.500	500	03/04/2017 00:09	WG957558
1,2-Dichloropropane	ND		0.500	500	03/04/2017 00:09	WG957558
1,1-Dichloropropene	ND		0.500	500	03/04/2017 00:09	WG957558
1,3-Dichloropropane	ND		0.500	500	03/04/2017 00:09	WG957558
cis-1,3-Dichloropropene	ND		0.500	500	03/04/2017 00:09	WG957558
trans-1,3-Dichloropropene	ND		0.500	500	03/04/2017 00:09	WG957558
2,2-Dichloropropane	ND		0.500	500	03/04/2017 00:09	WG957558
Di-isopropyl ether	ND		0.500	500	03/04/2017 00:09	WG957558
Ethylbenzene	7.40		0.500	500	03/04/2017 00:09	WG957558
Hexachloro-1,3-butadiene	ND		0.500	500	03/04/2017 00:09	WG957558
Isopropylbenzene	0.666		0.500	500	03/04/2017 00:09	WG957558
p-Isopropyltoluene	ND		0.500	500	03/04/2017 00:09	WG957558
2-Butanone (MEK)	ND		5.00	500	03/04/2017 00:09	WG957558
Methylene Chloride	ND		2.50	500	03/04/2017 00:09	WG957558
4-Methyl-2-pentanone (MIBK)	ND		5.00	500	03/04/2017 00:09	WG957558
Methyl tert-butyl ether	ND		0.500	500	03/04/2017 00:09	WG957558
Naphthalene	4.34		2.50	500	03/04/2017 00:09	WG957558
n-Propylbenzene	3.67		0.500	500	03/04/2017 00:09	WG957558
Styrene	ND		0.500	500	03/04/2017 00:09	WG957558
1,1,1,2-Tetrachloroethane	ND		0.500	500	03/04/2017 00:09	WG957558
1,1,2,2-Tetrachloroethane	ND		0.500	500	03/04/2017 00:09	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.500	500	03/04/2017 00:09	WG957558
Tetrachloroethene	ND		0.500	500	03/04/2017 00:09	WG957558
Toluene	ND		2.50	500	03/04/2017 00:09	WG957558
1,2,3-Trichlorobenzene	ND		0.500	500	03/04/2017 00:09	WG957558
1,2,4-Trichlorobenzene	ND		0.500	500	03/04/2017 00:09	WG957558
1,1,1-Trichloroethane	ND		0.500	500	03/04/2017 00:09	WG957558
1,1,2-Trichloroethane	ND		0.500	500	03/04/2017 00:09	WG957558
Trichloroethene	ND		0.500	500	03/04/2017 00:09	WG957558
Trichlorofluoromethane	ND		2.50	500	03/04/2017 00:09	WG957558
1,2,3-Trichloropropane	ND		1.25	500	03/04/2017 00:09	WG957558
1,2,4-Trimethylbenzene	6.85		0.500	500	03/04/2017 00:09	WG957558
1,2,3-Trimethylbenzene	4.08		0.500	500	03/04/2017 00:09	WG957558
1,3,5-Trimethylbenzene	7.23		0.500	500	03/04/2017 00:09	WG957558
Vinyl chloride	ND		0.500	500	03/04/2017 00:09	WG957558
Xylenes, Total	6.54		1.50	500	03/04/2017 00:09	WG957558
(S) Toluene-d8	*96.8*		*80.0-120*		*03/04/2017 00:09*	WG957558
(S) Dibromofluoromethane	*104*		*74.0-131*		*03/04/2017 00:09*	WG957558
(S) 4-Bromofluorobenzene	*87.2*		*64.0-132*		*03/04/2017 00:09*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	99.8		4.00	1	03/03/2017 06:07	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 06:07	WG956513
(S) o-Terphenyl	*96.8*		*18.0-148*		*03/03/2017 06:07*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 17:15	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 17:15	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 17:15	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 17:15	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 17:15	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 17:15	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 17:15	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 17:15	WG956926
Chrysene	ND		0.00600	1	03/03/2017 17:15	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 17:15	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 17:15	WG956926
Fluorene	ND		0.00600	1	03/03/2017 17:15	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 17:15	WG956926
Naphthalene	1.63		0.0200	1	03/03/2017 17:15	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 17:15	WG956926
Pyrene	ND		0.00600	1	03/03/2017 17:15	WG956926
1-Methylnaphthalene	0.653		0.0200	1	03/03/2017 17:15	WG956926
2-Methylnaphthalene	1.46		0.0200	1	03/03/2017 17:15	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 17:15	WG956926
(S) p-Terphenyl-d14	*85.6*		*23.0-120*		*03/03/2017 17:15*	WG956926
(S) Nitrobenzene-d5	*193*	J1	*14.0-149*		*03/03/2017 17:15*	WG956926
(S) 2-Fluorobiphenyl	*73.4*		*34.0-125*		*03/03/2017 17:15*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.6		1	03/02/2017 09:23	WG957054

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:29	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	364		0.500	1	03/03/2017 11:07	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:07	WG956306
Chromium	25.5		1.00	1	03/03/2017 11:07	WG956306
Lead	14.1		0.500	1	03/03/2017 11:07	WG956306
Selenium	ND		2.00	1	03/03/2017 11:07	WG956306
Silver	ND		1.00	1	03/03/2017 11:07	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	7.90		0.500	5	03/02/2017 11:53	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/03/2017 05:01	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*99.0*		*77.0-120*		*03/03/2017 05:01*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/04/2017 00:31	WG957558
Acrylonitrile	ND		0.0100	1	03/04/2017 00:31	WG957558
Benzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Bromobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Bromodichloromethane	ND		0.00100	1	03/04/2017 00:31	WG957558
Bromoform	ND		0.00100	1	03/04/2017 00:31	WG957558
Bromomethane	ND		0.00500	1	03/04/2017 00:31	WG957558
n-Butylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
sec-Butylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
tert-Butylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Carbon tetrachloride	ND		0.00100	1	03/04/2017 00:31	WG957558
Chlorobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Chlorodibromomethane	ND		0.00100	1	03/04/2017 00:31	WG957558
Chloroethane	ND		0.00500	1	03/04/2017 00:31	WG957558
Chloroform	ND		0.00500	1	03/04/2017 00:31	WG957558
Chloromethane	ND		0.00250	1	03/04/2017 00:31	WG957558
2-Chlorotoluene	ND		0.00100	1	03/04/2017 00:31	WG957558
4-Chlorotoluene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/04/2017 00:31	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/04/2017 00:31	WG957558
Dibromomethane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/04/2017 00:31	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/04/2017 00:31	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 00:31	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/04/2017 00:31	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 00:31	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 00:31	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/04/2017 00:31	WG957558
Di-isopropyl ether	ND		0.00100	1	03/04/2017 00:31	WG957558
Ethylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/04/2017 00:31	WG957558
Isopropylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/04/2017 00:31	WG957558
2-Butanone (MEK)	0.0233		0.0100	1	03/04/2017 00:31	WG957558
Methylene Chloride	ND		0.00500	1	03/04/2017 00:31	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/04/2017 00:31	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/04/2017 00:31	WG957558
Naphthalene	ND		0.00500	1	03/04/2017 00:31	WG957558
n-Propylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Styrene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
Tetrachloroethene	ND		0.00100	1	03/04/2017 00:31	WG957558
Toluene	ND		0.00500	1	03/04/2017 00:31	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/04/2017 00:31	WG957558
Trichloroethene	ND		0.00100	1	03/04/2017 00:31	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/04/2017 00:31	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/04/2017 00:31	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/04/2017 00:31	WG957558
Vinyl chloride	ND		0.00100	1	03/04/2017 00:31	WG957558
Xylenes, Total	ND		0.00300	1	03/04/2017 00:31	WG957558
(S) Toluene-d8	*100*		*80.0-120*		*03/04/2017 00:31*	WG957558
(S) Dibromofluoromethane	*112*		*74.0-131*		*03/04/2017 00:31*	WG957558
(S) 4-Bromofluorobenzene	*88.7*		*64.0-132*		*03/04/2017 00:31*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 02:30	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 02:30	WG956513
(S) o-Terphenyl	*94.0*		*18.0-148*		*03/03/2017 02:30*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 17:37	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 17:37	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 17:37	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 17:37	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 17:37	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 17:37	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 17:37	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 17:37	WG956926
Chrysene	ND		0.00600	1	03/03/2017 17:37	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 17:37	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 17:37	WG956926
Fluorene	ND		0.00600	1	03/03/2017 17:37	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 17:37	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 17:37	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 17:37	WG956926
Pyrene	ND		0.00600	1	03/03/2017 17:37	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 17:37	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 17:37	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 17:37	WG956926
(S) p-Terphenyl-d14	*77.3*		*23.0-120*		*03/03/2017 17:37*	WG956926
(S) Nitrobenzene-d5	*79.5*		*14.0-149*		*03/03/2017 17:37*	WG956926
(S) 2-Fluorobiphenyl	*68.9*		*34.0-125*		*03/03/2017 17:37*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.1		1	03/02/2017 09:23	WG957054

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:31	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	120		0.500	1	03/03/2017 11:10	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:10	WG956306
Chromium	19.4		1.00	1	03/03/2017 11:10	WG956306
Lead	4.89		0.500	1	03/03/2017 11:10	WG956306
Selenium	ND		2.00	1	03/03/2017 11:10	WG956306
Silver	ND		1.00	1	03/03/2017 11:10	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	9.71		0.500	5	03/02/2017 11:57	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	2.87		0.100	1	03/03/2017 15:08	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*105*		*77.0-120*		*03/03/2017 15:08*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.109		0.0500	1	03/04/2017 00:52	WG957558
Acrylonitrile	ND		0.0100	1	03/04/2017 00:52	WG957558
Benzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Bromobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Bromodichloromethane	ND		0.00100	1	03/04/2017 00:52	WG957558
Bromoform	ND		0.00100	1	03/04/2017 00:52	WG957558
Bromomethane	ND		0.00500	1	03/04/2017 00:52	WG957558
n-Butylbenzene	0.00844		0.00100	1	03/04/2017 00:52	WG957558
sec-Butylbenzene	0.00351		0.00100	1	03/04/2017 00:52	WG957558
tert-Butylbenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Carbon tetrachloride	ND		0.00100	1	03/04/2017 00:52	WG957558
Chlorobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Chlorodibromomethane	ND		0.00100	1	03/04/2017 00:52	WG957558
Chloroethane	ND		0.00500	1	03/04/2017 00:52	WG957558
Chloroform	ND		0.00500	1	03/04/2017 00:52	WG957558
Chloromethane	ND		0.00250	1	03/04/2017 00:52	WG957558
2-Chlorotoluene	ND		0.00100	1	03/04/2017 00:52	WG957558
4-Chlorotoluene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/04/2017 00:52	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/04/2017 00:52	WG957558
Dibromomethane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/04/2017 00:52	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/04/2017 00:52	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 00:52	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/04/2017 00:52	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 00:52	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 00:52	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/04/2017 00:52	WG957558
Di-isopropyl ether	ND		0.00100	1	03/04/2017 00:52	WG957558
Ethylbenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/04/2017 00:52	WG957558
Isopropylbenzene	0.00272		0.00100	1	03/04/2017 00:52	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/04/2017 00:52	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/04/2017 00:52	WG957558
Methylene Chloride	ND		0.00500	1	03/04/2017 00:52	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/04/2017 00:52	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/04/2017 00:52	WG957558
Naphthalene	0.00903		0.00500	1	03/04/2017 00:52	WG957558
n-Propylbenzene	0.0134		0.00100	1	03/04/2017 00:52	WG957558
Styrene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
Tetrachloroethene	ND		0.00100	1	03/04/2017 00:52	WG957558
Toluene	ND		0.00500	1	03/04/2017 00:52	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/04/2017 00:52	WG957558
Trichloroethene	ND		0.00100	1	03/04/2017 00:52	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/04/2017 00:52	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/04/2017 00:52	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
1,2,3-Trimethylbenzene	0.00125		0.00100	1	03/04/2017 00:52	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/04/2017 00:52	WG957558
Vinyl chloride	ND		0.00100	1	03/04/2017 00:52	WG957558
Xylenes, Total	ND		0.00300	1	03/04/2017 00:52	WG957558
(S) Toluene-d8	*104*		*80.0-120*		*03/04/2017 00:52*	WG957558
(S) Dibromofluoromethane	*112*		*74.0-131*		*03/04/2017 00:52*	WG957558
(S) 4-Bromofluorobenzene	*85.4*		*64.0-132*		*03/04/2017 00:52*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 02:45	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 02:45	WG956513
(S) o-Terphenyl	*85.6*		*18.0-148*		*03/03/2017 02:45*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 17:58	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 17:58	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 17:58	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 17:58	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 17:58	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 17:58	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 17:58	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 17:58	WG956926
Chrysene	ND		0.00600	1	03/03/2017 17:58	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 17:58	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 17:58	WG956926
Fluorene	ND		0.00600	1	03/03/2017 17:58	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 17:58	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 17:58	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 17:58	WG956926
Pyrene	ND		0.00600	1	03/03/2017 17:58	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 17:58	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 17:58	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 17:58	WG956926
(S) p-Terphenyl-d14	*76.1*		*23.0-120*		*03/03/2017 17:58*	WG956926
(S) Nitrobenzene-d5	*82.8*		*14.0-149*		*03/03/2017 17:58*	WG956926
(S) 2-Fluorobiphenyl	*63.6*		*34.0-125*		*03/03/2017 17:58*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.8		1	03/02/2017 09:23	WG957054

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:34	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	128		0.500	1	03/03/2017 11:13	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:13	WG956306
Chromium	16.5		1.00	1	03/03/2017 11:13	WG956306
Lead	32.7		0.500	1	03/03/2017 11:13	WG956306
Selenium	ND		2.00	1	03/03/2017 11:13	WG956306
Silver	ND		1.00	1	03/03/2017 11:13	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	4.74		0.500	5	03/02/2017 12:00	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/03/2017 05:43	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*100*		*77.0-120*		*03/03/2017 05:43*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/04/2017 01:13	WG957558
Acrylonitrile	ND		0.0100	1	03/04/2017 01:13	WG957558
Benzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Bromobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Bromodichloromethane	ND		0.00100	1	03/04/2017 01:13	WG957558
Bromoform	ND		0.00100	1	03/04/2017 01:13	WG957558
Bromomethane	ND		0.00500	1	03/04/2017 01:13	WG957558
n-Butylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
sec-Butylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
tert-Butylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Carbon tetrachloride	ND		0.00100	1	03/04/2017 01:13	WG957558
Chlorobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Chlorodibromomethane	ND		0.00100	1	03/04/2017 01:13	WG957558
Chloroethane	ND		0.00500	1	03/04/2017 01:13	WG957558
Chloroform	ND		0.00500	1	03/04/2017 01:13	WG957558
Chloromethane	ND		0.00250	1	03/04/2017 01:13	WG957558
2-Chlorotoluene	ND		0.00100	1	03/04/2017 01:13	WG957558
4-Chlorotoluene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/04/2017 01:13	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/04/2017 01:13	WG957558
Dibromomethane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/04/2017 01:13	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/04/2017 01:13	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 01:13	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/04/2017 01:13	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 01:13	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 01:13	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/04/2017 01:13	WG957558
Di-isopropyl ether	ND		0.00100	1	03/04/2017 01:13	WG957558
Ethylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/04/2017 01:13	WG957558
Isopropylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/04/2017 01:13	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/04/2017 01:13	WG957558
Methylene Chloride	ND		0.00500	1	03/04/2017 01:13	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/04/2017 01:13	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/04/2017 01:13	WG957558
Naphthalene	ND		0.00500	1	03/04/2017 01:13	WG957558
n-Propylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Styrene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
Tetrachloroethene	ND		0.00100	1	03/04/2017 01:13	WG957558
Toluene	ND		0.00500	1	03/04/2017 01:13	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/04/2017 01:13	WG957558
Trichloroethene	ND		0.00100	1	03/04/2017 01:13	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/04/2017 01:13	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/04/2017 01:13	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:13	WG957558
Vinyl chloride	ND		0.00100	1	03/04/2017 01:13	WG957558
Xylenes, Total	ND		0.00300	1	03/04/2017 01:13	WG957558
(S) Toluene-d8	*101*		*80.0-120*		*03/04/2017 01:13*	WG957558
(S) Dibromofluoromethane	*112*		*74.0-131*		*03/04/2017 01:13*	WG957558
(S) 4-Bromofluorobenzene	*87.4*		*64.0-132*		*03/04/2017 01:13*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 06:22	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 06:22	WG956513
(S) o-Terphenyl	*89.1*		*18.0-148*		*03/03/2017 06:22*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 18:19	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 18:19	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 18:19	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 18:19	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 18:19	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 18:19	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 18:19	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 18:19	WG956926
Chrysene	ND		0.00600	1	03/03/2017 18:19	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 18:19	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 18:19	WG956926
Fluorene	ND		0.00600	1	03/03/2017 18:19	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 18:19	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 18:19	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 18:19	WG956926
Pyrene	ND		0.00600	1	03/03/2017 18:19	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 18:19	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 18:19	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 18:19	WG956926
(S) p-Terphenyl-d14	*73.4*		*23.0-120*		*03/03/2017 18:19*	WG956926
(S) Nitrobenzene-d5	*75.1*		*14.0-149*		*03/03/2017 18:19*	WG956926
(S) 2-Fluorobiphenyl	*62.4*		*34.0-125*		*03/03/2017 18:19*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.8		1	03/02/2017 09:23	WG957054

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:36	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	37.3		0.500	1	03/03/2017 11:16	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:16	WG956306
Chromium	25.9		1.00	1	03/03/2017 11:16	WG956306
Lead	6.42		0.500	1	03/03/2017 11:16	WG956306
Selenium	ND		2.00	1	03/03/2017 11:16	WG956306
Silver	ND		1.00	1	03/03/2017 11:16	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	19.5		0.500	5	03/02/2017 12:04	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/03/2017 06:04	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*99.1*		*77.0-120*		*03/03/2017 06:04*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/04/2017 01:35	WG957558
Acrylonitrile	ND		0.0100	1	03/04/2017 01:35	WG957558
Benzene	0.00947		0.00100	1	03/04/2017 01:35	WG957558
Bromobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Bromodichloromethane	ND		0.00100	1	03/04/2017 01:35	WG957558
Bromoform	ND		0.00100	1	03/04/2017 01:35	WG957558
Bromomethane	ND		0.00500	1	03/04/2017 01:35	WG957558
n-Butylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
sec-Butylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
tert-Butylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Carbon tetrachloride	ND		0.00100	1	03/04/2017 01:35	WG957558
Chlorobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Chlorodibromomethane	ND		0.00100	1	03/04/2017 01:35	WG957558
Chloroethane	ND		0.00500	1	03/04/2017 01:35	WG957558
Chloroform	ND		0.00500	1	03/04/2017 01:35	WG957558
Chloromethane	ND		0.00250	1	03/04/2017 01:35	WG957558
2-Chlorotoluene	ND		0.00100	1	03/04/2017 01:35	WG957558
4-Chlorotoluene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/04/2017 01:35	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/04/2017 01:35	WG957558
Dibromomethane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/04/2017 01:35	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/04/2017 01:35	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 01:35	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/04/2017 01:35	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 01:35	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 01:35	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/04/2017 01:35	WG957558
Di-isopropyl ether	ND		0.00100	1	03/04/2017 01:35	WG957558
Ethylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/04/2017 01:35	WG957558
Isopropylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/04/2017 01:35	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/04/2017 01:35	WG957558
Methylene Chloride	ND		0.00500	1	03/04/2017 01:35	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/04/2017 01:35	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/04/2017 01:35	WG957558
Naphthalene	ND		0.00500	1	03/04/2017 01:35	WG957558
n-Propylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Styrene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
Tetrachloroethene	ND		0.00100	1	03/04/2017 01:35	WG957558
Toluene	ND		0.00500	1	03/04/2017 01:35	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/04/2017 01:35	WG957558
Trichloroethene	ND		0.00100	1	03/04/2017 01:35	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/04/2017 01:35	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/04/2017 01:35	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:35	WG957558
Vinyl chloride	ND		0.00100	1	03/04/2017 01:35	WG957558
Xylenes, Total	ND		0.00300	1	03/04/2017 01:35	WG957558
(S) Toluene-d8	*102*		*80.0-120*		*03/04/2017 01:35*	WG957558
(S) Dibromofluoromethane	*110*		*74.0-131*		*03/04/2017 01:35*	WG957558
(S) 4-Bromofluorobenzene	*92.7*		*64.0-132*		*03/04/2017 01:35*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 03:01	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 03:01	WG956513
(S) o-Terphenyl	*91.6*		*18.0-148*		*03/03/2017 03:01*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 18:40	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 18:40	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 18:40	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 18:40	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 18:40	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 18:40	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 18:40	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 18:40	WG956926
Chrysene	ND		0.00600	1	03/03/2017 18:40	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 18:40	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 18:40	WG956926
Fluorene	ND		0.00600	1	03/03/2017 18:40	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 18:40	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 18:40	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 18:40	WG956926
Pyrene	ND		0.00600	1	03/03/2017 18:40	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 18:40	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 18:40	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 18:40	WG956926
(S) p-Terphenyl-d14	*79.9*		*23.0-120*		*03/03/2017 18:40*	WG956926
(S) Nitrobenzene-d5	*78.2*		*14.0-149*		*03/03/2017 18:40*	WG956926
(S) 2-Fluorobiphenyl	*72.4*		*34.0-125*		*03/03/2017 18:40*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	77.3		1	03/02/2017 09:23	WG957054

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/01/2017 16:39	WG956419

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	89.8		0.500	1	03/03/2017 11:19	WG956306
Cadmium	ND		0.500	1	03/03/2017 11:19	WG956306
Chromium	28.7		1.00	1	03/03/2017 11:19	WG956306
Lead	7.12		0.500	1	03/03/2017 11:19	WG956306
Selenium	ND		2.00	1	03/03/2017 11:19	WG956306
Silver	ND		1.00	1	03/03/2017 11:19	WG956306

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.24		0.500	5	03/02/2017 12:07	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/03/2017 06:25	WG957489
(S) a,a,a-Trifluorotoluene(FID)	*99.3*		*77.0-120*		*03/03/2017 06:25*	WG957489

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/04/2017 01:57	WG957558
Acrylonitrile	ND		0.0100	1	03/04/2017 01:57	WG957558
Benzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Bromobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Bromodichloromethane	ND		0.00100	1	03/04/2017 01:57	WG957558
Bromoform	ND		0.00100	1	03/04/2017 01:57	WG957558
Bromomethane	ND		0.00500	1	03/04/2017 01:57	WG957558
n-Butylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
sec-Butylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
tert-Butylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Carbon tetrachloride	ND		0.00100	1	03/04/2017 01:57	WG957558
Chlorobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Chlorodibromomethane	ND		0.00100	1	03/04/2017 01:57	WG957558
Chloroethane	ND		0.00500	1	03/04/2017 01:57	WG957558
Chloroform	ND		0.00500	1	03/04/2017 01:57	WG957558
Chloromethane	ND		0.00250	1	03/04/2017 01:57	WG957558
2-Chlorotoluene	ND		0.00100	1	03/04/2017 01:57	WG957558
4-Chlorotoluene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	03/04/2017 01:57	WG957558
1,2-Dibromoethane	ND		0.00100	1	03/04/2017 01:57	WG957558
Dibromomethane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,2-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,4-Dichlorobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Dichlorodifluoromethane	ND		0.00500	1	03/04/2017 01:57	WG957558
1,1-Dichloroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,2-Dichloroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1-Dichloroethene	ND		0.00100	1	03/04/2017 01:57	WG957558
cis-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 01:57	WG957558
trans-1,2-Dichloroethene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,2-Dichloropropane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1-Dichloropropene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,3-Dichloropropane	ND		0.00100	1	03/04/2017 01:57	WG957558
cis-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 01:57	WG957558
trans-1,3-Dichloropropene	ND		0.00100	1	03/04/2017 01:57	WG957558
2,2-Dichloropropane	ND		0.00100	1	03/04/2017 01:57	WG957558
Di-isopropyl ether	ND		0.00100	1	03/04/2017 01:57	WG957558
Ethylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Hexachloro-1,3-butadiene	ND		0.00100	1	03/04/2017 01:57	WG957558
Isopropylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
p-Isopropyltoluene	ND		0.00100	1	03/04/2017 01:57	WG957558
2-Butanone (MEK)	ND		0.0100	1	03/04/2017 01:57	WG957558
Methylene Chloride	ND		0.00500	1	03/04/2017 01:57	WG957558
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/04/2017 01:57	WG957558
Methyl tert-butyl ether	ND		0.00100	1	03/04/2017 01:57	WG957558
Naphthalene	ND		0.00500	1	03/04/2017 01:57	WG957558
n-Propylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Styrene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
Tetrachloroethene	ND		0.00100	1	03/04/2017 01:57	WG957558
Toluene	ND		0.00500	1	03/04/2017 01:57	WG957558
1,2,3-Trichlorobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,2,4-Trichlorobenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1,1-Trichloroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
1,1,2-Trichloroethane	ND		0.00100	1	03/04/2017 01:57	WG957558
Trichloroethene	ND		0.00100	1	03/04/2017 01:57	WG957558
Trichlorofluoromethane	ND		0.00500	1	03/04/2017 01:57	WG957558
1,2,3-Trichloropropane	ND		0.00250	1	03/04/2017 01:57	WG957558
1,2,4-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,2,3-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
1,3,5-Trimethylbenzene	ND		0.00100	1	03/04/2017 01:57	WG957558
Vinyl chloride	ND		0.00100	1	03/04/2017 01:57	WG957558
Xylenes, Total	ND		0.00300	1	03/04/2017 01:57	WG957558
(S) Toluene-d8	*102*		*80.0-120*		*03/04/2017 01:57*	WG957558
(S) Dibromofluoromethane	*111*		*74.0-131*		*03/04/2017 01:57*	WG957558
(S) 4-Bromofluorobenzene	*89.6*		*64.0-132*		*03/04/2017 01:57*	WG957558

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 04:19	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 04:19	WG956513
(S) o-Terphenyl	*106*		*18.0-148*		*03/03/2017 04:19*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/03/2017 19:01	WG956926
Acenaphthene	ND		0.00600	1	03/03/2017 19:01	WG956926
Acenaphthylene	ND		0.00600	1	03/03/2017 19:01	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/03/2017 19:01	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/03/2017 19:01	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/03/2017 19:01	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/03/2017 19:01	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/03/2017 19:01	WG956926
Chrysene	ND		0.00600	1	03/03/2017 19:01	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/03/2017 19:01	WG956926
Fluoranthene	ND		0.00600	1	03/03/2017 19:01	WG956926
Fluorene	ND		0.00600	1	03/03/2017 19:01	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/03/2017 19:01	WG956926
Naphthalene	ND		0.0200	1	03/03/2017 19:01	WG956926
Phenanthrene	ND		0.00600	1	03/03/2017 19:01	WG956926
Pyrene	ND		0.00600	1	03/03/2017 19:01	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/03/2017 19:01	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/03/2017 19:01	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/03/2017 19:01	WG956926
(S) p-Terphenyl-d14	*84.3*		*23.0-120*		*03/03/2017 19:01*	WG956926
(S) Nitrobenzene-d5	*82.7*		*14.0-149*		*03/03/2017 19:01*	WG956926
(S) 2-Fluorobiphenyl	*77.6*		*34.0-125*		*03/03/2017 19:01*	WG956926

Method Blank (MB)

(MB) R3200723-1 03/02/17 09:33

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L892546-04 Original Sample (OS) • Duplicate (DUP)

(OS) L892546-04 03/02/17 09:33 • (DUP) R3200723-3 03/02/17 09:33

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.6	81.8	1	0.958		5

Laboratory Control Sample (LCS)

(LCS) R3200723-2 03/02/17 09:33

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3200722-1 03/02/17 09:23

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00140			

L892875-04 Original Sample (OS) • Duplicate (DUP)

(OS) L892875-04 03/02/17 09:23 • (DUP) R3200722-3 03/02/17 09:23

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.7	83.4	1	1.55		5

Laboratory Control Sample (LCS)

(LCS) R3200722-2 03/02/17 09:23

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3200336-1 03/01/17 15:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200336-2 03/01/17 15:34 • (LCSD) R3200336-3 03/01/17 15:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.265	0.263	88	88	80-120			1	20

L892408-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892408-01 03/01/17 15:39 • (MS) R3200336-4 03/01/17 15:47 • (MSD) R3200336-5 03/01/17 15:49

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.370	0.0428	0.363	0.398	87	96	1	75-125			9	20

Method Blank (MB)

(MB) R3200830-1 03/03/17 09:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200830-2 03/03/17 09:57 • (LCSD) R3200830-3 03/03/17 09:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Barium	100	104	103	104	103	80-120			1	20
Cadmium	100	101	100	101	100	80-120			1	20
Chromium	100	99.1	98.0	99	98	80-120			1	20
Lead	100	101	100	101	100	80-120			1	20
Selenium	100	102	101	102	101	80-120			1	20
Silver	20.0	18.4	18.0	92	90	80-120			2	20

L892370-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892370-01 03/03/17 10:03 • (MS) R3200830-6 03/03/17 10:11 • (MSD) R3200830-7 03/03/17 10:14

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	100	130	233	245	104	115	1	75-125			5	20
Cadmium	100	0.780	101	99.8	100	99	1	75-125			1	20
Chromium	100	15.5	110	108	95	92	1	75-125			3	20
Lead	100	180	210	197	30	17	1	75-125	J6	J6	7	20
Selenium	100	ND	100	99.2	100	99	1	75-125			1	20
Silver	20.0	ND	18.6	18.1	93	91	1	75-125			2	20

Method Blank (MB)

(MB) R3200531-1 03/02/17 11:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.0125	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200531-2 03/02/17 11:12 • (LCSD) R3200531-3 03/02/17 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	120	117	120	117	80-120			2	20

L892546-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892546-01 03/02/17 11:19 • (MS) R3200531-6 03/02/17 11:29 • (MSD) R3200531-7 03/02/17 11:32

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	20.0	3.54	109	120	105	117	5	75-125			10	20

Method Blank (MB)

(MB) R3200844-3 03/03/17 00:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200844-1 03/02/17 23:16 • (LCSD) R3200844-2 03/02/17 23:37

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.92	5.99	108	109	70.0-136			1.12	20
(S) a,a,a-Trifluorotoluene(FID)				*102*	*102*	*77.0-120*				

L892491-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892491-01 03/03/17 02:33 • (MS) R3200844-4 03/03/17 01:30 • (MSD) R3200844-5 03/03/17 01:51

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	342	575	776	42.4	78.9	100	10.0-147			29.7	30
(S) a,a,a-Trifluorotoluene(FID)					*99.4*	*98.9*		*77.0-120*				

Method Blank (MB)

(MB) R3201091-3 03/03/17 18:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

Method Blank (MB)

(MB) R3201091-3 03/03/17 18:44

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	0.000310	J	0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*102*			*80.0-120*
(S) Dibromofluoromethane	*107*			*74.0-131*
(S) 4-Bromofluorobenzene	*87.0*			*64.0-132*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201091-1 03/03/17 17:39 • (LCSD) R3201091-2 03/03/17 18:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.189	0.150	151	120	11.0-160			22.9	23
Acrylonitrile	0.125	0.130	0.130	104	104	61.0-143			0.400	20
Benzene	0.0250	0.0247	0.0242	98.6	96.8	71.0-124			1.91	20
Bromobenzene	0.0250	0.0231	0.0223	92.4	89.4	78.0-120			3.30	20
Bromodichloromethane	0.0250	0.0258	0.0256	103	103	75.0-120			0.430	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201091-1 03/03/17 17:39 • (LCSD) R3201091-2 03/03/17 18:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	0.0287	0.0281	115	112	65.0-133			2.10	20
Bromomethane	0.0250	0.0327	0.0320	131	128	26.0-160			2.21	20
n-Butylbenzene	0.0250	0.0235	0.0233	93.9	93.3	73.0-126			0.570	20
sec-Butylbenzene	0.0250	0.0216	0.0213	86.3	85.1	75.0-121			1.35	20
tert-Butylbenzene	0.0250	0.0224	0.0219	89.6	87.5	74.0-122			2.37	20
Carbon tetrachloride	0.0250	0.0266	0.0263	106	105	66.0-123			1.11	20
Chlorobenzene	0.0250	0.0248	0.0243	99.3	97.2	79.0-121			2.15	20
Chlorodibromomethane	0.0250	0.0277	0.0266	111	106	74.0-128			4.14	20
Chloroethane	0.0250	0.0312	0.0294	125	118	51.0-147			5.88	20
Chloroform	0.0250	0.0252	0.0251	101	100	73.0-123			0.360	20
Chloromethane	0.0250	0.0202	0.0197	81.0	78.8	51.0-138			2.77	20
2-Chlorotoluene	0.0250	0.0231	0.0223	92.4	89.2	72.0-124			3.48	20
4-Chlorotoluene	0.0250	0.0228	0.0223	91.3	89.3	78.0-120			2.22	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0261	0.0248	104	99.3	65.0-126			5.10	20
1,2-Dibromoethane	0.0250	0.0255	0.0250	102	100	78.0-122			2.13	20
Dibromomethane	0.0250	0.0261	0.0266	104	106	79.0-120			1.83	20
1,2-Dichlorobenzene	0.0250	0.0241	0.0238	96.3	95.3	80.0-120			1.03	20
1,3-Dichlorobenzene	0.0250	0.0232	0.0226	92.7	90.6	72.0-123			2.30	20
1,4-Dichlorobenzene	0.0250	0.0249	0.0244	99.7	97.5	77.0-120			2.26	20
Dichlorodifluoromethane	0.0250	0.0213	0.0201	85.1	80.3	49.0-155			5.80	20
1,1-Dichloroethane	0.0250	0.0258	0.0251	103	100	70.0-128			2.92	20
1,2-Dichloroethane	0.0250	0.0267	0.0259	107	104	69.0-128			2.89	20
1,1-Dichloroethene	0.0250	0.0295	0.0293	118	117	63.0-131			0.570	20
cis-1,2-Dichloroethene	0.0250	0.0251	0.0251	100	101	74.0-123			0.120	20
trans-1,2-Dichloroethene	0.0250	0.0251	0.0245	101	97.9	72.0-122			2.60	20
1,2-Dichloropropane	0.0250	0.0256	0.0246	102	98.4	75.0-126			3.96	20
1,1-Dichloropropene	0.0250	0.0267	0.0264	107	105	72.0-130			1.12	20
1,3-Dichloropropane	0.0250	0.0257	0.0245	103	97.9	80.0-121			4.69	20
cis-1,3-Dichloropropene	0.0250	0.0275	0.0272	110	109	80.0-125			1.10	20
trans-1,3-Dichloropropene	0.0250	0.0261	0.0258	105	103	75.0-129			1.26	20
2,2-Dichloropropane	0.0250	0.0269	0.0265	108	106	60.0-129			1.36	20
Di-isopropyl ether	0.0250	0.0245	0.0243	98.1	97.1	62.0-133			1.04	20
Ethylbenzene	0.0250	0.0238	0.0234	95.2	93.6	77.0-120			1.76	20
Hexachloro-1,3-butadiene	0.0250	0.0222	0.0217	89.0	86.8	68.0-128			2.42	20
Isopropylbenzene	0.0250	0.0226	0.0222	90.6	88.7	75.0-120			2.09	20
p-Isopropyltoluene	0.0250	0.0226	0.0222	90.3	88.7	74.0-125			1.76	20
2-Butanone (MEK)	0.125	0.141	0.130	113	104	37.0-159			7.92	20
Methylene Chloride	0.0250	0.0252	0.0244	101	97.5	67.0-123			3.23	20
4-Methyl-2-pentanone (MIBK)	0.125	0.157	0.152	126	122	60.0-144			3.34	20
Methyl tert-butyl ether	0.0250	0.0245	0.0231	97.8	92.6	66.0-125			5.50	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201091-1 03/03/17 17:39 • (LCSD) R3201091-2 03/03/17 18:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0250	0.0243	0.0230	97.0	92.0	64.0-125			5.30	20
n-Propylbenzene	0.0250	0.0233	0.0228	93.0	91.4	78.0-120			1.80	20
Styrene	0.0250	0.0247	0.0244	99.0	97.7	78.0-124			1.30	20
1,1,1,2-Tetrachloroethane	0.0250	0.0267	0.0261	107	104	74.0-124			2.31	20
1,1,2,2-Tetrachloroethane	0.0250	0.0245	0.0232	98.0	92.9	73.0-120			5.32	20
Tetrachloroethene	0.0250	0.0237	0.0232	94.7	92.9	70.0-127			1.92	20
Toluene	0.0250	0.0231	0.0230	92.6	91.8	77.0-120			0.830	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0301	0.0294	120	118	64.0-135			2.12	20
1,2,3-Trichlorobenzene	0.0250	0.0238	0.0227	95.1	90.9	68.0-126			4.45	20
1,2,4-Trichlorobenzene	0.0250	0.0245	0.0240	97.9	96.1	70.0-127			1.85	20
1,1,1-Trichloroethane	0.0250	0.0264	0.0265	105	106	69.0-125			0.550	20
1,1,2-Trichloroethane	0.0250	0.0236	0.0234	94.5	93.8	78.0-120			0.790	20
Trichloroethene	0.0250	0.0247	0.0251	98.9	100	79.0-120			1.34	20
Trichlorofluoromethane	0.0250	0.0296	0.0286	118	114	59.0-136			3.54	20
1,2,3-Trichloropropane	0.0250	0.0259	0.0240	104	96.2	73.0-124			7.57	20
1,2,3-Trimethylbenzene	0.0250	0.0237	0.0231	94.9	92.5	76.0-120			2.57	20
1,2,4-Trimethylbenzene	0.0250	0.0227	0.0217	90.8	86.9	75.0-120			4.47	20
1,3,5-Trimethylbenzene	0.0250	0.0218	0.0217	87.2	86.6	75.0-120			0.680	20
Vinyl chloride	0.0250	0.0266	0.0263	106	105	63.0-134			1.22	20
Xylenes, Total	0.0750	0.0705	0.0693	94.0	92.4	77.0-120			1.72	20
(S) Toluene-d8				*99.6*	*100*	*80.0-120*				
(S) Dibromofluoromethane				*108*	*106*	*74.0-131*				
(S) 4-Bromofluorobenzene				*88.7*	*86.6*	*64.0-132*				

L892546-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892546-01 03/04/17 02:19 • (MS) R3201091-4 03/04/17 02:40 • (MSD) R3201091-5 03/04/17 03:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	ND	0.113	0.133	82.3	98.5	1	10.0-160			16.5	36
Acrylonitrile	0.125	ND	0.0955	0.115	76.4	92.0	1	14.0-160			18.6	33
Benzene	0.0250	ND	0.0175	0.0198	68.1	77.2	1	13.0-146			12.1	27
Bromobenzene	0.0250	ND	0.0115	0.0130	46.0	52.2	1	10.0-149			12.6	33
Bromodichloromethane	0.0250	ND	0.0163	0.0195	65.2	78.1	1	15.0-142			18.0	28
Bromoform	0.0250	ND	0.0166	0.0207	66.3	82.9	1	10.0-147			22.3	31
Bromomethane	0.0250	ND	0.0204	0.0226	81.4	90.4	1	10.0-160			10.4	32
n-Butylbenzene	0.0250	ND	0.0121	0.0129	48.4	51.8	1	10.0-154			6.78	37
sec-Butylbenzene	0.0250	ND	0.0118	0.0128	47.2	51.1	1	10.0-151			7.94	36
tert-Butylbenzene	0.0250	ND	0.0121	0.0133	48.3	53.1	1	10.0-152			9.45	35

L892546-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892546-01 03/04/17 02:19 • (MS) R3201091-4 03/04/17 02:40 • (MSD) R3201091-5 03/04/17 03:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.0186	0.0214	74.2	85.4	1	13.0-140			14.1	30
Chlorobenzene	0.0250	ND	0.0139	0.0161	55.7	64.2	1	10.0-149			14.2	31
Chlorodibromomethane	0.0250	ND	0.0162	0.0193	64.7	77.3	1	12.0-147			17.7	29
Chloroethane	0.0250	ND	0.0242	0.0270	96.8	108	1	10.0-159			10.8	33
Chloroform	0.0250	ND	0.0173	0.0200	69.1	80.1	1	18.0-148			14.8	28
Chloromethane	0.0250	ND	0.0150	0.0174	59.8	69.8	1	10.0-146			15.4	29
2-Chlorotoluene	0.0250	ND	0.0115	0.0132	46.0	52.6	1	10.0-151			13.5	35
4-Chlorotoluene	0.0250	ND	0.0109	0.0122	43.7	48.8	1	10.0-150			11.0	35
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0189	0.0224	75.5	89.5	1	10.0-149			17.0	34
1,2-Dibromoethane	0.0250	ND	0.0162	0.0190	64.9	76.2	1	14.0-145			15.9	28
Dibromomethane	0.0250	ND	0.0174	0.0209	69.4	83.4	1	18.0-144			18.3	27
1,2-Dichlorobenzene	0.0250	ND	0.0112	0.0121	44.9	48.2	1	10.0-153			7.07	34
1,3-Dichlorobenzene	0.0250	ND	0.00996	0.0113	39.8	45.2	1	10.0-150			12.7	35
1,4-Dichlorobenzene	0.0250	ND	0.0112	0.0124	45.0	49.5	1	10.0-148			9.50	34
Dichlorodifluoromethane	0.0250	ND	0.0153	0.0186	61.1	74.5	1	10.0-160			19.8	30
1,1-Dichloroethane	0.0250	ND	0.0179	0.0209	71.8	83.5	1	19.0-148			15.0	28
1,2-Dichloroethane	0.0250	ND	0.0174	0.0208	69.8	83.3	1	17.0-147			17.7	27
1,1-Dichloroethene	0.0250	ND	0.0220	0.0252	88.2	101	1	10.0-150			13.5	31
cis-1,2-Dichloroethene	0.0250	ND	0.0171	0.0195	68.3	78.0	1	16.0-145			13.3	28
trans-1,2-Dichloroethene	0.0250	ND	0.0177	0.0204	70.7	81.7	1	11.0-142			14.3	29
1,2-Dichloropropane	0.0250	ND	0.0166	0.0195	66.4	77.8	1	17.0-148			15.8	28
1,1-Dichloropropene	0.0250	ND	0.0185	0.0214	73.8	85.6	1	10.0-150			14.8	30
1,3-Dichloropropane	0.0250	ND	0.0155	0.0183	61.9	73.1	1	16.0-148			16.6	27
cis-1,3-Dichloropropene	0.0250	ND	0.0171	0.0199	68.3	79.4	1	13.0-150			15.1	28
trans-1,3-Dichloropropene	0.0250	ND	0.0148	0.0181	59.0	72.4	1	10.0-152			20.3	29
2,2-Dichloropropane	0.0250	ND	0.0192	0.0213	76.8	85.2	1	16.0-143			10.4	30
Di-isopropyl ether	0.0250	ND	0.0168	0.0195	67.1	78.1	1	16.0-149			15.2	28
Ethylbenzene	0.0250	ND	0.0141	0.0159	56.5	63.7	1	10.0-147			11.9	31
Hexachloro-1,3-butadiene	0.0250	ND	0.00817	0.0102	32.7	40.9	1	10.0-154			22.3	40
Isopropylbenzene	0.0250	ND	0.0129	0.0144	51.5	57.7	1	10.0-147			11.2	33
p-Isopropyltoluene	0.0250	ND	0.0114	0.0125	45.8	49.9	1	10.0-156			8.72	37
2-Butanone (MEK)	0.125	ND	0.103	0.121	82.3	97.1	1	10.0-160			16.5	33
Methylene Chloride	0.0250	ND	0.0171	0.0196	64.3	74.4	1	16.0-139			13.7	29
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.129	0.157	103	126	1	12.0-160			20.0	32
Methyl tert-butyl ether	0.0250	ND	0.0169	0.0202	67.6	80.6	1	21.0-145			17.6	29
Naphthalene	0.0250	ND	0.0100	0.0108	40.0	43.3	1	10.0-153			8.03	36
n-Propylbenzene	0.0250	ND	0.0126	0.0137	50.4	54.8	1	10.0-151			8.37	34
Styrene	0.0250	ND	0.0107	0.0121	42.9	48.3	1	10.0-155			12.0	34
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0147	0.0176	59.0	70.4	1	10.0-147			17.7	30
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0152	0.0179	60.7	71.7	1	10.0-155			16.6	31

L892546-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892546-01 03/04/17 02:19 • (MS) R3201091-4 03/04/17 02:40 • (MSD) R3201091-5 03/04/17 03:02

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.0144	0.0163	57.6	65.0	1	10.0-144			12.1	32
Toluene	0.0250	ND	0.0159	0.0186	63.8	74.2	1	10.0-144			15.1	28
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0235	0.0261	94.0	104	1	10.0-153			10.4	33
1,2,3-Trichlorobenzene	0.0250	ND	0.00730	0.00872	29.2	34.9	1	10.0-153			17.7	40
1,2,4-Trichlorobenzene	0.0250	ND	0.00812	0.00918	32.5	36.7	1	10.0-156			12.2	40
1,1,1-Trichloroethane	0.0250	ND	0.0187	0.0219	75.0	87.7	1	18.0-145			15.7	29
1,1,2-Trichloroethane	0.0250	ND	0.0153	0.0177	61.2	70.6	1	12.0-151			14.3	28
Trichloroethene	0.0250	ND	0.0165	0.0193	66.0	77.3	1	11.0-148			15.8	29
Trichlorofluoromethane	0.0250	ND	0.0223	0.0267	89.1	107	1	10.0-157			18.2	34
1,2,3-Trichloropropane	0.0250	ND	0.0158	0.0198	63.4	79.2	1	10.0-154			22.2	32
1,2,3-Trimethylbenzene	0.0250	ND	0.0122	0.0131	48.7	52.4	1	10.0-150			7.26	33
1,2,4-Trimethylbenzene	0.0250	ND	0.0112	0.0123	44.7	49.1	1	10.0-151			9.33	34
1,3,5-Trimethylbenzene	0.0250	ND	0.0113	0.0126	45.1	50.5	1	10.0-150			11.3	33
Vinyl chloride	0.0250	ND	0.0207	0.0231	82.7	92.2	1	10.0-150			10.9	29
Xylenes, Total	0.0750	ND	0.0401	0.0453	53.5	60.4	1	10.0-150			12.2	31
(S) Toluene-d8					*99.1*	*98.7*		*80.0-120*				
(S) Dibromofluoromethane					*111*	*108*		*74.0-131*				
(S) 4-Bromofluorobenzene					*86.8*	*87.2*		*64.0-132*				

Method Blank (MB)

(MB) R3200764-1 03/02/17 17:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*68.2*			*18.0-148*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200764-2 03/02/17 17:50 • (LCSD) R3200764-3 03/02/17 18:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.0	41.3	39.2	68.9	65.3	50.0-150			5.38	20
(S) o-Terphenyl				*80.5*	*78.6*	*18.0-148*				

L892548-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892548-06 03/03/17 03:16 • (MS) R3200764-4 03/03/17 03:32 • (MSD) R3200764-5 03/03/17 03:48

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.0	ND	45.2	41.7	75.3	69.6	1	50.0-150			7.94	20
(S) o-Terphenyl					*92.2*	*81.8*		*18.0-148*				

Method Blank (MB)

(MB) R3200938-3 03/03/17 13:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) p-Terphenyl-d14	*84.1*			*23.0-120*
(S) Nitrobenzene-d5	*80.8*			*14.0-149*
(S) 2-Fluorobiphenyl	*82.6*			*34.0-125*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200938-1 03/03/17 12:38 • (LCSD) R3200938-2 03/03/17 12:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0800	0.0548	0.0566	68.5	70.7	50.0-125			3.21	20
Acenaphthene	0.0800	0.0601	0.0613	75.1	76.7	52.0-120			2.03	20
Acenaphthylene	0.0800	0.0588	0.0605	73.5	75.6	51.0-120			2.94	20
Benzo(a)anthracene	0.0800	0.0564	0.0589	70.5	73.6	46.0-121			4.33	20
Benzo(a)pyrene	0.0800	0.0512	0.0530	64.0	66.3	42.0-121			3.59	20
Benzo(b)fluoranthene	0.0800	0.0625	0.0622	78.1	77.7	42.0-123			0.570	20
Benzo(g,h,i)perylene	0.0800	0.0623	0.0626	77.9	78.3	43.0-128			0.480	20
Benzo(k)fluoranthene	0.0800	0.0531	0.0570	66.4	71.2	45.0-128			6.96	20
Chrysene	0.0800	0.0557	0.0583	69.6	72.8	48.0-127			4.54	20
Dibenz(a,h)anthracene	0.0800	0.0657	0.0651	82.2	81.4	43.0-132			0.910	20
Fluoranthene	0.0800	0.0576	0.0583	72.1	72.8	49.0-129			1.09	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200938-1 03/03/17 12:38 • (LCSD) R3200938-2 03/03/17 12:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	0.0800	0.0592	0.0603	74.0	75.4	50.0-120			1.76	20
Indeno(1,2,3-cd)pyrene	0.0800	0.0620	0.0623	77.5	77.9	44.0-131			0.480	20
Naphthalene	0.0800	0.0591	0.0605	73.9	75.7	50.0-120			2.37	20
Phenanthrene	0.0800	0.0572	0.0580	71.5	72.5	48.0-120			1.28	20
Pyrene	0.0800	0.0580	0.0596	72.5	74.6	48.0-135			2.77	20
1-Methylnaphthalene	0.0800	0.0624	0.0637	78.0	79.6	52.0-122			2.06	20
2-Methylnaphthalene	0.0800	0.0586	0.0600	73.2	75.1	52.0-120			2.48	20
2-Chloronaphthalene	0.0800	0.0601	0.0614	75.2	76.8	50.0-120			2.10	20
(S) p-Terphenyl-d14				*81.5*	*83.8*	*23.0-120*				
(S) Nitrobenzene-d5				*88.4*	*88.3*	*14.0-149*				
(S) 2-Fluorobiphenyl				*84.2*	*85.5*	*34.0-125*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

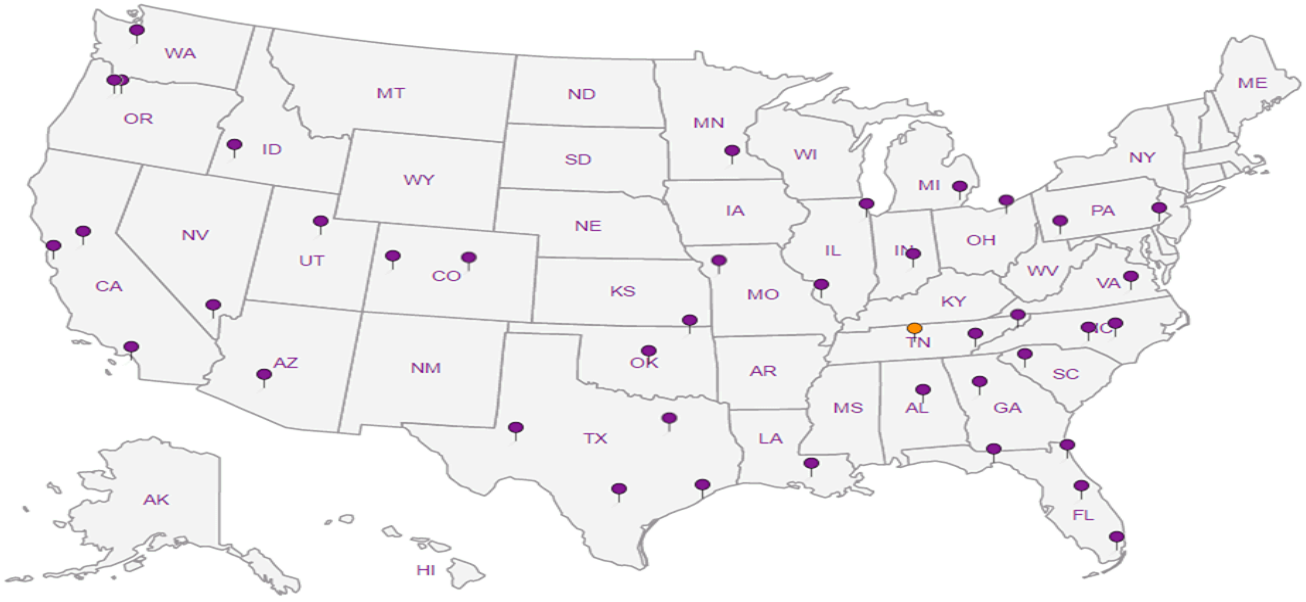
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address: SCS ENGINEERS 1817 COMMERCE CIRCLE STE #1 YUKON, OK. 73099

Billing Information:

Report to: DALE DANIEL

Email To: ddaniel@scsengineers.com

Project Description: 1721 NE 23 RD Street

City/State Collected: Oklahoma City OK.

Phone:

Fax:

Client Project #

Lab Project #

Collected by (print): DALE DANIEL

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: STANDARD

Email? ___No ___Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	FULL SCAN VOCs - 8260	TPH - LOW, MEDIUM, HIGH RANGE FRACTIONS	PAH - 8270C	RCRA-8 METALS
SB-04	GRAB	SOIL	0-1	2-21-17	800	3	X	X	X	X
SB-04			11-12		800		X	X	X	X
SB-05			0.5-1		1100		X	X	X	X
SB-05			9-10		1100		X	X	X	X
SB-06			6-7		1300		X	X	X	X
SB-06			9-10		1300		X	X	X	X
SB-07			0-1		1500		X	X	X	X
SB-07			11-12		1500		X	X	X	X
Duplicate			—		—		X	X	X	X

Chain of Custody Page 1 of ___

ESC LABORATORY SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L892546

H218

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Rem./Contaminant	Sample # (lab only)
	-01
	02
	03
	04
	05
	06
	07
	08
	09

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks: * ALL METHODS AS REQUIRED IN OKLAHOMA

pH ___ Temp ___

Flow ___ Other ___

Hold #

Condition: (lab use only) OK

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	2-23	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 3.1 °C Bottles Received: 27

Date: 2-24-17 Time: 9:00

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

ESC LAB SCIENCES
Cooler Receipt Form

Client: AQUATECOL	SDG#	L892546	
Cooler Received/Opened On: 2/25/17	Temperature:	3.1	
Received By: Rickey Mosley			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

ANALYTICAL REPORT

March 10, 2017

SCS Engineers - OK

Sample Delivery Group:	L892548
Samples Received:	02/25/2017
Project Number:	
Description:	1708-1721 NE 23rd

Report To:

Mr. Dale Daniel
1817 Commons Circle, Suite 1
Yukon, OK 73099

Entire Report Reviewed By:

Craig Cothron
Technical Service Representative

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EQUIPMENT L892548-01 GW

Collected by: Dale Daniel | Collected date/time: 02/21/17 17:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957979	1	03/07/17 19:56	03/07/17 19:56	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG958680	1	03/07/17 22:29	03/07/17 22:29	JHH
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG958933	1	03/07/17 23:53	03/08/17 14:17	TRF
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG958697	1	03/07/17 23:51	03/08/17 12:39	FMB

FIELD L892548-02 GW

Collected by: Dale Daniel | Collected date/time: 02/21/17 17:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957979	1	03/07/17 20:18	03/07/17 20:18	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG958680	1	03/07/17 22:51	03/07/17 22:51	JHH
Semi-Volatile Organic Compounds (GC) by Method 3511/8015	WG958933	1	03/07/17 23:53	03/08/17 14:35	TRF
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG958697	1	03/07/17 23:51	03/08/17 13:01	FMB

SB-01 0-1 L892548-03 Solid

Collected by: Dale Daniel | Collected date/time: 02/22/17 12:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957205	1	03/02/17 13:29	03/02/17 13:38	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:29	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:28	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:11	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	1	03/03/17 09:24	03/04/17 02:31	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	1	03/03/17 09:24	03/03/17 19:24	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 12:15	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	2	03/02/17 14:53	03/04/17 11:59	CLG

SB-01 8-9 L892548-04 Solid

Collected by: Dale Daniel | Collected date/time: 02/22/17 12:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957211	1	03/02/17 13:42	03/02/17 13:53	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:32	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:31	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:21	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	1	03/03/17 09:24	03/04/17 02:54	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	1	03/03/17 09:24	03/03/17 19:38	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 06:37	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/04/17 09:52	CLG

SB-02 0-1 L892548-05 Solid

Collected by: Dale Daniel | Collected date/time: 02/22/17 11:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957211	1	03/02/17 13:42	03/02/17 13:53	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:34	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:34	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:25	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	1	03/03/17 09:24	03/04/17 03:16	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	1	03/03/17 09:24	03/03/17 19:51	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 06:52	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/04/17 10:13	CLG

SB-02 12-13 L892548-06 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 11:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957211	1	03/02/17 13:42	03/02/17 13:53	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:37	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:37	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:28	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	1	03/03/17 09:24	03/04/17 03:38	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	1	03/03/17 09:24	03/03/17 20:04	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 03:16	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/04/17 10:34	CLG

SB-03 0-1 L892548-07 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 10:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957211	1	03/02/17 13:42	03/02/17 13:53	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:39	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:40	ST
Metals (ICP) by Method 6010B	WG956308	5	03/02/17 13:24	03/03/17 18:37	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:32	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	1	03/03/17 09:24	03/04/17 04:00	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	1	03/03/17 09:24	03/03/17 20:17	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 04:03	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/04/17 10:55	CLG

SB-03 8-9 L892548-08 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 10:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957211	1	03/02/17 13:42	03/02/17 13:53	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:42	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:43	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:35	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	50	03/03/17 09:24	03/06/17 16:34	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	25	03/03/17 09:24	03/03/17 20:30	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 04:34	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/04/17 11:16	CLG

DUPLICATE L892548-09 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 00:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957211	1	03/02/17 13:42	03/02/17 13:53	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 06:44	TRB
Metals (ICP) by Method 6010B	WG956308	1	03/02/17 13:24	03/03/17 15:46	ST
Metals (ICPMS) by Method 6020	WG956497	5	03/02/17 08:41	03/02/17 12:39	JPD
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957798	25	03/03/17 09:24	03/06/17 16:56	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957646	1	03/03/17 09:24	03/03/17 21:23	LRL
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956513	1	03/02/17 11:23	03/03/17 04:49	ACM
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956926	1	03/02/17 14:53	03/04/17 11:38	CLG

All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Technical Service Representative

Sample Handling and Receiving

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

ESC Sample ID	Project Sample ID	Method
L892548-01	EQUIPMENT	3511/8015, 8270C-SIM
L892548-02	FIELD	3511/8015, 8270C-SIM

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	03/07/2017 19:56	WG957979
(S) a,a,a-Trifluorotoluene(FID)	*96.8*		*77.0-122*		*03/07/2017 19:56*	WG957979

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/07/2017 22:29	WG958680
Acrylonitrile	ND		10.0	1	03/07/2017 22:29	WG958680
Benzene	ND		1.00	1	03/07/2017 22:29	WG958680
Bromochloromethane	ND		1.00	1	03/07/2017 22:29	WG958680
Bromodichloromethane	ND		1.00	1	03/07/2017 22:29	WG958680
Bromoform	ND		1.00	1	03/07/2017 22:29	WG958680
Bromomethane	ND		5.00	1	03/07/2017 22:29	WG958680
Carbon disulfide	ND		1.00	1	03/07/2017 22:29	WG958680
Carbon tetrachloride	ND		1.00	1	03/07/2017 22:29	WG958680
Chlorobenzene	ND		1.00	1	03/07/2017 22:29	WG958680
Chlorodibromomethane	ND		1.00	1	03/07/2017 22:29	WG958680
Chloroethane	ND		5.00	1	03/07/2017 22:29	WG958680
Chloroform	ND		5.00	1	03/07/2017 22:29	WG958680
Chloromethane	ND		2.50	1	03/07/2017 22:29	WG958680
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/07/2017 22:29	WG958680
1,2-Dibromoethane	ND		1.00	1	03/07/2017 22:29	WG958680
Dibromomethane	ND		1.00	1	03/07/2017 22:29	WG958680
1,2-Dichlorobenzene	ND		1.00	1	03/07/2017 22:29	WG958680
1,4-Dichlorobenzene	ND		1.00	1	03/07/2017 22:29	WG958680
1,1-Dichloroethane	ND		1.00	1	03/07/2017 22:29	WG958680
1,2-Dichloroethane	ND		1.00	1	03/07/2017 22:29	WG958680
1,1-Dichloroethene	ND	J3 J4	1.00	1	03/07/2017 22:29	WG958680
cis-1,2-Dichloroethene	ND		1.00	1	03/07/2017 22:29	WG958680
trans-1,2-Dichloroethene	ND		1.00	1	03/07/2017 22:29	WG958680
1,2-Dichloropropane	ND		1.00	1	03/07/2017 22:29	WG958680
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/07/2017 22:29	WG958680
cis-1,3-Dichloropropene	ND	J4	1.00	1	03/07/2017 22:29	WG958680
trans-1,3-Dichloropropene	ND	J4	1.00	1	03/07/2017 22:29	WG958680
Ethylbenzene	ND		1.00	1	03/07/2017 22:29	WG958680
2-Hexanone	ND		10.0	1	03/07/2017 22:29	WG958680
Iodomethane	ND		10.0	1	03/07/2017 22:29	WG958680
2-Butanone (MEK)	ND		10.0	1	03/07/2017 22:29	WG958680
Methylene Chloride	ND		5.00	1	03/07/2017 22:29	WG958680
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/07/2017 22:29	WG958680
Styrene	ND		1.00	1	03/07/2017 22:29	WG958680
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/07/2017 22:29	WG958680
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/07/2017 22:29	WG958680
Tetrachloroethene	ND		1.00	1	03/07/2017 22:29	WG958680
Toluene	ND		1.00	1	03/07/2017 22:29	WG958680
1,1,1-Trichloroethane	ND		1.00	1	03/07/2017 22:29	WG958680
1,1,2-Trichloroethane	ND		1.00	1	03/07/2017 22:29	WG958680
Trichloroethene	ND		1.00	1	03/07/2017 22:29	WG958680
Trichlorofluoromethane	ND		5.00	1	03/07/2017 22:29	WG958680
1,2,3-Trichloropropane	ND		2.50	1	03/07/2017 22:29	WG958680
Vinyl acetate	ND		10.0	1	03/07/2017 22:29	WG958680
Vinyl chloride	ND		1.00	1	03/07/2017 22:29	WG958680
Xylenes, Total	ND		3.00	1	03/07/2017 22:29	WG958680
(S) Toluene-d8	*107*		*80.0-120*		*03/07/2017 22:29*	WG958680
(S) Dibromofluoromethane	*106*		*76.0-123*		*03/07/2017 22:29*	WG958680

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 4-Bromofluorobenzene	*96.1*		*80.0-120*		*03/07/2017 22:29*	WG958680

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	03/08/2017 14:17	WG958933
(S) o-Terphenyl	*92.4*		*31.0-160*		*03/08/2017 14:17*	WG958933

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/08/2017 12:39	WG958697
Acenaphthene	ND		0.0500	1	03/08/2017 12:39	WG958697
Acenaphthylene	ND		0.0500	1	03/08/2017 12:39	WG958697
Benzo(a)anthracene	ND		0.0500	1	03/08/2017 12:39	WG958697
Benzo(a)pyrene	ND		0.0500	1	03/08/2017 12:39	WG958697
Benzo(b)fluoranthene	ND		0.0500	1	03/08/2017 12:39	WG958697
Benzo(g,h,i)perylene	ND		0.0500	1	03/08/2017 12:39	WG958697
Benzo(k)fluoranthene	ND		0.0500	1	03/08/2017 12:39	WG958697
Chrysene	ND		0.0500	1	03/08/2017 12:39	WG958697
Dibenz(a,h)anthracene	ND		0.0500	1	03/08/2017 12:39	WG958697
Fluoranthene	ND		0.0500	1	03/08/2017 12:39	WG958697
Fluorene	ND		0.0500	1	03/08/2017 12:39	WG958697
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/08/2017 12:39	WG958697
Naphthalene	ND		0.250	1	03/08/2017 12:39	WG958697
Phenanthrene	ND		0.0500	1	03/08/2017 12:39	WG958697
Pyrene	ND		0.0500	1	03/08/2017 12:39	WG958697
1-Methylnaphthalene	ND		0.250	1	03/08/2017 12:39	WG958697
2-Methylnaphthalene	ND		0.250	1	03/08/2017 12:39	WG958697
2-Chloronaphthalene	ND		0.250	1	03/08/2017 12:39	WG958697
(S) Nitrobenzene-d5	*124*		*31.0-160*		*03/08/2017 12:39*	WG958697
(S) 2-Fluorobiphenyl	*91.5*		*48.0-148*		*03/08/2017 12:39*	WG958697
(S) p-Terphenyl-d14	*98.2*		*37.0-146*		*03/08/2017 12:39*	WG958697

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	03/07/2017 20:18	WG957979
(S) a,a,a-Trifluorotoluene(FID)	*97.2*		*77.0-122*		*03/07/2017 20:18*	WG957979

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/07/2017 22:51	WG958680
Acrylonitrile	ND		10.0	1	03/07/2017 22:51	WG958680
Benzene	ND		1.00	1	03/07/2017 22:51	WG958680
Bromochloromethane	ND		1.00	1	03/07/2017 22:51	WG958680
Bromodichloromethane	ND		1.00	1	03/07/2017 22:51	WG958680
Bromoform	ND		1.00	1	03/07/2017 22:51	WG958680
Bromomethane	ND		5.00	1	03/07/2017 22:51	WG958680
Carbon disulfide	ND		1.00	1	03/07/2017 22:51	WG958680
Carbon tetrachloride	ND		1.00	1	03/07/2017 22:51	WG958680
Chlorobenzene	ND		1.00	1	03/07/2017 22:51	WG958680
Chlorodibromomethane	ND		1.00	1	03/07/2017 22:51	WG958680
Chloroethane	ND		5.00	1	03/07/2017 22:51	WG958680
Chloroform	ND		5.00	1	03/07/2017 22:51	WG958680
Chloromethane	ND		2.50	1	03/07/2017 22:51	WG958680
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/07/2017 22:51	WG958680
1,2-Dibromoethane	ND		1.00	1	03/07/2017 22:51	WG958680
Dibromomethane	ND		1.00	1	03/07/2017 22:51	WG958680
1,2-Dichlorobenzene	ND		1.00	1	03/07/2017 22:51	WG958680
1,4-Dichlorobenzene	ND		1.00	1	03/07/2017 22:51	WG958680
1,1-Dichloroethane	ND		1.00	1	03/07/2017 22:51	WG958680
1,2-Dichloroethane	ND		1.00	1	03/07/2017 22:51	WG958680
1,1-Dichloroethene	ND	J3 J4	1.00	1	03/07/2017 22:51	WG958680
cis-1,2-Dichloroethene	ND		1.00	1	03/07/2017 22:51	WG958680
trans-1,2-Dichloroethene	ND		1.00	1	03/07/2017 22:51	WG958680
1,2-Dichloropropane	ND		1.00	1	03/07/2017 22:51	WG958680
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/07/2017 22:51	WG958680
cis-1,3-Dichloropropene	ND	J4	1.00	1	03/07/2017 22:51	WG958680
trans-1,3-Dichloropropene	ND	J4	1.00	1	03/07/2017 22:51	WG958680
Ethylbenzene	ND		1.00	1	03/07/2017 22:51	WG958680
2-Hexanone	ND		10.0	1	03/07/2017 22:51	WG958680
Iodomethane	ND		10.0	1	03/07/2017 22:51	WG958680
2-Butanone (MEK)	ND		10.0	1	03/07/2017 22:51	WG958680
Methylene Chloride	ND		5.00	1	03/07/2017 22:51	WG958680
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/07/2017 22:51	WG958680
Styrene	ND		1.00	1	03/07/2017 22:51	WG958680
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/07/2017 22:51	WG958680
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/07/2017 22:51	WG958680
Tetrachloroethene	ND		1.00	1	03/07/2017 22:51	WG958680
Toluene	ND		1.00	1	03/07/2017 22:51	WG958680
1,1,1-Trichloroethane	ND		1.00	1	03/07/2017 22:51	WG958680
1,1,2-Trichloroethane	ND		1.00	1	03/07/2017 22:51	WG958680
Trichloroethene	ND		1.00	1	03/07/2017 22:51	WG958680
Trichlorofluoromethane	ND		5.00	1	03/07/2017 22:51	WG958680
1,2,3-Trichloropropane	ND		2.50	1	03/07/2017 22:51	WG958680
Vinyl acetate	ND		10.0	1	03/07/2017 22:51	WG958680
Vinyl chloride	ND		1.00	1	03/07/2017 22:51	WG958680
Xylenes, Total	ND		3.00	1	03/07/2017 22:51	WG958680
(S) Toluene-d8	*110*		*80.0-120*		*03/07/2017 22:51*	WG958680
(S) Dibromofluoromethane	*106*		*76.0-123*		*03/07/2017 22:51*	WG958680

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 4-Bromofluorobenzene	*95.8*		*80.0-120*		*03/07/2017 22:51*	WG958680

Semi-Volatile Organic Compounds (GC) by Method 3511/8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) High Fraction	ND		100	1	03/08/2017 14:35	WG958933
(S) o-Terphenyl	*92.2*		*31.0-160*		*03/08/2017 14:35*	WG958933

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/08/2017 13:01	WG958697
Acenaphthene	ND		0.0500	1	03/08/2017 13:01	WG958697
Acenaphthylene	ND		0.0500	1	03/08/2017 13:01	WG958697
Benzo(a)anthracene	ND		0.0500	1	03/08/2017 13:01	WG958697
Benzo(a)pyrene	ND		0.0500	1	03/08/2017 13:01	WG958697
Benzo(b)fluoranthene	ND		0.0500	1	03/08/2017 13:01	WG958697
Benzo(g,h,i)perylene	ND		0.0500	1	03/08/2017 13:01	WG958697
Benzo(k)fluoranthene	ND		0.0500	1	03/08/2017 13:01	WG958697
Chrysene	ND		0.0500	1	03/08/2017 13:01	WG958697
Dibenz(a,h)anthracene	ND		0.0500	1	03/08/2017 13:01	WG958697
Fluoranthene	ND		0.0500	1	03/08/2017 13:01	WG958697
Fluorene	ND		0.0500	1	03/08/2017 13:01	WG958697
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/08/2017 13:01	WG958697
Naphthalene	ND		0.250	1	03/08/2017 13:01	WG958697
Phenanthrene	ND		0.0500	1	03/08/2017 13:01	WG958697
Pyrene	ND		0.0500	1	03/08/2017 13:01	WG958697
1-Methylnaphthalene	ND		0.250	1	03/08/2017 13:01	WG958697
2-Methylnaphthalene	ND		0.250	1	03/08/2017 13:01	WG958697
2-Chloronaphthalene	ND		0.250	1	03/08/2017 13:01	WG958697
(S) Nitrobenzene-d5	*126*		*31.0-160*		*03/08/2017 13:01*	WG958697
(S) 2-Fluorobiphenyl	*92.2*		*48.0-148*		*03/08/2017 13:01*	WG958697
(S) p-Terphenyl-d14	*98.3*		*37.0-146*		*03/08/2017 13:01*	WG958697

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.7		1	03/02/2017 13:38	WG957205

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 06:29	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	73.0		0.500	1	03/03/2017 15:28	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:28	WG956308
Chromium	9.35		1.00	1	03/03/2017 15:28	WG956308
Lead	17.2		0.500	1	03/03/2017 15:28	WG956308
Selenium	ND		2.00	1	03/03/2017 15:28	WG956308
Silver	ND		1.00	1	03/03/2017 15:28	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.59		0.500	5	03/02/2017 12:11	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/04/2017 02:31	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*93.3*		*77.0-120*		*03/04/2017 02:31*	WG957798

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 19:24	WG957646
Acrylonitrile	ND		0.0100	1	03/03/2017 19:24	WG957646
Benzene	0.00167		0.00100	1	03/03/2017 19:24	WG957646
Bromobenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Bromodichloromethane	ND		0.00100	1	03/03/2017 19:24	WG957646
Bromoform	ND		0.00100	1	03/03/2017 19:24	WG957646
Bromomethane	ND		0.00500	1	03/03/2017 19:24	WG957646
n-Butylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
sec-Butylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
tert-Butylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Carbon tetrachloride	ND		0.00100	1	03/03/2017 19:24	WG957646
Chlorobenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Chlorodibromomethane	ND		0.00100	1	03/03/2017 19:24	WG957646
Chloroethane	ND		0.00500	1	03/03/2017 19:24	WG957646
Chloroform	ND		0.00500	1	03/03/2017 19:24	WG957646
Chloromethane	ND		0.00250	1	03/03/2017 19:24	WG957646
2-Chlorotoluene	ND		0.00100	1	03/03/2017 19:24	WG957646
4-Chlorotoluene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.00500	1	03/03/2017 19:24	WG957646
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 19:24	WG957646
Dibromomethane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,2-Dichlorobenzene	ND	J4	0.00100	1	03/03/2017 19:24	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 19:24	WG957646
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 19:24	WG957646
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 19:24	WG957646
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 19:24	WG957646
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 19:24	WG957646
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 19:24	WG957646
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 19:24	WG957646
Di-isopropyl ether	ND		0.00100	1	03/03/2017 19:24	WG957646
Ethylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 19:24	WG957646
Isopropylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 19:24	WG957646
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 19:24	WG957646
Methylene Chloride	ND		0.00500	1	03/03/2017 19:24	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 19:24	WG957646
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 19:24	WG957646
Naphthalene	ND		0.00500	1	03/03/2017 19:24	WG957646
n-Propylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Styrene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
Tetrachloroethene	ND		0.00100	1	03/03/2017 19:24	WG957646
Toluene	ND		0.00500	1	03/03/2017 19:24	WG957646
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 19:24	WG957646
Trichloroethene	ND		0.00100	1	03/03/2017 19:24	WG957646
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 19:24	WG957646
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 19:24	WG957646
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:24	WG957646
Vinyl chloride	ND		0.00100	1	03/03/2017 19:24	WG957646
Xylenes, Total	ND		0.00300	1	03/03/2017 19:24	WG957646
(S) Toluene-d8	*94.9*		*80.0-120*		*03/03/2017 19:24*	WG957646
(S) Dibromofluoromethane	*120*		*74.0-131*		*03/03/2017 19:24*	WG957646
(S) 4-Bromofluorobenzene	*63.1*	J2	*64.0-132*		*03/03/2017 19:24*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 12:15	WG956513
C28-C40 Oil Range	4.59		4.00	1	03/03/2017 12:15	WG956513
(S) o-Terphenyl	*85.3*		*18.0-148*		*03/03/2017 12:15*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0120	2	03/04/2017 11:59	WG956926
Acenaphthene	ND		0.0120	2	03/04/2017 11:59	WG956926
Acenaphthylene	ND		0.0120	2	03/04/2017 11:59	WG956926
Benzo(a)anthracene	ND		0.0120	2	03/04/2017 11:59	WG956926
Benzo(a)pyrene	ND		0.0120	2	03/04/2017 11:59	WG956926
Benzo(b)fluoranthene	ND		0.0120	2	03/04/2017 11:59	WG956926
Benzo(g,h,i)perylene	ND		0.0120	2	03/04/2017 11:59	WG956926
Benzo(k)fluoranthene	ND		0.0120	2	03/04/2017 11:59	WG956926
Chrysene	ND		0.0120	2	03/04/2017 11:59	WG956926
Dibenz(a,h)anthracene	ND		0.0120	2	03/04/2017 11:59	WG956926
Fluoranthene	ND		0.0120	2	03/04/2017 11:59	WG956926
Fluorene	ND		0.0120	2	03/04/2017 11:59	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.0120	2	03/04/2017 11:59	WG956926
Naphthalene	ND		0.0400	2	03/04/2017 11:59	WG956926
Phenanthrene	ND		0.0120	2	03/04/2017 11:59	WG956926
Pyrene	ND		0.0120	2	03/04/2017 11:59	WG956926
1-Methylnaphthalene	ND		0.0400	2	03/04/2017 11:59	WG956926
2-Methylnaphthalene	ND		0.0400	2	03/04/2017 11:59	WG956926
2-Chloronaphthalene	ND		0.0400	2	03/04/2017 11:59	WG956926
(S) p-Terphenyl-d14	*69.2*		*23.0-120*		*03/04/2017 11:59*	WG956926
(S) Nitrobenzene-d5	*69.9*		*14.0-149*		*03/04/2017 11:59*	WG956926
(S) 2-Fluorobiphenyl	*69.0*		*34.0-125*		*03/04/2017 11:59*	WG956926

Sample Narrative:

8270C-SIM L892548-03 WG956926: Dilution due to matrix

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.6		1	03/02/2017 13:53	WG957211

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 06:32	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	330		0.500	1	03/03/2017 15:31	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:31	WG956308
Chromium	17.5		1.00	1	03/03/2017 15:31	WG956308
Lead	4.79		0.500	1	03/03/2017 15:31	WG956308
Selenium	ND		2.00	1	03/03/2017 15:31	WG956308
Silver	ND		1.00	1	03/03/2017 15:31	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	1.51		0.500	5	03/02/2017 12:21	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/04/2017 02:54	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*99.4*		*77.0-120*		*03/04/2017 02:54*	WG957798

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 19:38	WG957646
Acrylonitrile	ND		0.0100	1	03/03/2017 19:38	WG957646
Benzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Bromobenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Bromodichloromethane	ND		0.00100	1	03/03/2017 19:38	WG957646
Bromoform	ND		0.00100	1	03/03/2017 19:38	WG957646
Bromomethane	ND		0.00500	1	03/03/2017 19:38	WG957646
n-Butylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
sec-Butylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
tert-Butylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Carbon tetrachloride	ND		0.00100	1	03/03/2017 19:38	WG957646
Chlorobenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Chlorodibromomethane	ND		0.00100	1	03/03/2017 19:38	WG957646
Chloroethane	ND		0.00500	1	03/03/2017 19:38	WG957646
Chloroform	ND		0.00500	1	03/03/2017 19:38	WG957646
Chloromethane	ND		0.00250	1	03/03/2017 19:38	WG957646
2-Chlorotoluene	ND		0.00100	1	03/03/2017 19:38	WG957646
4-Chlorotoluene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.00500	1	03/03/2017 19:38	WG957646
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 19:38	WG957646
Dibromomethane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,2-Dichlorobenzene	ND	J4	0.00100	1	03/03/2017 19:38	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 19:38	WG957646
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 19:38	WG957646
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 19:38	WG957646
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 19:38	WG957646
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 19:38	WG957646
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 19:38	WG957646
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 19:38	WG957646
Di-isopropyl ether	ND		0.00100	1	03/03/2017 19:38	WG957646
Ethylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 19:38	WG957646
Isopropylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 19:38	WG957646
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 19:38	WG957646
Methylene Chloride	ND		0.00500	1	03/03/2017 19:38	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 19:38	WG957646
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 19:38	WG957646
Naphthalene	ND		0.00500	1	03/03/2017 19:38	WG957646
n-Propylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Styrene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
Tetrachloroethene	ND		0.00100	1	03/03/2017 19:38	WG957646
Toluene	ND		0.00500	1	03/03/2017 19:38	WG957646
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 19:38	WG957646
Trichloroethene	ND		0.00100	1	03/03/2017 19:38	WG957646
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 19:38	WG957646
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 19:38	WG957646
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:38	WG957646
Vinyl chloride	ND		0.00100	1	03/03/2017 19:38	WG957646
Xylenes, Total	ND		0.00300	1	03/03/2017 19:38	WG957646
(S) Toluene-d8	*105*		*80.0-120*		*03/03/2017 19:38*	WG957646
(S) Dibromofluoromethane	*113*		*74.0-131*		*03/03/2017 19:38*	WG957646
(S) 4-Bromofluorobenzene	*106*		*64.0-132*		*03/03/2017 19:38*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 06:37	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 06:37	WG956513
(S) o-Terphenyl	*97.2*		*18.0-148*		*03/03/2017 06:37*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/04/2017 09:52	WG956926
Acenaphthene	ND		0.00600	1	03/04/2017 09:52	WG956926
Acenaphthylene	ND		0.00600	1	03/04/2017 09:52	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/04/2017 09:52	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/04/2017 09:52	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/04/2017 09:52	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/04/2017 09:52	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/04/2017 09:52	WG956926
Chrysene	ND		0.00600	1	03/04/2017 09:52	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/04/2017 09:52	WG956926
Fluoranthene	ND		0.00600	1	03/04/2017 09:52	WG956926
Fluorene	ND		0.00600	1	03/04/2017 09:52	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/04/2017 09:52	WG956926
Naphthalene	ND		0.0200	1	03/04/2017 09:52	WG956926
Phenanthrene	ND		0.00600	1	03/04/2017 09:52	WG956926
Pyrene	ND		0.00600	1	03/04/2017 09:52	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/04/2017 09:52	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/04/2017 09:52	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/04/2017 09:52	WG956926
(S) p-Terphenyl-d14	*72.8*		*23.0-120*		*03/04/2017 09:52*	WG956926
(S) Nitrobenzene-d5	*76.5*		*14.0-149*		*03/04/2017 09:52*	WG956926
(S) 2-Fluorobiphenyl	*69.5*		*34.0-125*		*03/04/2017 09:52*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.2		1	03/02/2017 13:53	WG957211

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0270		0.0200	1	03/03/2017 06:34	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	146		0.500	1	03/03/2017 15:34	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:34	WG956308
Chromium	11.5		1.00	1	03/03/2017 15:34	WG956308
Lead	16.0		0.500	1	03/03/2017 15:34	WG956308
Selenium	ND		2.00	1	03/03/2017 15:34	WG956308
Silver	ND		1.00	1	03/03/2017 15:34	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	5.53		0.500	5	03/02/2017 12:25	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/04/2017 03:16	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*98.7*		*77.0-120*		*03/04/2017 03:16*	WG957798

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 19:51	WG957646
Acrylonitrile	ND		0.0100	1	03/03/2017 19:51	WG957646
Benzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Bromobenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Bromodichloromethane	ND		0.00100	1	03/03/2017 19:51	WG957646
Bromoform	ND		0.00100	1	03/03/2017 19:51	WG957646
Bromomethane	ND		0.00500	1	03/03/2017 19:51	WG957646
n-Butylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
sec-Butylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
tert-Butylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Carbon tetrachloride	ND		0.00100	1	03/03/2017 19:51	WG957646
Chlorobenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Chlorodibromomethane	ND		0.00100	1	03/03/2017 19:51	WG957646
Chloroethane	ND		0.00500	1	03/03/2017 19:51	WG957646
Chloroform	ND		0.00500	1	03/03/2017 19:51	WG957646
Chloromethane	ND		0.00250	1	03/03/2017 19:51	WG957646
2-Chlorotoluene	ND		0.00100	1	03/03/2017 19:51	WG957646
4-Chlorotoluene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.00500	1	03/03/2017 19:51	WG957646
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 19:51	WG957646
Dibromomethane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,2-Dichlorobenzene	ND	J4	0.00100	1	03/03/2017 19:51	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 19:51	WG957646
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 19:51	WG957646
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 19:51	WG957646
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 19:51	WG957646
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 19:51	WG957646
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 19:51	WG957646
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 19:51	WG957646
Di-isopropyl ether	ND		0.00100	1	03/03/2017 19:51	WG957646
Ethylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 19:51	WG957646
Isopropylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 19:51	WG957646
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 19:51	WG957646
Methylene Chloride	ND		0.00500	1	03/03/2017 19:51	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 19:51	WG957646
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 19:51	WG957646
Naphthalene	ND		0.00500	1	03/03/2017 19:51	WG957646
n-Propylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Styrene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
Tetrachloroethene	ND		0.00100	1	03/03/2017 19:51	WG957646
Toluene	ND		0.00500	1	03/03/2017 19:51	WG957646
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 19:51	WG957646
Trichloroethene	ND		0.00100	1	03/03/2017 19:51	WG957646
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 19:51	WG957646
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 19:51	WG957646
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 19:51	WG957646
Vinyl chloride	ND		0.00100	1	03/03/2017 19:51	WG957646
Xylenes, Total	ND		0.00300	1	03/03/2017 19:51	WG957646
(S) Toluene-d8	*105*		*80.0-120*		*03/03/2017 19:51*	WG957646
(S) Dibromofluoromethane	*121*		*74.0-131*		*03/03/2017 19:51*	WG957646
(S) 4-Bromofluorobenzene	*92.6*		*64.0-132*		*03/03/2017 19:51*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 06:52	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 06:52	WG956513
(S) o-Terphenyl	*82.8*		*18.0-148*		*03/03/2017 06:52*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/04/2017 10:13	WG956926
Acenaphthene	ND		0.00600	1	03/04/2017 10:13	WG956926
Acenaphthylene	ND		0.00600	1	03/04/2017 10:13	WG956926
Benzo(a)anthracene	0.0103		0.00600	1	03/04/2017 10:13	WG956926
Benzo(a)pyrene	0.00926		0.00600	1	03/04/2017 10:13	WG956926
Benzo(b)fluoranthene	0.0141		0.00600	1	03/04/2017 10:13	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/04/2017 10:13	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/04/2017 10:13	WG956926
Chrysene	0.00959		0.00600	1	03/04/2017 10:13	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/04/2017 10:13	WG956926
Fluoranthene	0.0197		0.00600	1	03/04/2017 10:13	WG956926
Fluorene	ND		0.00600	1	03/04/2017 10:13	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/04/2017 10:13	WG956926
Naphthalene	ND		0.0200	1	03/04/2017 10:13	WG956926
Phenanthrene	0.00837		0.00600	1	03/04/2017 10:13	WG956926
Pyrene	0.0171		0.00600	1	03/04/2017 10:13	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/04/2017 10:13	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/04/2017 10:13	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/04/2017 10:13	WG956926
(S) p-Terphenyl-d14	*68.5*		*23.0-120*		*03/04/2017 10:13*	WG956926
(S) Nitrobenzene-d5	*79.7*		*14.0-149*		*03/04/2017 10:13*	WG956926
(S) 2-Fluorobiphenyl	*64.3*		*34.0-125*		*03/04/2017 10:13*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.9		1	03/02/2017 13:53	WG957211

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 06:37	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	771		0.500	1	03/03/2017 15:37	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:37	WG956308
Chromium	41.5		1.00	1	03/03/2017 15:37	WG956308
Lead	16.2		0.500	1	03/03/2017 15:37	WG956308
Selenium	ND		2.00	1	03/03/2017 15:37	WG956308
Silver	ND		1.00	1	03/03/2017 15:37	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	8.33		0.500	5	03/02/2017 12:28	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/04/2017 03:38	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*98.8*		*77.0-120*		*03/04/2017 03:38*	WG957798

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 20:04	WG957646
Acrylonitrile	ND		0.0100	1	03/03/2017 20:04	WG957646
Benzene	0.00311		0.00100	1	03/03/2017 20:04	WG957646
Bromobenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Bromodichloromethane	ND		0.00100	1	03/03/2017 20:04	WG957646
Bromoform	ND		0.00100	1	03/03/2017 20:04	WG957646
Bromomethane	ND		0.00500	1	03/03/2017 20:04	WG957646
n-Butylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
sec-Butylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
tert-Butylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Carbon tetrachloride	ND		0.00100	1	03/03/2017 20:04	WG957646
Chlorobenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Chlorodibromomethane	ND		0.00100	1	03/03/2017 20:04	WG957646
Chloroethane	ND		0.00500	1	03/03/2017 20:04	WG957646
Chloroform	ND		0.00500	1	03/03/2017 20:04	WG957646
Chloromethane	ND		0.00250	1	03/03/2017 20:04	WG957646
2-Chlorotoluene	ND		0.00100	1	03/03/2017 20:04	WG957646
4-Chlorotoluene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.00500	1	03/03/2017 20:04	WG957646
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 20:04	WG957646
Dibromomethane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,2-Dichlorobenzene	ND	J4	0.00100	1	03/03/2017 20:04	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 20:04	WG957646
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 20:04	WG957646
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 20:04	WG957646
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 20:04	WG957646
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 20:04	WG957646
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 20:04	WG957646
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 20:04	WG957646
Di-isopropyl ether	ND		0.00100	1	03/03/2017 20:04	WG957646
Ethylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 20:04	WG957646
Isopropylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 20:04	WG957646
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 20:04	WG957646
Methylene Chloride	ND		0.00500	1	03/03/2017 20:04	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 20:04	WG957646
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 20:04	WG957646
Naphthalene	ND		0.00500	1	03/03/2017 20:04	WG957646
n-Propylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Styrene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
Tetrachloroethene	ND		0.00100	1	03/03/2017 20:04	WG957646
Toluene	ND		0.00500	1	03/03/2017 20:04	WG957646
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 20:04	WG957646
Trichloroethene	ND		0.00100	1	03/03/2017 20:04	WG957646
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 20:04	WG957646
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 20:04	WG957646
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 20:04	WG957646
Vinyl chloride	ND		0.00100	1	03/03/2017 20:04	WG957646
Xylenes, Total	ND		0.00300	1	03/03/2017 20:04	WG957646
(S) Toluene-d8	*107*		*80.0-120*		*03/03/2017 20:04*	WG957646
(S) Dibromofluoromethane	*110*		*74.0-131*		*03/03/2017 20:04*	WG957646
(S) 4-Bromofluorobenzene	*108*		*64.0-132*		*03/03/2017 20:04*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 03:16	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 03:16	WG956513
(S) o-Terphenyl	*80.9*		*18.0-148*		*03/03/2017 03:16*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/04/2017 10:34	WG956926
Acenaphthene	ND		0.00600	1	03/04/2017 10:34	WG956926
Acenaphthylene	ND		0.00600	1	03/04/2017 10:34	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/04/2017 10:34	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/04/2017 10:34	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/04/2017 10:34	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/04/2017 10:34	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/04/2017 10:34	WG956926
Chrysene	ND		0.00600	1	03/04/2017 10:34	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/04/2017 10:34	WG956926
Fluoranthene	ND		0.00600	1	03/04/2017 10:34	WG956926
Fluorene	ND		0.00600	1	03/04/2017 10:34	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/04/2017 10:34	WG956926
Naphthalene	ND		0.0200	1	03/04/2017 10:34	WG956926
Phenanthrene	ND		0.00600	1	03/04/2017 10:34	WG956926
Pyrene	ND		0.00600	1	03/04/2017 10:34	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/04/2017 10:34	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/04/2017 10:34	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/04/2017 10:34	WG956926
(S) p-Terphenyl-d14	*72.4*		*23.0-120*		*03/04/2017 10:34*	WG956926
(S) Nitrobenzene-d5	*73.3*		*14.0-149*		*03/04/2017 10:34*	WG956926
(S) 2-Fluorobiphenyl	*72.4*		*34.0-125*		*03/04/2017 10:34*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.5		1	03/02/2017 13:53	WG957211

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 06:39	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	1130		2.50	5	03/03/2017 18:37	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:40	WG956308
Chromium	20.9		1.00	1	03/03/2017 15:40	WG956308
Lead	10.2		0.500	1	03/03/2017 15:40	WG956308
Selenium	ND		2.00	1	03/03/2017 15:40	WG956308
Silver	ND		1.00	1	03/03/2017 15:40	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	3.75		0.500	5	03/02/2017 12:32	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		0.100	1	03/04/2017 04:00	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*98.8*		*77.0-120*		*03/04/2017 04:00*	WG957798

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 20:17	WG957646
Acrylonitrile	ND		0.0100	1	03/03/2017 20:17	WG957646
Benzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Bromobenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Bromodichloromethane	ND		0.00100	1	03/03/2017 20:17	WG957646
Bromoform	ND		0.00100	1	03/03/2017 20:17	WG957646
Bromomethane	ND		0.00500	1	03/03/2017 20:17	WG957646
n-Butylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
sec-Butylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
tert-Butylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Carbon tetrachloride	ND		0.00100	1	03/03/2017 20:17	WG957646
Chlorobenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Chlorodibromomethane	ND		0.00100	1	03/03/2017 20:17	WG957646
Chloroethane	ND		0.00500	1	03/03/2017 20:17	WG957646
Chloroform	ND		0.00500	1	03/03/2017 20:17	WG957646
Chloromethane	ND		0.00250	1	03/03/2017 20:17	WG957646
2-Chlorotoluene	ND		0.00100	1	03/03/2017 20:17	WG957646
4-Chlorotoluene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.00500	1	03/03/2017 20:17	WG957646
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 20:17	WG957646
Dibromomethane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,2-Dichlorobenzene	ND	J4	0.00100	1	03/03/2017 20:17	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 20:17	WG957646
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 20:17	WG957646
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 20:17	WG957646
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 20:17	WG957646
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 20:17	WG957646
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 20:17	WG957646
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 20:17	WG957646
Di-isopropyl ether	ND		0.00100	1	03/03/2017 20:17	WG957646
Ethylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 20:17	WG957646
Isopropylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 20:17	WG957646
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 20:17	WG957646
Methylene Chloride	ND		0.00500	1	03/03/2017 20:17	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 20:17	WG957646
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 20:17	WG957646
Naphthalene	ND		0.00500	1	03/03/2017 20:17	WG957646
n-Propylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Styrene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
Tetrachloroethene	ND		0.00100	1	03/03/2017 20:17	WG957646
Toluene	ND		0.00500	1	03/03/2017 20:17	WG957646
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 20:17	WG957646
Trichloroethene	ND		0.00100	1	03/03/2017 20:17	WG957646
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 20:17	WG957646
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 20:17	WG957646
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 20:17	WG957646
Vinyl chloride	ND		0.00100	1	03/03/2017 20:17	WG957646
Xylenes, Total	ND		0.00300	1	03/03/2017 20:17	WG957646
(S) Toluene-d8	*104*		*80.0-120*		*03/03/2017 20:17*	WG957646
(S) Dibromofluoromethane	*114*		*74.0-131*		*03/03/2017 20:17*	WG957646
(S) 4-Bromofluorobenzene	*101*		*64.0-132*		*03/03/2017 20:17*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 04:03	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 04:03	WG956513
(S) o-Terphenyl	*88.9*		*18.0-148*		*03/03/2017 04:03*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/04/2017 10:55	WG956926
Acenaphthene	ND		0.00600	1	03/04/2017 10:55	WG956926
Acenaphthylene	ND		0.00600	1	03/04/2017 10:55	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/04/2017 10:55	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/04/2017 10:55	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/04/2017 10:55	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/04/2017 10:55	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/04/2017 10:55	WG956926
Chrysene	ND		0.00600	1	03/04/2017 10:55	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/04/2017 10:55	WG956926
Fluoranthene	ND		0.00600	1	03/04/2017 10:55	WG956926
Fluorene	ND		0.00600	1	03/04/2017 10:55	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/04/2017 10:55	WG956926
Naphthalene	ND		0.0200	1	03/04/2017 10:55	WG956926
Phenanthrene	ND		0.00600	1	03/04/2017 10:55	WG956926
Pyrene	ND		0.00600	1	03/04/2017 10:55	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/04/2017 10:55	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/04/2017 10:55	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/04/2017 10:55	WG956926
(S) p-Terphenyl-d14	*72.8*		*23.0-120*		*03/04/2017 10:55*	WG956926
(S) Nitrobenzene-d5	*77.8*		*14.0-149*		*03/04/2017 10:55*	WG956926
(S) 2-Fluorobiphenyl	*72.4*		*34.0-125*		*03/04/2017 10:55*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	%				
Total Solids	81.2		1	03/02/2017 13:53	WG957211

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Mercury	ND		0.0200	1	03/03/2017 06:42	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	335		0.500	1	03/03/2017 15:43	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:43	WG956308
Chromium	25.1		1.00	1	03/03/2017 15:43	WG956308
Lead	8.97		0.500	1	03/03/2017 15:43	WG956308
Selenium	ND		2.00	1	03/03/2017 15:43	WG956308
Silver	ND		1.00	1	03/03/2017 15:43	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	12.7		0.500	5	03/02/2017 12:35	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	125		5.00	50	03/06/2017 16:34	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*96.4*		*77.0-120*		*03/06/2017 16:34*	WG957798

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Acetone	ND		1.25	25	03/03/2017 20:30	WG957646
Acrylonitrile	ND		0.250	25	03/03/2017 20:30	WG957646
Benzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Bromobenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Bromodichloromethane	ND		0.0250	25	03/03/2017 20:30	WG957646
Bromoform	ND		0.0250	25	03/03/2017 20:30	WG957646
Bromomethane	ND		0.125	25	03/03/2017 20:30	WG957646
n-Butylbenzene	0.197		0.0250	25	03/03/2017 20:30	WG957646
sec-Butylbenzene	0.0912		0.0250	25	03/03/2017 20:30	WG957646
tert-Butylbenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Carbon tetrachloride	ND		0.0250	25	03/03/2017 20:30	WG957646
Chlorobenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Chlorodibromomethane	ND		0.0250	25	03/03/2017 20:30	WG957646
Chloroethane	ND	J3 J6	0.125	25	03/03/2017 20:30	WG957646
Chloroform	ND		0.125	25	03/03/2017 20:30	WG957646
Chloromethane	ND		0.0625	25	03/03/2017 20:30	WG957646
2-Chlorotoluene	ND		0.0250	25	03/03/2017 20:30	WG957646
4-Chlorotoluene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.125	25	03/03/2017 20:30	WG957646
1,2-Dibromoethane	ND		0.0250	25	03/03/2017 20:30	WG957646
Dibromomethane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,2-Dichlorobenzene	ND	J4	0.0250	25	03/03/2017 20:30	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,3-Dichlorobenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,4-Dichlorobenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Dichlorodifluoromethane	ND		0.125	25	03/03/2017 20:30	WG957646
1,1-Dichloroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,2-Dichloroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1-Dichloroethene	ND		0.0250	25	03/03/2017 20:30	WG957646
cis-1,2-Dichloroethene	ND		0.0250	25	03/03/2017 20:30	WG957646
trans-1,2-Dichloroethene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,2-Dichloropropane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1-Dichloropropene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,3-Dichloropropane	ND		0.0250	25	03/03/2017 20:30	WG957646
cis-1,3-Dichloropropene	ND		0.0250	25	03/03/2017 20:30	WG957646
trans-1,3-Dichloropropene	ND		0.0250	25	03/03/2017 20:30	WG957646
2,2-Dichloropropane	ND		0.0250	25	03/03/2017 20:30	WG957646
Di-isopropyl ether	ND		0.0250	25	03/03/2017 20:30	WG957646
Ethylbenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Hexachloro-1,3-butadiene	ND		0.0250	25	03/03/2017 20:30	WG957646
Isopropylbenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
p-Isopropyltoluene	ND		0.0250	25	03/03/2017 20:30	WG957646
2-Butanone (MEK)	ND		0.250	25	03/03/2017 20:30	WG957646
Methylene Chloride	ND		0.125	25	03/03/2017 20:30	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.250	25	03/03/2017 20:30	WG957646
Methyl tert-butyl ether	ND		0.0250	25	03/03/2017 20:30	WG957646
Naphthalene	ND		0.125	25	03/03/2017 20:30	WG957646
n-Propylbenzene	0.132		0.0250	25	03/03/2017 20:30	WG957646
Styrene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1,1,2-Tetrachloroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1,2,2-Tetrachloroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
Tetrachloroethene	ND		0.0250	25	03/03/2017 20:30	WG957646
Toluene	ND		0.125	25	03/03/2017 20:30	WG957646
1,2,3-Trichlorobenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,2,4-Trichlorobenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1,1-Trichloroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
1,1,2-Trichloroethane	ND		0.0250	25	03/03/2017 20:30	WG957646
Trichloroethene	ND		0.0250	25	03/03/2017 20:30	WG957646
Trichlorofluoromethane	ND		0.125	25	03/03/2017 20:30	WG957646
1,2,3-Trichloropropane	ND		0.0625	25	03/03/2017 20:30	WG957646
1,2,4-Trimethylbenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,2,3-Trimethylbenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
1,3,5-Trimethylbenzene	ND		0.0250	25	03/03/2017 20:30	WG957646
Vinyl chloride	ND		0.0250	25	03/03/2017 20:30	WG957646
Xylenes, Total	ND		0.0750	25	03/03/2017 20:30	WG957646
(S) Toluene-d8	*106*		*80.0-120*		*03/03/2017 20:30*	WG957646
(S) Dibromofluoromethane	*97.6*		*74.0-131*		*03/03/2017 20:30*	WG957646
(S) 4-Bromofluorobenzene	*113*		*64.0-132*		*03/03/2017 20:30*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	10.7		4.00	1	03/03/2017 04:34	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 04:34	WG956513
(S) o-Terphenyl	*85.0*		*18.0-148*		*03/03/2017 04:34*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/04/2017 11:16	WG956926
Acenaphthene	ND		0.00600	1	03/04/2017 11:16	WG956926
Acenaphthylene	ND		0.00600	1	03/04/2017 11:16	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/04/2017 11:16	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/04/2017 11:16	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/04/2017 11:16	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/04/2017 11:16	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/04/2017 11:16	WG956926
Chrysene	ND		0.00600	1	03/04/2017 11:16	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/04/2017 11:16	WG956926
Fluoranthene	ND		0.00600	1	03/04/2017 11:16	WG956926
Fluorene	ND		0.00600	1	03/04/2017 11:16	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/04/2017 11:16	WG956926
Naphthalene	ND		0.0200	1	03/04/2017 11:16	WG956926
Phenanthrene	ND		0.00600	1	03/04/2017 11:16	WG956926
Pyrene	ND		0.00600	1	03/04/2017 11:16	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/04/2017 11:16	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/04/2017 11:16	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/04/2017 11:16	WG956926
(S) p-Terphenyl-d14	*83.6*		*23.0-120*		*03/04/2017 11:16*	WG956926
(S) Nitrobenzene-d5	*97.8*		*14.0-149*		*03/04/2017 11:16*	WG956926
(S) 2-Fluorobiphenyl	*77.8*		*34.0-125*		*03/04/2017 11:16*	WG956926

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	03/02/2017 13:53	WG957211

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 06:44	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Barium	37.9		0.500	1	03/03/2017 15:46	WG956308
Cadmium	ND		0.500	1	03/03/2017 15:46	WG956308
Chromium	24.2		1.00	1	03/03/2017 15:46	WG956308
Lead	6.11		0.500	1	03/03/2017 15:46	WG956308
Selenium	ND		2.00	1	03/03/2017 15:46	WG956308
Silver	ND		1.00	1	03/03/2017 15:46	WG956308

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	16.7		0.500	5	03/02/2017 12:39	WG956497

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
TPH (GC/FID) Low Fraction	ND		2.50	25	03/06/2017 16:56	WG957798
(S) a,a,a-Trifluorotoluene(FID)	*96.3*		*77.0-120*		*03/06/2017 16:56*	WG957798

Sample Narrative:

8015D/GRO L892548-09 WG957798: No stir bars remain for analysis.

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0500	1	03/03/2017 21:23	WG957646
Acrylonitrile	ND		0.0100	1	03/03/2017 21:23	WG957646
Benzene	0.00788		0.00100	1	03/03/2017 21:23	WG957646
Bromobenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Bromodichloromethane	ND		0.00100	1	03/03/2017 21:23	WG957646
Bromoform	ND		0.00100	1	03/03/2017 21:23	WG957646
Bromomethane	ND		0.00500	1	03/03/2017 21:23	WG957646
n-Butylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
sec-Butylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
tert-Butylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Carbon tetrachloride	ND		0.00100	1	03/03/2017 21:23	WG957646
Chlorobenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Chlorodibromomethane	ND		0.00100	1	03/03/2017 21:23	WG957646
Chloroethane	ND		0.00500	1	03/03/2017 21:23	WG957646
Chloroform	ND		0.00500	1	03/03/2017 21:23	WG957646
Chloromethane	ND		0.00250	1	03/03/2017 21:23	WG957646
2-Chlorotoluene	ND		0.00100	1	03/03/2017 21:23	WG957646
4-Chlorotoluene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,2-Dibromo-3-Chloropropane	ND	J4	0.00500	1	03/03/2017 21:23	WG957646

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
1,2-Dibromoethane	ND		0.00100	1	03/03/2017 21:23	WG957646
Dibromomethane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,2-Dichlorobenzene	ND	J4	0.00100	1	03/03/2017 21:23	WG957646
1,3-Dichlorobenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,4-Dichlorobenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Dichlorodifluoromethane	ND		0.00500	1	03/03/2017 21:23	WG957646
1,1-Dichloroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,2-Dichloroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1-Dichloroethene	ND		0.00100	1	03/03/2017 21:23	WG957646
cis-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 21:23	WG957646
trans-1,2-Dichloroethene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,2-Dichloropropane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1-Dichloropropene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,3-Dichloropropane	ND		0.00100	1	03/03/2017 21:23	WG957646
cis-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 21:23	WG957646
trans-1,3-Dichloropropene	ND		0.00100	1	03/03/2017 21:23	WG957646
2,2-Dichloropropane	ND		0.00100	1	03/03/2017 21:23	WG957646
Di-isopropyl ether	ND		0.00100	1	03/03/2017 21:23	WG957646
Ethylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Hexachloro-1,3-butadiene	ND		0.00100	1	03/03/2017 21:23	WG957646
Isopropylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
p-Isopropyltoluene	ND		0.00100	1	03/03/2017 21:23	WG957646
2-Butanone (MEK)	ND		0.0100	1	03/03/2017 21:23	WG957646
Methylene Chloride	ND		0.00500	1	03/03/2017 21:23	WG957646
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	03/03/2017 21:23	WG957646
Methyl tert-butyl ether	ND		0.00100	1	03/03/2017 21:23	WG957646
Naphthalene	ND		0.00500	1	03/03/2017 21:23	WG957646
n-Propylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Styrene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1,1,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1,2,2-Tetrachloroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1,2-Trichlorotrifluoroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
Tetrachloroethene	ND		0.00100	1	03/03/2017 21:23	WG957646
Toluene	ND		0.00500	1	03/03/2017 21:23	WG957646
1,2,3-Trichlorobenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,2,4-Trichlorobenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1,1-Trichloroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
1,1,2-Trichloroethane	ND		0.00100	1	03/03/2017 21:23	WG957646
Trichloroethene	ND		0.00100	1	03/03/2017 21:23	WG957646
Trichlorofluoromethane	ND		0.00500	1	03/03/2017 21:23	WG957646
1,2,3-Trichloropropane	ND		0.00250	1	03/03/2017 21:23	WG957646
1,2,4-Trimethylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,2,3-Trimethylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
1,3,5-Trimethylbenzene	ND		0.00100	1	03/03/2017 21:23	WG957646
Vinyl chloride	ND		0.00100	1	03/03/2017 21:23	WG957646
Xylenes, Total	ND		0.00300	1	03/03/2017 21:23	WG957646
(S) Toluene-d8	*105*		*80.0-120*		*03/03/2017 21:23*	WG957646
(S) Dibromofluoromethane	*113*		*74.0-131*		*03/03/2017 21:23*	WG957646
(S) 4-Bromofluorobenzene	*108*		*64.0-132*		*03/03/2017 21:23*	WG957646

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	03/03/2017 04:49	WG956513
C28-C40 Oil Range	ND		4.00	1	03/03/2017 04:49	WG956513
(S) o-Terphenyl	*71.5*		*18.0-148*		*03/03/2017 04:49*	WG956513

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	03/04/2017 11:38	WG956926
Acenaphthene	ND		0.00600	1	03/04/2017 11:38	WG956926
Acenaphthylene	ND		0.00600	1	03/04/2017 11:38	WG956926
Benzo(a)anthracene	ND		0.00600	1	03/04/2017 11:38	WG956926
Benzo(a)pyrene	ND		0.00600	1	03/04/2017 11:38	WG956926
Benzo(b)fluoranthene	ND		0.00600	1	03/04/2017 11:38	WG956926
Benzo(g,h,i)perylene	ND		0.00600	1	03/04/2017 11:38	WG956926
Benzo(k)fluoranthene	ND		0.00600	1	03/04/2017 11:38	WG956926
Chrysene	ND		0.00600	1	03/04/2017 11:38	WG956926
Dibenz(a,h)anthracene	ND		0.00600	1	03/04/2017 11:38	WG956926
Fluoranthene	ND		0.00600	1	03/04/2017 11:38	WG956926
Fluorene	ND		0.00600	1	03/04/2017 11:38	WG956926
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	03/04/2017 11:38	WG956926
Naphthalene	ND		0.0200	1	03/04/2017 11:38	WG956926
Phenanthrene	ND		0.00600	1	03/04/2017 11:38	WG956926
Pyrene	ND		0.00600	1	03/04/2017 11:38	WG956926
1-Methylnaphthalene	ND		0.0200	1	03/04/2017 11:38	WG956926
2-Methylnaphthalene	ND		0.0200	1	03/04/2017 11:38	WG956926
2-Chloronaphthalene	ND		0.0200	1	03/04/2017 11:38	WG956926
(S) p-Terphenyl-d14	*74.9*		*23.0-120*		*03/04/2017 11:38*	WG956926
(S) Nitrobenzene-d5	*73.9*		*14.0-149*		*03/04/2017 11:38*	WG956926
(S) 2-Fluorobiphenyl	*71.5*		*34.0-125*		*03/04/2017 11:38*	WG956926

Method Blank (MB)

(MB) R3200735-1 03/02/17 13:38

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000900			

L892548-03 Original Sample (OS) • Duplicate (DUP)

(OS) L892548-03 03/02/17 13:38 • (DUP) R3200735-3 03/02/17 13:38

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.7	84.9	1	0.220		5

Laboratory Control Sample (LCS)

(LCS) R3200735-2 03/02/17 13:38

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3200736-1 03/02/17 13:53

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000100			

L892548-07 Original Sample (OS) • Duplicate (DUP)

(OS) L892548-07 03/02/17 13:53 • (DUP) R3200736-3 03/02/17 13:53

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.5	82.2	1	0.441		5

Laboratory Control Sample (LCS)

(LCS) R3200736-2 03/02/17 13:53

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3200720-1 03/03/17 05:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200720-2 03/03/17 05:59 • (LCSD) R3200720-3 03/03/17 06:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.281	0.275	94	92	80-120			2	20

L892503-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892503-02 03/03/17 06:04 • (MS) R3200720-4 03/03/17 06:06 • (MSD) R3200720-5 03/03/17 06:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.0328	0.298	0.268	88	78	1	75-125			11	20

Method Blank (MB)

(MB) R3200935-1 03/03/17 14:19

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200935-2 03/03/17 14:22 • (LCSD) R3200935-3 03/03/17 14:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Barium	100	106	105	106	105	80-120			1	20
Cadmium	100	103	102	103	102	80-120			1	20
Chromium	100	102	102	102	102	80-120			0	20
Lead	100	103	102	103	102	80-120			1	20
Selenium	100	103	102	103	102	80-120			1	20
Silver	20.0	18.6	18.6	93	93	80-120			0	20

L892484-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892484-04 03/03/17 14:27 • (MS) R3200935-6 03/03/17 14:36 • (MSD) R3200935-7 03/03/17 14:39

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Barium	118	112	266	235	131	105	1	75-125	J5		12	20
Cadmium	118	ND	119	121	101	102	1	75-125			2	20
Chromium	118	20.9	136	138	97	99	1	75-125			2	20
Lead	118	23.3	154	151	110	108	1	75-125			2	20
Selenium	118	ND	118	120	100	102	1	75-125			1	20
Silver	23.6	ND	21.8	22.1	93	94	1	75-125			1	20

Method Blank (MB)

(MB) R3200531-1 03/02/17 11:08

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.0125	0.500

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200531-2 03/02/17 11:12 • (LCSD) R3200531-3 03/02/17 11:15

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	120	117	120	117	80-120			2	20

L892546-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892546-01 03/02/17 11:19 • (MS) R3200531-6 03/02/17 11:29 • (MSD) R3200531-7 03/02/17 11:32

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	20.0	3.54	109	120	105	117	5	75-125			10	20

Method Blank (MB)

(MB) R3201224-3 03/03/17 22:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*101*			*77.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201224-1 03/03/17 21:29 • (LCSD) R3201224-2 03/03/17 21:51

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	5.61	5.73	102	104	70.0-136			2.15	20
(S) a,a,a-Trifluorotoluene(FID)				*101*	*102*	*77.0-120*				

L892773-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892773-01 03/04/17 02:09 • (MS) R3201224-4 03/03/17 23:34 • (MSD) R3201224-5 03/03/17 23:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TPH (GC/FID) Low Fraction	5.50	1650	2130	2530	18.7	34.0	475	10.0-147			17.1	30
(S) a,a,a-Trifluorotoluene(FID)					*101*	*101*		*77.0-120*				

Method Blank (MB)

(MB) R3201654-3 03/07/17 11:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
(S) a,a,a-Trifluorotoluene(FID)	*94.6*			*77.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201654-1 03/07/17 10:46 • (LCSD) R3201654-2 03/07/17 11:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5500	4110	4250	74.7	77.2	71.0-136			3.30	20
(S) a,a,a-Trifluorotoluene(FID)				*99.5*	*100*	*77.0-122*				

Method Blank (MB)

(MB) R3200978-3 03/03/17 17:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

Method Blank (MB)

(MB) R3200978-3 03/03/17 17:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	*105*			*80.0-120*
(S) Dibromofluoromethane	*102*			*74.0-131*
(S) 4-Bromofluorobenzene	*108*			*64.0-132*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200978-1 03/03/17 16:57 • (LCSD) R3200978-2 03/03/17 17:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0903	0.0997	72.3	79.8	11.0-160			9.91	23
Acrylonitrile	0.125	0.0915	0.0997	73.2	79.8	61.0-143			8.63	20
Benzene	0.0250	0.0209	0.0229	83.8	91.7	71.0-124			8.99	20
Bromobenzene	0.0250	0.0203	0.0224	81.0	89.5	78.0-120			9.91	20
Bromodichloromethane	0.0250	0.0218	0.0237	87.1	94.9	75.0-120			8.50	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200978-1 03/03/17 16:57 • (LCSD) R3200978-2 03/03/17 17:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	0.0195	0.0214	78.0	85.7	65.0-133			9.42	20
Bromomethane	0.0250	0.0217	0.0229	86.6	91.6	26.0-160			5.62	20
n-Butylbenzene	0.0250	0.0198	0.0215	79.3	86.0	73.0-126			8.12	20
sec-Butylbenzene	0.0250	0.0202	0.0224	80.7	89.5	75.0-121			10.3	20
tert-Butylbenzene	0.0250	0.0207	0.0230	82.8	92.0	74.0-122			10.5	20
Carbon tetrachloride	0.0250	0.0205	0.0207	82.0	82.8	66.0-123			1.05	20
Chlorobenzene	0.0250	0.0212	0.0231	84.9	92.4	79.0-121			8.47	20
Chlorodibromomethane	0.0250	0.0211	0.0237	84.4	94.7	74.0-128			11.5	20
Chloroethane	0.0250	0.0185	0.0201	73.8	80.4	51.0-147			8.45	20
Chloroform	0.0250	0.0217	0.0236	86.7	94.5	73.0-123			8.56	20
Chloromethane	0.0250	0.0167	0.0180	66.8	72.0	51.0-138			7.49	20
2-Chlorotoluene	0.0250	0.0206	0.0229	82.2	91.6	72.0-124			10.8	20
4-Chlorotoluene	0.0250	0.0207	0.0229	83.0	91.8	78.0-120			10.1	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0162	0.0184	64.9	73.7	65.0-126	J4		12.7	20
1,2-Dibromoethane	0.0250	0.0198	0.0221	79.4	88.4	78.0-122			10.7	20
Dibromomethane	0.0250	0.0207	0.0232	82.7	92.7	79.0-120			11.3	20
1,2-Dichlorobenzene	0.0250	0.0194	0.0213	77.8	85.3	80.0-120	J4		9.18	20
1,3-Dichlorobenzene	0.0250	0.0197	0.0217	78.6	86.9	72.0-123			10.0	20
1,4-Dichlorobenzene	0.0250	0.0202	0.0217	80.8	86.6	77.0-120			6.92	20
Dichlorodifluoromethane	0.0250	0.0159	0.0172	63.5	69.0	49.0-155			8.33	20
1,1-Dichloroethane	0.0250	0.0211	0.0230	84.5	92.1	70.0-128			8.63	20
1,2-Dichloroethane	0.0250	0.0206	0.0231	82.6	92.6	69.0-128			11.4	20
1,1-Dichloroethene	0.0250	0.0194	0.0212	77.7	85.0	63.0-131			8.93	20
cis-1,2-Dichloroethene	0.0250	0.0215	0.0233	86.0	93.3	74.0-123			8.18	20
trans-1,2-Dichloroethene	0.0250	0.0199	0.0220	79.8	88.0	72.0-122			9.83	20
1,2-Dichloropropane	0.0250	0.0225	0.0243	90.2	97.0	75.0-126			7.33	20
1,1-Dichloropropene	0.0250	0.0204	0.0225	81.7	90.1	72.0-130			9.74	20
1,3-Dichloropropane	0.0250	0.0211	0.0232	84.5	92.9	80.0-121			9.44	20
cis-1,3-Dichloropropene	0.0250	0.0238	0.0261	95.0	104	80.0-125			9.24	20
trans-1,3-Dichloropropene	0.0250	0.0221	0.0244	88.3	97.7	75.0-129			10.2	20
2,2-Dichloropropane	0.0250	0.0201	0.0220	80.6	87.8	60.0-129			8.60	20
Di-isopropyl ether	0.0250	0.0217	0.0235	86.9	94.1	62.0-133			7.95	20
Ethylbenzene	0.0250	0.0202	0.0226	80.9	90.5	77.0-120			11.2	20
Hexachloro-1,3-butadiene	0.0250	0.0187	0.0206	74.7	82.4	68.0-128			9.79	20
Isopropylbenzene	0.0250	0.0202	0.0222	80.7	88.9	75.0-120			9.70	20
p-Isopropyltoluene	0.0250	0.0212	0.0237	84.8	94.6	74.0-125			10.9	20
2-Butanone (MEK)	0.125	0.0836	0.0922	66.9	73.8	37.0-159			9.84	20
Methylene Chloride	0.0250	0.0211	0.0227	84.4	90.9	67.0-123			7.37	20
4-Methyl-2-pentanone (MIBK)	0.125	0.102	0.111	81.3	89.1	60.0-144			9.22	20
Methyl tert-butyl ether	0.0250	0.0206	0.0221	82.4	88.6	66.0-125			7.22	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200978-1 03/03/17 16:57 • (LCSD) R3200978-2 03/03/17 17:10

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0250	0.0174	0.0192	69.6	76.9	64.0-125			9.99	20
n-Propylbenzene	0.0250	0.0205	0.0225	82.1	90.1	78.0-120			9.31	20
Styrene	0.0250	0.0222	0.0246	88.7	98.4	78.0-124			10.3	20
1,1,1,2-Tetrachloroethane	0.0250	0.0217	0.0239	86.9	95.4	74.0-124			9.35	20
1,1,2,2-Tetrachloroethane	0.0250	0.0188	0.0205	75.1	81.9	73.0-120			8.72	20
Tetrachloroethene	0.0250	0.0197	0.0222	78.7	88.8	70.0-127			12.0	20
Toluene	0.0250	0.0200	0.0217	80.0	86.7	77.0-120			8.02	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0197	0.0208	78.8	83.3	64.0-135			5.62	20
1,2,3-Trichlorobenzene	0.0250	0.0182	0.0206	72.8	82.4	68.0-126			12.5	20
1,2,4-Trichlorobenzene	0.0250	0.0196	0.0213	78.5	85.1	70.0-127			8.14	20
1,1,1-Trichloroethane	0.0250	0.0208	0.0228	83.1	91.4	69.0-125			9.49	20
1,1,2-Trichloroethane	0.0250	0.0207	0.0231	83.0	92.4	78.0-120			10.7	20
Trichloroethene	0.0250	0.0199	0.0221	79.5	88.3	79.0-120			10.4	20
Trichlorofluoromethane	0.0250	0.0181	0.0195	72.6	77.9	59.0-136			7.05	20
1,2,3-Trichloropropane	0.0250	0.0194	0.0210	77.5	84.1	73.0-124			8.18	20
1,2,3-Trimethylbenzene	0.0250	0.0205	0.0224	81.9	89.8	76.0-120			9.20	20
1,2,4-Trimethylbenzene	0.0250	0.0215	0.0238	85.9	95.4	75.0-120			10.5	20
1,3,5-Trimethylbenzene	0.0250	0.0209	0.0230	83.7	92.1	75.0-120			9.51	20
Vinyl chloride	0.0250	0.0178	0.0194	71.1	77.7	63.0-134			8.89	20
Xylenes, Total	0.0750	0.0619	0.0679	82.5	90.5	77.0-120			9.24	20
(S) Toluene-d8				*106*	*105*	*80.0-120*				
(S) Dibromofluoromethane				*102*	*103*	*74.0-131*				
(S) 4-Bromofluorobenzene				*103*	*103*	*64.0-132*				

L892548-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892548-08 03/03/17 20:30 • (MS) R3200978-4 03/03/17 20:43 • (MSD) R3200978-5 03/03/17 20:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	ND	2.31	2.22	64.5	61.6	25	10.0-160			3.96	36
Acrylonitrile	0.125	ND	2.48	2.43	79.5	77.9	25	14.0-160			2.01	33
Benzene	0.0250	ND	0.551	0.518	88.1	82.9	25	13.0-146			6.11	27
Bromobenzene	0.0250	ND	0.553	0.493	88.4	78.9	25	10.0-149			11.4	33
Bromodichloromethane	0.0250	ND	0.581	0.543	93.0	86.9	25	15.0-142			6.77	28
Bromoform	0.0250	ND	0.493	0.459	78.8	73.4	25	10.0-147			7.15	31
Bromomethane	0.0250	ND	0.109	0.0945	17.5	15.1	25	10.0-160			14.3	32
n-Butylbenzene	0.0250	0.197	0.732	0.667	85.5	75.1	25	10.0-154			9.32	37
sec-Butylbenzene	0.0250	0.0912	0.631	0.537	86.3	71.3	25	10.0-151			16.0	36
tert-Butylbenzene	0.0250	ND	0.599	0.509	95.8	81.5	25	10.0-152			16.1	35

L892548-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892548-08 03/03/17 20:30 • (MS) R3200978-4 03/03/17 20:43 • (MSD) R3200978-5 03/03/17 20:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.482	0.414	77.1	66.2	25	13.0-140			15.1	30
Chlorobenzene	0.0250	ND	0.576	0.524	92.2	83.9	25	10.0-149			9.38	31
Chlorodibromomethane	0.0250	ND	0.571	0.534	91.4	85.4	25	12.0-147			6.76	29
Chloroethane	0.0250	ND	0.0344	ND	5.51	0.000	25	10.0-159	J6	J3 J6	200	33
Chloroform	0.0250	ND	0.586	0.549	93.8	87.9	25	18.0-148			6.48	28
Chloromethane	0.0250	ND	0.351	0.315	56.1	50.4	25	10.0-146			10.7	29
2-Chlorotoluene	0.0250	ND	0.576	0.510	92.2	81.7	25	10.0-151			12.1	35
4-Chlorotoluene	0.0250	ND	0.586	0.520	93.7	83.2	25	10.0-150			11.9	35
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.471	0.436	75.4	69.7	25	10.0-149			7.83	34
1,2-Dibromoethane	0.0250	ND	0.536	0.521	85.7	83.4	25	14.0-145			2.73	28
Dibromomethane	0.0250	ND	0.552	0.521	88.3	83.4	25	18.0-144			5.73	27
1,2-Dichlorobenzene	0.0250	ND	0.536	0.499	85.7	79.9	25	10.0-153			7.07	34
1,3-Dichlorobenzene	0.0250	ND	0.533	0.467	85.3	74.8	25	10.0-150			13.1	35
1,4-Dichlorobenzene	0.0250	ND	0.538	0.500	86.1	80.0	25	10.0-148			7.29	34
Dichlorodifluoromethane	0.0250	ND	0.328	0.281	52.5	45.0	25	10.0-160			15.4	30
1,1-Dichloroethane	0.0250	ND	0.573	0.520	91.6	83.3	25	19.0-148			9.57	28
1,2-Dichloroethane	0.0250	ND	0.564	0.555	90.3	88.8	25	17.0-147			1.69	27
1,1-Dichloroethene	0.0250	ND	0.488	0.426	78.1	68.1	25	10.0-150			13.6	31
cis-1,2-Dichloroethene	0.0250	ND	0.580	0.539	92.9	86.2	25	16.0-145			7.47	28
trans-1,2-Dichloroethene	0.0250	ND	0.511	0.462	81.7	73.9	25	11.0-142			10.1	29
1,2-Dichloropropane	0.0250	ND	0.603	0.559	96.4	89.4	25	17.0-148			7.53	28
1,1-Dichloropropene	0.0250	ND	0.520	0.480	83.2	76.8	25	10.0-150			7.97	30
1,3-Dichloropropane	0.0250	ND	0.576	0.560	92.1	89.6	25	16.0-148			2.79	27
cis-1,3-Dichloropropene	0.0250	ND	0.621	0.609	99.3	97.4	25	13.0-150			1.87	28
trans-1,3-Dichloropropene	0.0250	ND	0.571	0.560	91.3	89.6	25	10.0-152			1.95	29
2,2-Dichloropropane	0.0250	ND	0.501	0.434	80.2	69.5	25	16.0-143			14.3	30
Di-isopropyl ether	0.0250	ND	0.591	0.566	94.6	90.6	25	16.0-149			4.39	28
Ethylbenzene	0.0250	ND	0.573	0.503	91.7	80.5	25	10.0-147			13.0	31
Hexachloro-1,3-butadiene	0.0250	ND	0.506	0.448	80.9	71.7	25	10.0-154			12.0	40
Isopropylbenzene	0.0250	ND	0.587	0.507	90.6	77.8	25	10.0-147			14.6	33
p-Isopropyltoluene	0.0250	ND	0.618	0.532	95.1	81.2	25	10.0-156			15.0	37
2-Butanone (MEK)	0.125	ND	2.41	2.43	77.2	77.7	25	10.0-160			0.670	33
Methylene Chloride	0.0250	ND	0.556	0.516	88.9	82.5	25	16.0-139			7.51	29
4-Methyl-2-pentanone (MIBK)	0.125	ND	2.70	2.65	86.3	84.8	25	12.0-160			1.77	32
Methyl tert-butyl ether	0.0250	ND	0.558	0.530	89.2	84.9	25	21.0-145			5.03	29
Naphthalene	0.0250	ND	0.468	0.452	74.9	72.3	25	10.0-153			3.53	36
n-Propylbenzene	0.0250	0.132	0.668	0.582	85.8	72.0	25	10.0-151			13.8	34
Styrene	0.0250	ND	0.626	0.568	100	90.9	25	10.0-155			9.74	34
1,1,1,2-Tetrachloroethane	0.0250	ND	0.600	0.547	96.0	87.5	25	10.0-147			9.32	30
1,1,2,2-Tetrachloroethane	0.0250	ND	0.685	0.642	110	103	25	10.0-155			6.38	31

L892548-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892548-08 03/03/17 20:30 • (MS) R3200978-4 03/03/17 20:43 • (MSD) R3200978-5 03/03/17 20:56

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.534	0.459	85.5	73.5	25	10.0-144			15.0	32
Toluene	0.0250	ND	0.524	0.482	83.8	77.2	25	10.0-144			8.29	28
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.502	0.431	80.4	68.9	25	10.0-153			15.4	33
1,2,3-Trichlorobenzene	0.0250	ND	0.511	0.481	81.8	77.0	25	10.0-153			6.08	40
1,2,4-Trichlorobenzene	0.0250	ND	0.535	0.497	85.5	79.6	25	10.0-156			7.22	40
1,1,1-Trichloroethane	0.0250	ND	0.549	0.485	87.8	77.7	25	18.0-145			12.3	29
1,1,2-Trichloroethane	0.0250	ND	0.614	0.572	98.3	91.5	25	12.0-151			7.15	28
Trichloroethene	0.0250	ND	0.524	0.475	83.8	75.9	25	11.0-148			9.83	29
Trichlorofluoromethane	0.0250	ND	0.167	0.136	26.7	21.7	25	10.0-157			20.7	34
1,2,3-Trichloropropane	0.0250	ND	0.562	0.492	90.0	78.7	25	10.0-154			13.4	32
1,2,3-Trimethylbenzene	0.0250	ND	0.574	0.530	91.8	84.7	25	10.0-150			8.03	33
1,2,4-Trimethylbenzene	0.0250	ND	0.609	0.531	97.5	84.9	25	10.0-151			13.8	34
1,3,5-Trimethylbenzene	0.0250	ND	0.589	0.511	94.2	81.7	25	10.0-150			14.2	33
Vinyl chloride	0.0250	ND	0.353	0.313	56.5	50.1	25	10.0-150			11.9	29
Xylenes, Total	0.0750	ND	1.73	1.52	92.4	81.0	25	10.0-150			13.1	31
(S) Toluene-d8					*104*	*104*		*80.0-120*				
(S) Dibromofluoromethane					*103*	*102*		*74.0-131*				
(S) 4-Bromofluorobenzene					*111*	*107*		*64.0-132*				

Method Blank (MB)

(MB) R3201660-3 03/07/17 22:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,4-Dichlorobenzene	U		0.274	1.00
trans-1,4-Dichloro-2-butene	U		0.866	2.50
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Iodomethane	U		1.71	10.0
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.319	1.00

Method Blank (MB)

(MB) R3201660-3 03/07/17 22:08

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
Vinyl acetate	U		1.63	10.0
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*109*			*80.0-120*
(S) Dibromofluoromethane	*106*			*76.0-123*
(S) 4-Bromofluorobenzene	*94.4*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201660-1 03/07/17 21:04 • (LCSD) R3201660-2 03/07/17 21:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	116	128	92.6	103	10.0-160			10.2	23
Acrylonitrile	125	125	141	99.7	113	60.0-142			12.5	20
Benzene	25.0	25.8	28.4	103	114	69.0-123			9.89	20
Bromodichloromethane	25.0	25.2	28.1	101	112	76.0-120			10.9	20
Bromochloromethane	25.0	27.5	28.8	110	115	76.0-122			4.61	20
Bromoform	25.0	24.3	28.7	97.2	115	67.0-132			16.6	20
Bromomethane	25.0	29.3	34.1	117	136	18.0-160			15.1	20
Carbon disulfide	25.0	19.1	21.8	76.4	87.3	55.0-127			13.3	20
Carbon tetrachloride	25.0	26.2	29.4	105	118	63.0-122			11.6	20
Chlorobenzene	25.0	25.9	29.2	104	117	79.0-121			12.0	20
Chlorodibromomethane	25.0	25.3	28.5	101	114	75.0-125			11.8	20
Chloroethane	25.0	29.0	29.5	116	118	47.0-152			1.89	20
Chloroform	25.0	26.6	28.8	106	115	72.0-121			8.21	20
Chloromethane	25.0	20.9	23.4	83.4	93.7	48.0-139			11.7	20
1,2-Dibromo-3-Chloropropane	25.0	20.8	24.6	83.1	98.4	64.0-127			16.8	20
1,2-Dibromoethane	25.0	24.8	28.3	99.0	113	77.0-123			13.5	20
Dibromomethane	25.0	25.1	27.7	100	111	78.0-120			10.1	20
1,2-Dichlorobenzene	25.0	25.6	28.3	103	113	80.0-120			10.0	20
1,4-Dichlorobenzene	25.0	23.8	25.5	95.1	102	77.0-120			6.98	20
trans-1,4-Dichloro-2-butene	25.0	26.6	29.8	106	119	55.0-134			11.5	20
1,1-Dichloroethane	25.0	25.6	28.1	102	113	70.0-126			9.39	20
1,2-Dichloroethane	25.0	26.3	29.8	105	119	67.0-126			12.5	20
1,1-Dichloroethene	25.0	15.9	26.4	63.7	105	64.0-129	J4	J3	49.5	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201660-1 03/07/17 21:04 • (LCSD) R3201660-2 03/07/17 21:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	26.7	28.7	107	115	73.0-120			7.18	20
trans-1,2-Dichloroethene	25.0	25.7	28.5	103	114	71.0-121			10.3	20
1,2-Dichloropropane	25.0	25.9	28.0	104	112	75.0-125			7.79	20
cis-1,3-Dichloropropene	25.0	28.7	31.2	115	125	79.0-123		J4	8.24	20
trans-1,3-Dichloropropene	25.0	29.2	32.2	117	129	74.0-127		J4	9.69	20
Ethylbenzene	25.0	24.2	27.6	96.7	110	77.0-120			13.2	20
2-Hexanone	125	131	149	105	119	58.0-147			13.2	20
Iodomethane	125	128	143	103	114	57.0-140			10.5	20
2-Butanone (MEK)	125	121	138	97.1	110	37.0-158			12.8	20
Methylene Chloride	25.0	23.6	26.0	94.3	104	66.0-121			9.61	20
4-Methyl-2-pentanone (MIBK)	125	145	162	116	129	59.0-143			10.7	20
Styrene	25.0	27.2	30.2	109	121	78.0-124			10.4	20
1,1,1,2-Tetrachloroethane	25.0	25.5	28.8	102	115	75.0-122			12.3	20
1,1,2,2-Tetrachloroethane	25.0	24.3	27.7	97.3	111	71.0-122			12.9	20
Tetrachloroethene	25.0	23.7	26.0	94.7	104	70.0-127			9.50	20
Toluene	25.0	25.5	28.0	102	112	77.0-120			9.62	20
1,1,1-Trichloroethane	25.0	25.8	29.0	103	116	68.0-122			11.9	20
1,1,2-Trichloroethane	25.0	24.6	28.5	98.5	114	78.0-120			14.7	20
Trichloroethene	25.0	24.4	27.0	97.5	108	78.0-120			10.4	20
Trichlorofluoromethane	25.0	27.7	29.6	111	118	56.0-137			6.61	20
1,2,3-Trichloropropane	25.0	24.5	28.0	97.9	112	72.0-124			13.3	20
Vinyl acetate	125	144	156	115	125	46.0-160			7.88	20
Vinyl chloride	25.0	26.3	29.3	105	117	64.0-133			10.8	20
Xylenes, Total	75.0	76.0	85.5	101	114	77.0-120			11.8	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) Dibromofluoromethane				*105*	*106*	*76.0-123*				
(S) 4-Bromofluorobenzene				*104*	*105*	*80.0-120*				

L894043-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L894043-05 03/08/17 02:23 • (MS) R3201660-4 03/07/17 23:12 • (MSD) R3201660-5 03/07/17 23:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	126	1030	1060	72.5	75.0	10	10.0-139			2.95	25
Acrylonitrile	125	U	1480	1550	118	124	10	46.0-159			4.87	23
Benzene	25.0	U	277	278	111	111	10	34.0-147			0.280	20
Bromodichloromethane	25.0	U	287	286	115	114	10	52.0-135			0.330	20
Bromochloromethane	25.0	U	267	271	107	108	10	53.0-138			1.54	20
Bromoform	25.0	U	298	300	119	120	10	50.0-146			0.860	20

L894043-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L894043-05 03/08/17 02:23 • (MS) R3201660-4 03/07/17 23:12 • (MSD) R3201660-5 03/07/17 23:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromomethane	25.0	U	330	320	132	128	10	10.0-160			3.11	23
Carbon disulfide	25.0	U	226	227	90.3	90.8	10	10.0-147			0.530	20
Carbon tetrachloride	25.0	U	293	299	117	120	10	41.0-138			2.12	20
Chlorobenzene	25.0	U	302	300	121	120	10	52.0-141			0.800	20
Chlorodibromomethane	25.0	U	295	294	118	117	10	54.0-142			0.300	20
Chloroethane	25.0	U	268	283	107	113	10	23.0-160			5.18	20
Chloroform	25.0	U	298	304	119	122	10	50.0-139			1.91	20
Chloromethane	25.0	U	171	187	68.3	74.8	10	14.0-151			9.11	20
1,2-Dibromo-3-Chloropropane	25.0	U	264	279	106	111	10	49.0-144			5.37	24
1,2-Dibromoethane	25.0	U	281	284	112	114	10	54.0-140			1.06	20
Dibromomethane	25.0	U	279	281	111	113	10	53.0-138			1.04	20
1,2-Dichlorobenzene	25.0	U	306	306	122	122	10	56.0-139			0.0300	20
1,4-Dichlorobenzene	25.0	U	269	275	108	110	10	53.0-136			2.08	20
trans-1,4-Dichloro-2-butene	25.0	53.8	333	325	112	109	10	40.0-150			2.52	21
1,1-Dichloroethane	25.0	U	272	282	109	113	10	47.0-143			3.72	20
1,2-Dichloroethane	25.0	U	286	294	114	118	10	47.0-141			2.72	20
1,1-Dichloroethene	25.0	U	258	256	103	102	10	31.0-148			0.910	20
cis-1,2-Dichloroethene	25.0	U	281	287	112	115	10	43.0-142			2.25	20
trans-1,2-Dichloroethene	25.0	U	251	253	100	101	10	36.0-141			0.990	20
1,2-Dichloropropane	25.0	U	288	288	115	115	10	51.0-141			0.140	20
cis-1,3-Dichloropropene	25.0	U	314	314	126	125	10	53.0-139			0.210	20
trans-1,3-Dichloropropene	25.0	U	330	331	132	132	10	51.0-143			0.340	20
Ethylbenzene	25.0	45.1	326	325	112	112	10	42.0-147			0.240	20
2-Hexanone	125	U	1530	1530	122	122	10	36.0-145			0.0400	23
Iodomethane	125	U	1610	1880	129	151	10	30.0-151			15.4	20
2-Butanone (MEK)	125	U	1420	1520	113	121	10	12.0-149			6.88	24
Methylene Chloride	25.0	U	235	243	93.9	97.1	10	42.0-135			3.39	20
4-Methyl-2-pentanone (MIBK)	125	U	1740	1740	139	139	10	44.0-160			0.100	22
Styrene	25.0	U	328	317	131	127	10	47.0-147			3.16	20
1,1,1,2-Tetrachloroethane	25.0	U	308	302	123	121	10	52.0-140			2.09	20
1,1,2,2-Tetrachloroethane	25.0	U	317	306	127	122	10	46.0-149			3.63	20
Tetrachloroethene	25.0	U	259	252	104	101	10	38.0-147			3.02	20
Toluene	25.0	U	282	275	113	110	10	42.0-141			2.46	20
1,1,1-Trichloroethane	25.0	U	292	297	117	119	10	46.0-140			1.88	20
1,1,2-Trichloroethane	25.0	U	300	297	120	119	10	54.0-139			1.15	20
Trichloroethene	25.0	U	265	261	106	104	10	32.0-156			1.27	20
Trichlorofluoromethane	25.0	U	273	279	109	112	10	32.0-152			2.20	20
1,2,3-Trichloropropane	25.0	U	316	315	127	126	10	54.0-143			0.390	21
Vinyl acetate	125	U	1790	1840	143	147	10	30.0-160			2.67	20
Vinyl chloride	25.0	U	233	235	93.3	94.1	10	24.0-153			0.860	20

L894043-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L894043-05 03/08/17 02:23 • (MS) R3201660-4 03/07/17 23:12 • (MSD) R3201660-5 03/07/17 23:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Xylenes, Total	75.0	215	1130	1100	121	119	10	41.0-148			1.88	20
(S) Toluene-d8					*105*	*103*		*80.0-120*				
(S) Dibromofluoromethane					*106*	*106*		*76.0-123*				
(S) 4-Bromofluorobenzene					*103*	*102*		*80.0-120*				

Method Blank (MB)

(MB) R3202083-1 03/08/17 12:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) High Fraction	U		24.7	100
(S) o-Terphenyl	*89.9*			*31.0-160*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3202083-2 03/08/17 12:50 • (LCSD) R3202083-3 03/08/17 13:08

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) High Fraction	1500	1690	1780	112	119	50.0-150			5.49	20
(S) o-Terphenyl				*97.7*	*95.8*	*31.0-160*				

Method Blank (MB)

(MB) R3200764-1 03/02/17 17:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C40 Oil Range	U		0.274	4.00
(S) o-Terphenyl	*68.2*			*18.0-148*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200764-2 03/02/17 17:50 • (LCSD) R3200764-3 03/02/17 18:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.0	41.3	39.2	68.9	65.3	50.0-150			5.38	20
(S) o-Terphenyl				*80.5*	*78.6*	*18.0-148*				

L892548-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892548-06 03/03/17 03:16 • (MS) R3200764-4 03/03/17 03:32 • (MSD) R3200764-5 03/03/17 03:48

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	60.0	ND	45.2	41.7	75.3	69.6	1	50.0-150			7.94	20
(S) o-Terphenyl					*92.2*	*81.8*		*18.0-148*				

Method Blank (MB)

(MB) R3200938-3 03/03/17 13:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.000600	0.00600
Acenaphthene	U		0.000600	0.00600
Acenaphthylene	U		0.000600	0.00600
Benzo(a)anthracene	U		0.000600	0.00600
Benzo(a)pyrene	U		0.000600	0.00600
Benzo(b)fluoranthene	U		0.000600	0.00600
Benzo(g,h,i)perylene	U		0.000600	0.00600
Benzo(k)fluoranthene	U		0.000600	0.00600
Chrysene	U		0.000600	0.00600
Dibenz(a,h)anthracene	U		0.000600	0.00600
Fluoranthene	U		0.000600	0.00600
Fluorene	U		0.000600	0.00600
Indeno(1,2,3-cd)pyrene	U		0.000600	0.00600
Naphthalene	U		0.00200	0.0200
Phenanthrene	U		0.000600	0.00600
Pyrene	U		0.000600	0.00600
1-Methylnaphthalene	U		0.00200	0.0200
2-Methylnaphthalene	U		0.00200	0.0200
2-Chloronaphthalene	U		0.00200	0.0200
(S) p-Terphenyl-d14	*84.1*			*23.0-120*
(S) Nitrobenzene-d5	*80.8*			*14.0-149*
(S) 2-Fluorobiphenyl	*82.6*			*34.0-125*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200938-1 03/03/17 12:38 • (LCSD) R3200938-2 03/03/17 12:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0800	0.0548	0.0566	68.5	70.7	50.0-125			3.21	20
Acenaphthene	0.0800	0.0601	0.0613	75.1	76.7	52.0-120			2.03	20
Acenaphthylene	0.0800	0.0588	0.0605	73.5	75.6	51.0-120			2.94	20
Benzo(a)anthracene	0.0800	0.0564	0.0589	70.5	73.6	46.0-121			4.33	20
Benzo(a)pyrene	0.0800	0.0512	0.0530	64.0	66.3	42.0-121			3.59	20
Benzo(b)fluoranthene	0.0800	0.0625	0.0622	78.1	77.7	42.0-123			0.570	20
Benzo(g,h,i)perylene	0.0800	0.0623	0.0626	77.9	78.3	43.0-128			0.480	20
Benzo(k)fluoranthene	0.0800	0.0531	0.0570	66.4	71.2	45.0-128			6.96	20
Chrysene	0.0800	0.0557	0.0583	69.6	72.8	48.0-127			4.54	20
Dibenz(a,h)anthracene	0.0800	0.0657	0.0651	82.2	81.4	43.0-132			0.910	20
Fluoranthene	0.0800	0.0576	0.0583	72.1	72.8	49.0-129			1.09	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200938-1 03/03/17 12:38 • (LCSD) R3200938-2 03/03/17 12:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	0.0800	0.0592	0.0603	74.0	75.4	50.0-120			1.76	20
Indeno(1,2,3-cd)pyrene	0.0800	0.0620	0.0623	77.5	77.9	44.0-131			0.480	20
Naphthalene	0.0800	0.0591	0.0605	73.9	75.7	50.0-120			2.37	20
Phenanthrene	0.0800	0.0572	0.0580	71.5	72.5	48.0-120			1.28	20
Pyrene	0.0800	0.0580	0.0596	72.5	74.6	48.0-135			2.77	20
1-Methylnaphthalene	0.0800	0.0624	0.0637	78.0	79.6	52.0-122			2.06	20
2-Methylnaphthalene	0.0800	0.0586	0.0600	73.2	75.1	52.0-120			2.48	20
2-Chloronaphthalene	0.0800	0.0601	0.0614	75.2	76.8	50.0-120			2.10	20
(S) p-Terphenyl-d14				*81.5*	*83.8*	*23.0-120*				
(S) Nitrobenzene-d5				*88.4*	*88.3*	*14.0-149*				
(S) 2-Fluorobiphenyl				*84.2*	*85.5*	*34.0-125*				

L892656-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892656-01 03/05/17 07:40 • (MS) R3201277-1 03/05/17 08:01 • (MSD) R3201277-2 03/05/17 08:22

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Anthracene	0.0800	ND	0.0544	0.0546	68.0	68.3	1	20.0-136			0.390	24
Acenaphthene	0.0800	ND	0.0583	0.0585	72.9	73.1	1	29.0-124			0.340	20
Acenaphthylene	0.0800	ND	0.0585	0.0593	73.1	74.1	1	35.0-120			1.46	20
Benzo(a)anthracene	0.0800	ND	0.0510	0.0506	63.8	63.2	1	13.0-132			0.900	27
Benzo(a)pyrene	0.0800	ND	0.0512	0.0498	64.0	62.2	1	14.0-138			2.89	27
Benzo(b)fluoranthene	0.0800	ND	0.0475	0.0471	59.4	58.8	1	10.0-129			0.960	31
Benzo(g,h,i)perylene	0.0800	ND	0.0499	0.0419	62.4	52.4	1	10.0-133			17.5	30
Benzo(k)fluoranthene	0.0800	ND	0.0549	0.0558	68.7	69.8	1	15.0-131			1.62	27
Chrysene	0.0800	ND	0.0546	0.0550	68.3	68.7	1	15.0-137			0.630	25
Dibenz(a,h)anthracene	0.0800	ND	0.0512	0.0427	64.0	53.4	1	15.0-132			18.2	27
Fluoranthene	0.0800	ND	0.0525	0.0520	65.7	65.0	1	13.0-139			0.990	28
Fluorene	0.0800	ND	0.0561	0.0567	70.1	70.9	1	27.0-122			1.13	22
Indeno(1,2,3-cd)pyrene	0.0800	ND	0.0503	0.0417	62.8	52.1	1	11.0-133			18.6	29
Naphthalene	0.0800	ND	0.0562	0.0561	70.2	70.1	1	18.0-136			0.190	21
Phenanthrene	0.0800	ND	0.0540	0.0543	67.5	67.9	1	15.0-133			0.670	25
Pyrene	0.0800	ND	0.0629	0.0557	78.7	69.6	1	11.0-146			12.2	29
1-Methylnaphthalene	0.0800	ND	0.0596	0.0598	74.6	74.8	1	24.0-137			0.310	22
2-Methylnaphthalene	0.0800	ND	0.0556	0.0563	69.5	70.4	1	23.0-136			1.31	22
2-Chloronaphthalene	0.0800	ND	0.0575	0.0582	71.8	72.7	1	36.0-120			1.25	20
(S) p-Terphenyl-d14					*84.5*	*75.5*		*23.0-120*				
(S) Nitrobenzene-d5					*86.8*	*89.6*		*14.0-149*				
(S) 2-Fluorobiphenyl					*77.3*	*79.3*		*34.0-125*				

Method Blank (MB)

(MB) R3201865-3 03/08/17 12:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0140	0.0500
Acenaphthene	U		0.0100	0.0500
Acenaphthylene	U		0.0120	0.0500
Benzo(a)anthracene	U		0.00410	0.0500
Benzo(a)pyrene	U		0.0116	0.0500
Benzo(b)fluoranthene	0.00433	J	0.00212	0.0500
Benzo(g,h,i)perylene	0.00560	J	0.00227	0.0500
Benzo(k)fluoranthene	U		0.0136	0.0500
Chrysene	U		0.0108	0.0500
Dibenz(a,h)anthracene	0.00438	J	0.00396	0.0500
Fluoranthene	U		0.0157	0.0500
Fluorene	U		0.00850	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500
Naphthalene	0.0229	J	0.0198	0.250
Phenanthrene	U		0.00820	0.0500
Pyrene	U		0.0117	0.0500
1-Methylnaphthalene	U		0.00821	0.250
2-Methylnaphthalene	U		0.00902	0.250
2-Chloronaphthalene	U		0.00647	0.250
(S) Nitrobenzene-d5	*124*			*31.0-160*
(S) 2-Fluorobiphenyl	*93.4*			*48.0-148*
(S) p-Terphenyl-d14	*99.1*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201865-1 03/08/17 11:34 • (LCSD) R3201865-2 03/08/17 11:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	1.74	1.76	86.9	88.0	64.0-142			1.29	20
Acenaphthene	2.00	1.82	1.85	91.0	92.7	66.0-132			1.91	20
Acenaphthylene	2.00	1.86	1.86	92.8	93.0	65.0-132			0.200	20
Benzo(a)anthracene	2.00	1.87	1.89	93.4	94.5	59.0-134			1.24	20
Benzo(a)pyrene	2.00	1.93	1.96	96.3	97.9	61.0-145			1.63	20
Benzo(b)fluoranthene	2.00	1.92	1.92	96.1	96.1	57.0-136			0.0200	20
Benzo(g,h,i)perylene	2.00	2.18	2.21	109	110	54.0-140			1.21	20
Benzo(k)fluoranthene	2.00	1.85	1.97	92.5	98.3	57.0-141			6.02	20
Chrysene	2.00	1.83	1.88	91.5	94.2	63.0-140			2.84	20
Dibenz(a,h)anthracene	2.00	2.12	2.05	106	103	49.0-141			2.98	20
Fluoranthene	2.00	1.95	1.99	97.5	99.3	65.0-143			1.82	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201865-1 03/08/17 11:34 • (LCSD) R3201865-2 03/08/17 11:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	2.00	1.87	1.90	93.5	95.2	64.0-129			1.80	20
Indeno(1,2,3-cd)pyrene	2.00	2.18	2.17	109	108	53.0-141			0.620	20
Naphthalene	2.00	1.90	1.95	95.1	97.6	68.0-129			2.62	20
Phenanthrene	2.00	1.76	1.80	87.8	89.8	62.0-132			2.31	20
Pyrene	2.00	1.85	1.93	92.5	96.3	58.0-156			3.96	20
1-Methylnaphthalene	2.00	1.98	2.05	99.0	103	68.0-137			3.62	20
2-Methylnaphthalene	2.00	1.93	1.98	96.5	99.0	68.0-134			2.55	20
2-Chloronaphthalene	2.00	1.81	1.84	90.4	91.8	65.0-129			1.55	20
(S) Nitrobenzene-d5				*130*	*123*	*31.0-160*				
(S) 2-Fluorobiphenyl				*94.6*	*90.9*	*48.0-148*				
(S) p-Terphenyl-d14				*97.2*	*95.8*	*37.0-146*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

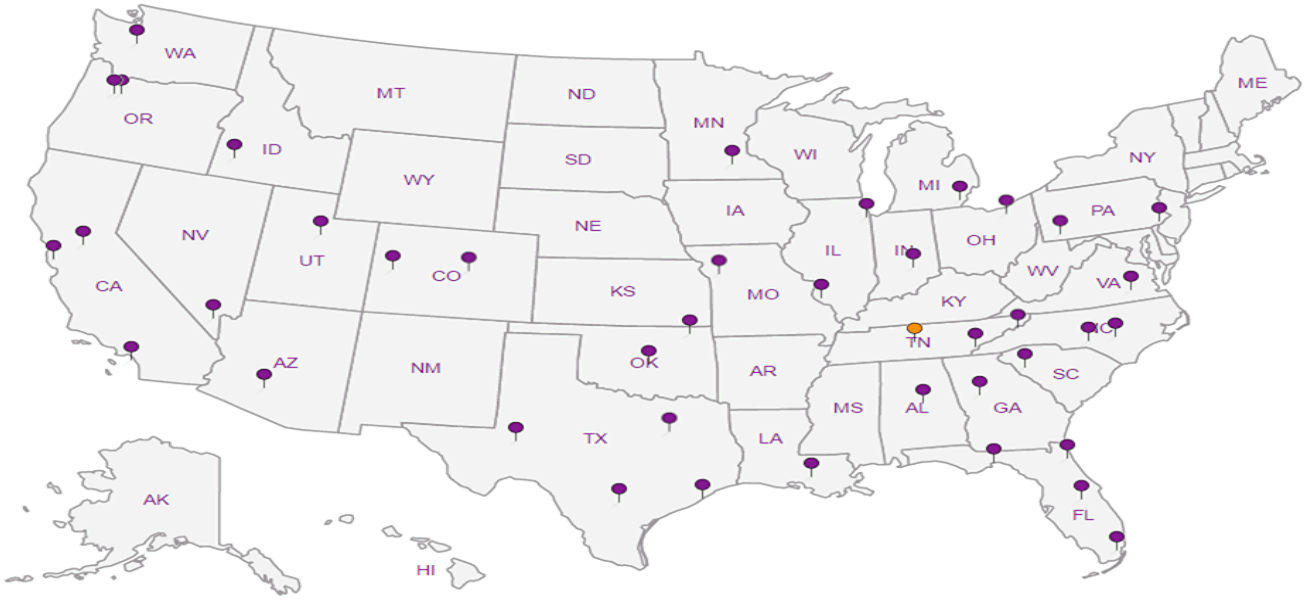
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address: SCS Engineers, 1817 Commons Cr.

Billing Information:

Report to: Dale Daniel

Email To: ddaniel@scsengineers.com

Project Description: 1708-1721 NE 23rd

City/State Collected: OKC

Phone:
Fax:

Client Project #

Lab Project #

Collected by (print): Dale Daniel

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: STANDARD

Email? ___No ___Yes
FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L892548
H217

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Full Scan VOCs - 8260B	TPH - Low, Medium, High Fractions	PAH - 8270	RCRA 8 Metals	Rem./Contaminant	Sample # (lab only)
Equipment	G	SS	—	2-21	1700	3	X	X	X	X		-01
Field		SS	—	2-21	1700	3	X	X	X	X		02
SB-01			0-1	2-22	1200	3	X	X	X	X		03
SB-01			8-9	2-22	1200	3	X	X	X	X		04
SB-02			0-1	2-22	1100	3	X	X	X	X		05
SB-02			12-13	2-22	1100	3	X	X	X	X		06
SB-03			0-1	2-22	1000	3	X	X	X	X		07
SB-03			8-9	2-22	1000	3	X	X	X	X		08
Duplicate			—	2-22	—	3	X	X	X	X		09

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other ___

Remarks: All methods as required in OK

pH ___ Temp ___
Flow ___ Other ___

Hold #

Condition: (lab use only) OK

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	2-23	1700	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 3.1 °C Bottles Received: 27 FB

Date: 2-25-17 Time: 9:00

ESC LAB SCIENCES
Cooler Receipt Form

Client:	AQUATECLOK	SDG#	L892548
Cooler Received/Opened On: 2/25/17		Temperature:	3.1
Received By: **Rickey Mosley**			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?		✓	
Preservation Correct / Checked?			

Jeremy W. Watkins

ESC Lab Sciences
Non-Conformance Form

Login #: L892548	Client: AQUATEOCOK	Date: 2/25/17	Evaluated by: Jeremy

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received 1-4oz and 2-2oz for of liquid for EQUIPMENT and FIELD. Please advise.

Client informed by:		Call	x	Email		Voice Mail		Date:3/7/17	Time:1410
TSR Initials:cc	Client Contact: Dale Daniel								

Login Instructions:

1. For Equipment and Field Blanks Pour up 3-40ml HCL vials and 1 -40ml unpreserved vial and log for V8260, GRO, DROOROLVI, PAHSIMLVI.

ANALYTICAL REPORT

March 10, 2017

SCS Engineers - OK

Sample Delivery Group:	L892558
Samples Received:	02/25/2017
Project Number:	
Description:	1708 & 1721 NE 23rd

Report To:

Mr. Dale Daniel
1817 Commons Circle, Suite 1
Yukon, OK 73099

Entire Report Reviewed By:

Craig Cothron
Technical Service Representative

TABLE OF CONTENTS

SS-01 0-1 L892558-01 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 13:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957218	1	03/02/17 14:17	03/02/17 14:25	KDW
Chlorinated Acid Herbicides (GC) by Method 8151	WG955946	1	03/02/17 14:15	03/04/17 01:44	ADF
Pesticides (GC) by Method 8081	WG956522	1	03/01/17 23:12	03/07/17 12:28	VKS

SS-01 0-3 L892558-02 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 13:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957218	1	03/02/17 14:17	03/02/17 14:25	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 07:05	TRB
Metals (ICP) by Method 6010B	WG956309	1	03/02/17 13:33	03/03/17 15:48	ST
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG957737	1	03/04/17 15:52	03/05/17 10:33	ADF

SS-02 0-3 L892558-03 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 14:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957218	1	03/02/17 14:17	03/02/17 14:25	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 07:07	TRB
Metals (ICP) by Method 6010B	WG956309	1	03/02/17 13:33	03/03/17 15:50	ST
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG957737	5	03/04/17 15:52	03/05/17 11:24	ADF

SS-03 0-3 L892558-04 Solid

Collected by: Dale Daniel
Collected date/time: 02/22/17 09:30
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG957218	1	03/02/17 14:17	03/02/17 14:25	KDW
Mercury by Method 7471A	WG956579	1	03/01/17 17:16	03/03/17 07:10	TRB
Metals (ICP) by Method 6010B	WG956309	1	03/02/17 13:33	03/03/17 15:53	ST
Semi Volatile Organic Compounds (GC/MS) by Method 8270C	WG957737	1	03/04/17 15:52	03/05/17 08:01	ADF

FIELD BLANK L892558-07 GW

Collected by: Dale Daniel
Collected date/time: 02/22/17 16:00
Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957582	1	03/03/17 13:02	03/03/17 13:02	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956965	1	03/08/17 14:02	03/08/17 14:02	JAH
Semi-Volatile Organic Compounds (GC) by Method 8015	WG956511	1	02/28/17 22:18	03/01/17 16:10	TH
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956482	1	02/28/17 23:38	03/01/17 14:38	FMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Technical Service Representative

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.5		1	03/02/2017 14:25	WG957218

Chlorinated Acid Herbicides (GC) by Method 8151

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
2,4-D	ND		0.0700	1	03/04/2017 01:44	WG955946
Dalapon	ND		0.0700	1	03/04/2017 01:44	WG955946
2,4-DB	ND		0.0700	1	03/04/2017 01:44	WG955946
Dicamba	ND		0.0700	1	03/04/2017 01:44	WG955946
Dichloroprop	ND		0.0700	1	03/04/2017 01:44	WG955946
Dinoseb	ND		0.0700	1	03/04/2017 01:44	WG955946
MCPA	ND		6.50	1	03/04/2017 01:44	WG955946
MCPP	ND		6.50	1	03/04/2017 01:44	WG955946
2,4,5-T	ND		0.0700	1	03/04/2017 01:44	WG955946
2,4,5-TP (Silvex)	ND		0.0700	1	03/04/2017 01:44	WG955946
(S) 2,4-Dichlorophenyl Acetic Acid	*84.5*		*22.0-132*		*03/04/2017 01:44*	WG955946

Pesticides (GC) by Method 8081

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Aldrin	ND		0.0200	1	03/07/2017 12:28	WG956522
Alpha BHC	ND		0.0200	1	03/07/2017 12:28	WG956522
Beta BHC	ND		0.0200	1	03/07/2017 12:28	WG956522
Delta BHC	ND		0.0200	1	03/07/2017 12:28	WG956522
Gamma BHC	ND		0.0200	1	03/07/2017 12:28	WG956522
Chlordane	ND		0.200	1	03/07/2017 12:28	WG956522
4,4-DDD	ND		0.0200	1	03/07/2017 12:28	WG956522
4,4-DDE	ND		0.0200	1	03/07/2017 12:28	WG956522
4,4-DDT	ND		0.0200	1	03/07/2017 12:28	WG956522
Dieldrin	ND		0.0200	1	03/07/2017 12:28	WG956522
Endosulfan I	ND		0.0200	1	03/07/2017 12:28	WG956522
Endosulfan II	ND		0.0200	1	03/07/2017 12:28	WG956522
Endosulfan sulfate	ND		0.0200	1	03/07/2017 12:28	WG956522
Endrin	ND		0.0200	1	03/07/2017 12:28	WG956522
Endrin aldehyde	ND		0.0200	1	03/07/2017 12:28	WG956522
Endrin ketone	ND		0.0200	1	03/07/2017 12:28	WG956522
Hexachlorobenzene	ND		0.0200	1	03/07/2017 12:28	WG956522
Heptachlor	ND		0.0200	1	03/07/2017 12:28	WG956522
Heptachlor epoxide	ND		0.0200	1	03/07/2017 12:28	WG956522
Methoxychlor	ND		0.0200	1	03/07/2017 12:28	WG956522
Toxaphene	ND		0.400	1	03/07/2017 12:28	WG956522
(S) Decachlorobiphenyl	*73.5*		*10.0-148*		*03/07/2017 12:28*	WG956522
(S) Tetrachloro-m-xylene	*97.3*		*21.0-146*		*03/07/2017 12:28*	WG956522

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.1		1	03/02/2017 14:25	WG957218

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 07:05	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	ND		2.00	1	03/03/2017 15:48	WG956309
Barium	85.5		0.500	1	03/03/2017 15:48	WG956309
Cadmium	ND		0.500	1	03/03/2017 15:48	WG956309
Chromium	10.4		1.00	1	03/03/2017 15:48	WG956309
Lead	10.5		0.500	1	03/03/2017 15:48	WG956309
Selenium	ND		2.00	1	03/03/2017 15:48	WG956309
Silver	ND		1.00	1	03/03/2017 15:48	WG956309

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	0.0385		0.0330	1	03/05/2017 10:33	WG957737
Acenaphthene	ND		0.0330	1	03/05/2017 10:33	WG957737
Acenaphthylene	ND		0.0330	1	03/05/2017 10:33	WG957737
Benzo(a)anthracene	0.116		0.0330	1	03/05/2017 10:33	WG957737
Benzo(a)pyrene	0.0940		0.0330	1	03/05/2017 10:33	WG957737
Benzo(b)fluoranthene	0.121		0.0330	1	03/05/2017 10:33	WG957737
Benzo(g,h,i)perylene	0.0762		0.0330	1	03/05/2017 10:33	WG957737
Benzo(k)fluoranthene	0.0430		0.0330	1	03/05/2017 10:33	WG957737
Chrysene	0.112		0.0330	1	03/05/2017 10:33	WG957737
Dibenz(a,h)anthracene	ND		0.0330	1	03/05/2017 10:33	WG957737
Fluoranthene	0.286		0.0330	1	03/05/2017 10:33	WG957737
Fluorene	ND		0.0330	1	03/05/2017 10:33	WG957737
Indeno(1,2,3-cd)pyrene	0.0594		0.0330	1	03/05/2017 10:33	WG957737
Naphthalene	ND		0.0330	1	03/05/2017 10:33	WG957737
Phenanthrene	0.231		0.0330	1	03/05/2017 10:33	WG957737
Pyrene	0.218		0.0330	1	03/05/2017 10:33	WG957737
(S) Nitrobenzene-d5	*130*		*31.0-146*		*03/05/2017 10:33*	WG957737
(S) 2-Fluorobiphenyl	*66.0*		*31.0-130*		*03/05/2017 10:33*	WG957737
(S) p-Terphenyl-d14	*88.6*		*20.0-127*		*03/05/2017 10:33*	WG957737

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.1		1	03/02/2017 14:25	WG957218

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	0.0292		0.0200	1	03/03/2017 07:07	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.99		2.00	1	03/03/2017 15:50	WG956309
Barium	122		0.500	1	03/03/2017 15:50	WG956309
Cadmium	ND		0.500	1	03/03/2017 15:50	WG956309
Chromium	13.6		1.00	1	03/03/2017 15:50	WG956309
Lead	15.7		0.500	1	03/03/2017 15:50	WG956309
Selenium	ND		2.00	1	03/03/2017 15:50	WG956309
Silver	ND		1.00	1	03/03/2017 15:50	WG956309

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.165	5	03/05/2017 11:24	WG957737
Acenaphthene	ND		0.165	5	03/05/2017 11:24	WG957737
Acenaphthylene	ND		0.165	5	03/05/2017 11:24	WG957737
Benzo(a)anthracene	ND		0.165	5	03/05/2017 11:24	WG957737
Benzo(a)pyrene	ND		0.165	5	03/05/2017 11:24	WG957737
Benzo(b)fluoranthene	ND		0.165	5	03/05/2017 11:24	WG957737
Benzo(g,h,i)perylene	ND		0.165	5	03/05/2017 11:24	WG957737
Benzo(k)fluoranthene	ND		0.165	5	03/05/2017 11:24	WG957737
Chrysene	ND		0.165	5	03/05/2017 11:24	WG957737
Dibenz(a,h)anthracene	ND		0.165	5	03/05/2017 11:24	WG957737
Fluoranthene	ND		0.165	5	03/05/2017 11:24	WG957737
Fluorene	ND		0.165	5	03/05/2017 11:24	WG957737
Indeno(1,2,3-cd)pyrene	ND		0.165	5	03/05/2017 11:24	WG957737
Naphthalene	ND		0.165	5	03/05/2017 11:24	WG957737
Phenanthrene	ND		0.165	5	03/05/2017 11:24	WG957737
Pyrene	ND		0.165	5	03/05/2017 11:24	WG957737
(S) Nitrobenzene-d5	*134*		*31.0-146*		*03/05/2017 11:24*	WG957737
(S) 2-Fluorobiphenyl	*110*		*31.0-130*		*03/05/2017 11:24*	WG957737
(S) p-Terphenyl-d14	*135*	J1	*20.0-127*		*03/05/2017 11:24*	WG957737

Sample Narrative:

8270C L892558-03 WG957737: Dilution due to matrix

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	76.9		1	03/02/2017 14:25	WG957218

Mercury by Method 7471A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Mercury	ND		0.0200	1	03/03/2017 07:10	WG956579

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Arsenic	2.97		2.00	1	03/03/2017 15:53	WG956309
Barium	103		0.500	1	03/03/2017 15:53	WG956309
Cadmium	ND		0.500	1	03/03/2017 15:53	WG956309
Chromium	22.9		1.00	1	03/03/2017 15:53	WG956309
Lead	9.10		0.500	1	03/03/2017 15:53	WG956309
Selenium	ND		2.00	1	03/03/2017 15:53	WG956309
Silver	ND		1.00	1	03/03/2017 15:53	WG956309

Semi Volatile Organic Compounds (GC/MS) by Method 8270C

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Anthracene	ND		0.0330	1	03/05/2017 08:01	WG957737
Acenaphthene	ND		0.0330	1	03/05/2017 08:01	WG957737
Acenaphthylene	ND		0.0330	1	03/05/2017 08:01	WG957737
Benzo(a)anthracene	ND		0.0330	1	03/05/2017 08:01	WG957737
Benzo(a)pyrene	ND		0.0330	1	03/05/2017 08:01	WG957737
Benzo(b)fluoranthene	ND		0.0330	1	03/05/2017 08:01	WG957737
Benzo(g,h,i)perylene	ND		0.0330	1	03/05/2017 08:01	WG957737
Benzo(k)fluoranthene	ND		0.0330	1	03/05/2017 08:01	WG957737
Chrysene	ND		0.0330	1	03/05/2017 08:01	WG957737
Dibenz(a,h)anthracene	ND		0.0330	1	03/05/2017 08:01	WG957737
Fluoranthene	ND		0.0330	1	03/05/2017 08:01	WG957737
Fluorene	ND		0.0330	1	03/05/2017 08:01	WG957737
Indeno(1,2,3-cd)pyrene	ND		0.0330	1	03/05/2017 08:01	WG957737
Naphthalene	ND		0.0330	1	03/05/2017 08:01	WG957737
Phenanthrene	ND		0.0330	1	03/05/2017 08:01	WG957737
Pyrene	ND		0.0330	1	03/05/2017 08:01	WG957737
(S) Nitrobenzene-d5	*76.3*		*31.0-146*		*03/05/2017 08:01*	WG957737
(S) 2-Fluorobiphenyl	*68.2*		*31.0-130*		*03/05/2017 08:01*	WG957737
(S) p-Terphenyl-d14	*57.9*		*20.0-127*		*03/05/2017 08:01*	WG957737

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		100	1	03/03/2017 13:02	WG957582
(S) a,a,a-Trifluorotoluene(FID)	*98.6*		*77.0-122*		*03/03/2017 13:02*	WG957582

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	03/08/2017 14:02	WG956965
Acrylonitrile	ND		10.0	1	03/08/2017 14:02	WG956965
Benzene	ND		1.00	1	03/08/2017 14:02	WG956965
Bromochloromethane	ND		1.00	1	03/08/2017 14:02	WG956965
Bromodichloromethane	ND		1.00	1	03/08/2017 14:02	WG956965
Bromoform	ND		1.00	1	03/08/2017 14:02	WG956965
Bromomethane	ND		5.00	1	03/08/2017 14:02	WG956965
Carbon disulfide	ND		1.00	1	03/08/2017 14:02	WG956965
Carbon tetrachloride	ND		1.00	1	03/08/2017 14:02	WG956965
Chlorobenzene	ND		1.00	1	03/08/2017 14:02	WG956965
Chlorodibromomethane	ND		1.00	1	03/08/2017 14:02	WG956965
Chloroethane	ND		5.00	1	03/08/2017 14:02	WG956965
Chloroform	ND		5.00	1	03/08/2017 14:02	WG956965
Chloromethane	ND		2.50	1	03/08/2017 14:02	WG956965
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/08/2017 14:02	WG956965
1,2-Dibromoethane	ND		1.00	1	03/08/2017 14:02	WG956965
Dibromomethane	ND		1.00	1	03/08/2017 14:02	WG956965
1,2-Dichlorobenzene	ND		1.00	1	03/08/2017 14:02	WG956965
1,4-Dichlorobenzene	ND		1.00	1	03/08/2017 14:02	WG956965
1,1-Dichloroethane	ND		1.00	1	03/08/2017 14:02	WG956965
1,2-Dichloroethane	ND		1.00	1	03/08/2017 14:02	WG956965
1,1-Dichloroethene	ND		1.00	1	03/08/2017 14:02	WG956965
cis-1,2-Dichloroethene	ND		1.00	1	03/08/2017 14:02	WG956965
trans-1,2-Dichloroethene	ND		1.00	1	03/08/2017 14:02	WG956965
1,2-Dichloropropane	ND		1.00	1	03/08/2017 14:02	WG956965
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/08/2017 14:02	WG956965
cis-1,3-Dichloropropene	ND		1.00	1	03/08/2017 14:02	WG956965
trans-1,3-Dichloropropene	ND		1.00	1	03/08/2017 14:02	WG956965
Ethylbenzene	ND		1.00	1	03/08/2017 14:02	WG956965
2-Hexanone	ND		10.0	1	03/08/2017 14:02	WG956965
Iodomethane	ND		10.0	1	03/08/2017 14:02	WG956965
2-Butanone (MEK)	ND		10.0	1	03/08/2017 14:02	WG956965
Methylene Chloride	ND		5.00	1	03/08/2017 14:02	WG956965
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/08/2017 14:02	WG956965
Styrene	ND		1.00	1	03/08/2017 14:02	WG956965
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/08/2017 14:02	WG956965
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/08/2017 14:02	WG956965
Tetrachloroethene	ND		1.00	1	03/08/2017 14:02	WG956965
Toluene	ND		1.00	1	03/08/2017 14:02	WG956965
1,1,1-Trichloroethane	ND		1.00	1	03/08/2017 14:02	WG956965
1,1,2-Trichloroethane	ND		1.00	1	03/08/2017 14:02	WG956965
Trichloroethene	ND		1.00	1	03/08/2017 14:02	WG956965
Trichlorofluoromethane	ND		5.00	1	03/08/2017 14:02	WG956965
1,2,3-Trichloropropane	ND		2.50	1	03/08/2017 14:02	WG956965
Vinyl acetate	ND		10.0	1	03/08/2017 14:02	WG956965
Vinyl chloride	ND		1.00	1	03/08/2017 14:02	WG956965
Xylenes, Total	ND		3.00	1	03/08/2017 14:02	WG956965
(S) Toluene-d8	*103*		*80.0-120*		*03/08/2017 14:02*	WG956965
(S) Dibromofluoromethane	*88.8*		*76.0-123*		*03/08/2017 14:02*	WG956965

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 4-Bromofluorobenzene	*105*		*80.0-120*		*03/08/2017 14:02*	WG956965

Semi-Volatile Organic Compounds (GC) by Method 8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		100	1	03/01/2017 16:10	WG956511
C28-C40 Oil Range	ND		100	1	03/01/2017 16:10	WG956511
(S) o-Terphenyl	*121*		*52.0-156*		*03/01/2017 16:10*	WG956511

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/01/2017 14:38	WG956482
Acenaphthene	ND		0.0500	1	03/01/2017 14:38	WG956482
Acenaphthylene	ND		0.0500	1	03/01/2017 14:38	WG956482
Benzo(a)anthracene	ND		0.0500	1	03/01/2017 14:38	WG956482
Benzo(a)pyrene	ND		0.0500	1	03/01/2017 14:38	WG956482
Benzo(b)fluoranthene	ND		0.0500	1	03/01/2017 14:38	WG956482
Benzo(g,h,i)perylene	ND		0.0500	1	03/01/2017 14:38	WG956482
Benzo(k)fluoranthene	ND		0.0500	1	03/01/2017 14:38	WG956482
Chrysene	ND		0.0500	1	03/01/2017 14:38	WG956482
Dibenz(a,h)anthracene	ND		0.0500	1	03/01/2017 14:38	WG956482
Fluoranthene	ND		0.0500	1	03/01/2017 14:38	WG956482
Fluorene	ND		0.0500	1	03/01/2017 14:38	WG956482
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/01/2017 14:38	WG956482
Naphthalene	ND		0.250	1	03/01/2017 14:38	WG956482
Phenanthrene	ND		0.0500	1	03/01/2017 14:38	WG956482
Pyrene	ND		0.0500	1	03/01/2017 14:38	WG956482
1-Methylnaphthalene	ND		0.250	1	03/01/2017 14:38	WG956482
2-Methylnaphthalene	ND		0.250	1	03/01/2017 14:38	WG956482
2-Chloronaphthalene	ND		0.250	1	03/01/2017 14:38	WG956482
(S) Nitrobenzene-d5	*72.3*		*31.0-160*		*03/01/2017 14:38*	WG956482
(S) 2-Fluorobiphenyl	*95.2*		*48.0-148*		*03/01/2017 14:38*	WG956482
(S) p-Terphenyl-d14	*101*		*37.0-146*		*03/01/2017 14:38*	WG956482

Method Blank (MB)

(MB) R3200740-1 03/02/17 14:25

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000800			

L892580-03 Original Sample (OS) • Duplicate (DUP)

(OS) L892580-03 03/02/17 14:25 • (DUP) R3200740-3 03/02/17 14:25

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	87.2	83.1	1	4.83		5

Laboratory Control Sample (LCS)

(LCS) R3200740-2 03/02/17 14:25

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3200720-1 03/03/17 05:56

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Mercury	U		0.0028	0.0200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200720-2 03/03/17 05:59 • (LCSD) R3200720-3 03/03/17 06:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.281	0.275	94	92	80-120			2	20

L892503-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892503-02 03/03/17 06:04 • (MS) R3200720-4 03/03/17 06:06 • (MSD) R3200720-5 03/03/17 06:09

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury	0.300	0.0328	0.298	0.268	88	78	1	75-125			11	20

Method Blank (MB)

(MB) R3200961-7 03/03/17 15:17

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.65	2.00
Barium	U		0.17	0.500
Cadmium	U		0.07	0.500
Chromium	U		0.14	1.00
Lead	U		0.19	0.500
Selenium	U		0.74	2.00
Silver	U		0.28	1.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200961-8 03/03/17 15:19 • (LCSD) R3200961-12 03/03/17 20:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic	100	103	108	103	108	80-120			5	20
Barium	100	104	109	104	109	80-120			5	20
Cadmium	100	99.8	106	100	106	80-120			6	20
Chromium	100	101	107	101	107	80-120			6	20
Lead	100	102	108	102	108	80-120			6	20
Selenium	100	102	107	102	107	80-120			5	20
Silver	20.0	18.1	19.2	90	96	80-120			6	20

L892565-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892565-01 03/03/17 15:24 • (MS) R3200961-10 03/03/17 15:32 • (MSD) R3200961-11 03/03/17 15:35

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	128	2.51	122	128	94	98	1	75-125			5	20
Barium	128	118	237	238	93	94	1	75-125			1	20
Cadmium	128	U	120	125	94	98	1	75-125			4	20
Chromium	128	30.9	153	158	95	100	1	75-125			4	20
Lead	128	13.8	142	147	100	104	1	75-125			4	20
Selenium	128	U	121	125	94	98	1	75-125			4	20
Silver	25.6	U	22.4	23.4	88	91	1	75-125			4	20

Method Blank (MB)

(MB) R3201193-5 03/03/17 11:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
(S) a,a,a-Trifluorotoluene(FID)	*99.7*			*77.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201193-3 03/03/17 10:42 • (LCSD) R3201193-4 03/03/17 11:04

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5500	5890	5940	107	108	71.0-136			0.920	20
(S) a,a,a-Trifluorotoluene(FID)				*106*	*106*	*77.0-122*				

L892496-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892496-10 03/03/17 13:25 • (MS) R3201193-8 03/03/17 14:31 • (MSD) R3201193-9 03/03/17 14:54

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5500	2130	6950	7130	87.8	91.0	1	18.0-160			2.49	20
(S) a,a,a-Trifluorotoluene(FID)					*105*	*105*		*77.0-122*				

Method Blank (MB)

(MB) R3201151-3 03/03/17 00:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,4-Dichlorobenzene	U		0.274	1.00
trans-1,4-Dichloro-2-butene	U		0.866	2.50
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Iodomethane	U		1.71	10.0
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.319	1.00

Method Blank (MB)

(MB) R3201151-3 03/03/17 00:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
Vinyl acetate	U		1.63	10.0
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*101*			*80.0-120*
(S) Dibromofluoromethane	*96.0*			*76.0-123*
(S) 4-Bromofluorobenzene	*103*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201151-1 03/02/17 22:35 • (LCSD) R3201151-2 03/02/17 22:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	86.8	91.8	69.4	73.4	10.0-160			5.62	23
Acrylonitrile	125	107	108	85.9	86.7	60.0-142			0.980	20
Benzene	25.0	24.4	24.7	97.5	98.8	69.0-123			1.40	20
Bromodichloromethane	25.0	23.7	24.0	94.9	96.1	76.0-120			1.28	20
Bromochloromethane	25.0	23.2	23.4	92.9	93.8	76.0-122			0.910	20
Bromoform	25.0	27.6	28.0	110	112	67.0-132			1.46	20
Bromomethane	25.0	25.9	24.8	104	99.1	18.0-160			4.48	20
Carbon disulfide	25.0	24.6	25.1	98.2	100	55.0-127			2.18	20
Carbon tetrachloride	25.0	24.1	23.2	96.3	92.7	63.0-122			3.76	20
Chlorobenzene	25.0	26.7	27.5	107	110	79.0-121			2.85	20
Chlorodibromomethane	25.0	26.7	26.9	107	107	75.0-125			0.530	20
Chloroethane	25.0	23.2	23.8	92.8	95.1	47.0-152			2.43	20
Chloroform	25.0	24.3	24.6	97.1	98.3	72.0-121			1.25	20
Chloromethane	25.0	20.0	20.2	80.1	80.8	48.0-139			0.860	20
1,2-Dibromo-3-Chloropropane	25.0	24.6	25.0	98.6	99.9	64.0-127			1.36	20
1,2-Dibromoethane	25.0	25.9	26.4	104	106	77.0-123			1.97	20
Dibromomethane	25.0	24.5	24.5	97.9	98.1	78.0-120			0.270	20
1,2-Dichlorobenzene	25.0	26.5	26.7	106	107	80.0-120			0.580	20
1,4-Dichlorobenzene	25.0	25.5	26.2	102	105	77.0-120			2.65	20
trans-1,4-Dichloro-2-butene	25.0	26.2	25.0	105	100	55.0-134			4.91	20
1,1-Dichloroethane	25.0	23.5	24.1	94.1	96.5	70.0-126			2.51	20
1,2-Dichloroethane	25.0	23.1	23.2	92.6	92.7	67.0-126			0.0700	20
1,1-Dichloroethene	25.0	25.0	25.9	99.9	103	64.0-129			3.50	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201151-1 03/02/17 22:35 • (LCSD) R3201151-2 03/02/17 22:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	24.5	24.6	98.0	98.6	73.0-120			0.530	20
trans-1,2-Dichloroethene	25.0	24.7	25.1	98.9	100	71.0-121			1.59	20
1,2-Dichloropropane	25.0	23.8	24.5	95.3	98.2	75.0-125			2.98	20
cis-1,3-Dichloropropene	25.0	25.9	25.9	104	104	79.0-123			0.200	20
trans-1,3-Dichloropropene	25.0	25.6	25.7	102	103	74.0-127			0.570	20
Ethylbenzene	25.0	25.9	26.7	103	107	77.0-120			3.22	20
2-Hexanone	125	118	120	94.0	95.9	58.0-147			1.99	20
Iodomethane	125	135	138	108	110	57.0-140			1.88	20
2-Butanone (MEK)	125	97.6	101	78.1	80.8	37.0-158			3.44	20
Methylene Chloride	25.0	23.5	23.3	94.2	93.4	66.0-121			0.830	20
4-Methyl-2-pentanone (MIBK)	125	122	122	97.4	97.6	59.0-143			0.140	20
Styrene	25.0	26.8	27.4	107	109	78.0-124			1.90	20
1,1,1,2-Tetrachloroethane	25.0	25.9	26.6	104	106	75.0-122			2.68	20
1,1,2,2-Tetrachloroethane	25.0	25.0	25.2	99.9	101	71.0-122			1.01	20
Tetrachloroethene	25.0	25.9	26.5	104	106	70.0-127			2.19	20
Toluene	25.0	25.0	25.5	100	102	77.0-120			1.87	20
1,1,1-Trichloroethane	25.0	23.9	24.1	95.6	96.2	68.0-122			0.690	20
1,1,2-Trichloroethane	25.0	25.0	25.7	99.8	103	78.0-120			3.00	20
Trichloroethene	25.0	24.3	25.1	97.4	100	78.0-120			2.92	20
Trichlorofluoromethane	25.0	23.7	24.0	94.9	96.2	56.0-137			1.28	20
1,2,3-Trichloropropane	25.0	25.1	25.4	101	101	72.0-124			0.960	20
Vinyl acetate	125	137	133	110	106	46.0-160			3.02	20
Vinyl chloride	25.0	22.3	22.8	89.2	91.1	64.0-133			2.13	20
Xylenes, Total	75.0	79.2	81.2	106	108	77.0-120			2.49	20
(S) Toluene-d8				*101*	*102*	*80.0-120*				
(S) Dibromofluoromethane				*98.2*	*98.0*	*76.0-123*				
(S) 4-Bromofluorobenzene				*103*	*105*	*80.0-120*				

Method Blank (MB)

(MB) R3200441-1 03/01/17 13:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C10-C28 Diesel Range	U		22.2	100
C28-C40 Oil Range	U		11.8	100
(S) o-Terphenyl	*121*			*52.0-156*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200441-2 03/01/17 14:00 • (LCSD) R3200441-3 03/01/17 14:17

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
C10-C28 Diesel Range	1500	1610	1660	108	111	50.0-150			2.87	20
(S) o-Terphenyl				*126*	*129*	*52.0-156*				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3201131-1 03/03/17 20:31

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2,4-D	U		0.0110	0.0700
Dalapon	U		0.0110	0.0700
2,4-DB	U		0.0110	0.0700
Dicamba	U		0.0110	0.0700
Dichloroprop	U		0.0110	0.0700
Dinoseb	U		0.0110	0.0700
MCPA	U		1.22	6.50
MCPP	U		1.22	6.50
2,4,5-T	U		0.0110	0.0700
2,4,5-TP (Silvex)	U		0.0110	0.0700
(S) 2,4-Dichlorophenyl Acetic Acid	*82.0*			*22.0-132*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201131-2 03/03/17 20:44 • (LCSD) R3201131-3 03/03/17 20:57

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,4-D	0.167	0.139	0.143	83.6	85.6	40.0-120			2.38	20
Dalapon	0.167	0.105	0.108	63.1	64.9	15.0-120			2.83	24
2,4-DB	0.167	0.121	0.121	72.4	72.4	25.0-143			0.0100	24
Dicamba	0.167	0.161	0.165	96.8	99.1	43.0-120			2.32	20
Dichloroprop	0.167	0.145	0.148	87.1	88.7	32.0-129			1.82	20
Dinoseb	0.167	0.0924	0.0934	55.4	56.0	10.0-120			1.11	37
MCPA	16.7	13.9	13.8	83.2	82.6	31.0-121			0.680	21
MCPP	16.7	14.6	14.7	87.4	88.4	28.0-133			1.16	25
2,4,5-T	0.167	0.151	0.151	90.3	90.7	41.0-120			0.400	21
2,4,5-TP (Silvex)	0.167	0.168	0.172	101	103	42.0-120			1.91	20
(S) 2,4-Dichlorophenyl Acetic Acid				*84.9*	*86.7*	*22.0-132*				

L892205-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892205-01 03/03/17 22:29 • (MS) R3201131-4 03/03/17 22:42 • (MSD) R3201131-5 03/03/17 22:55

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,4-D	0.167	ND	0.124	0.129	74.2	77.3	1	19.0-136			4.05	25
Dalapon	0.167	ND	0.0492	0.0499	29.5	30.0	1	10.0-122			1.52	29
2,4-DB	0.167	ND	0.109	0.112	65.1	67.0	1	18.0-150			2.89	28
Dicamba	0.167	ND	0.124	0.130	74.3	78.1	1	29.0-123			4.99	24

L892205-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892205-01 03/03/17 22:29 • (MS) R3201131-4 03/03/17 22:42 • (MSD) R3201131-5 03/03/17 22:55

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dichloroprop	0.167	ND	0.130	0.134	78.1	80.5	1	23.0-124			3.01	24
Dinoseb	0.167	ND	0.0980	0.0994	58.8	59.6	1	10.0-120			1.37	40
MCPA	16.7	ND	11.2	11.7	67.5	70.3	1	16.0-128			4.17	27
MCPP	16.7	ND	13.1	13.1	78.7	78.7	1	10.0-160			0.0700	34
2,4,5-T	0.167	ND	0.131	0.136	78.6	81.9	1	34.0-120			4.14	25
2,4,5-TP (Silvex)	0.167	ND	0.159	0.164	95.7	98.4	1	32.0-120			2.83	25
(S) 2,4-Dichlorophenyl Acetic Acid					*74.2*	*77.1*		*22.0-132*				

Method Blank (MB)

(MB) R3200654-3 03/02/17 15:10

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Aldrin	U		0.00135	0.0200
Alpha BHC	U		0.00136	0.0200
Beta BHC	U		0.00160	0.0200
Delta BHC	U		0.00143	0.0200
Gamma BHC	U		0.00145	0.0200
4,4-DDD	U		0.00156	0.0200
4,4-DDE	U		0.00154	0.0200
4,4-DDT	U		0.00200	0.0200
Dieldrin	U		0.00152	0.0200
Endosulfan I	U		0.00149	0.0200
Endosulfan II	U		0.00160	0.0200
Endosulfan sulfate	U		0.00151	0.0200
Endrin	U		0.00157	0.0200
Endrin aldehyde	U		0.00129	0.0200
Endrin ketone	U		0.00165	0.0200
Heptachlor	U		0.00154	0.0200
Heptachlor epoxide	U		0.00161	0.0200
Hexachlorobenzene	U		0.00124	0.0200
Methoxychlor	U		0.00178	0.0200
Chlordane	U		0.0390	0.200
Toxaphene	U		0.0360	0.400
(S) Decachlorobiphenyl	*73.7*			*10.0-148*
(S) Tetrachloro-m-xylene	*76.3*			*21.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200654-1 03/02/17 14:45 • (LCSD) R3200654-2 03/02/17 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0667	0.0619	0.0666	92.8	99.9	55.0-137			7.38	29
Alpha BHC	0.0667	0.0651	0.0700	97.6	105	55.0-136			7.33	28
Beta BHC	0.0667	0.0600	0.0643	89.9	96.4	53.0-133			6.96	28
Delta BHC	0.0667	0.0626	0.0673	93.9	101	53.0-139			7.24	29
Gamma BHC	0.0667	0.0635	0.0682	95.2	102	54.0-136			7.10	29
4,4-DDD	0.0667	0.0705	0.0767	106	115	51.0-141			8.44	29
4,4-DDE	0.0667	0.0576	0.0632	86.4	94.8	53.0-142			9.21	30
4,4-DDT	0.0667	0.0643	0.0701	96.4	105	47.0-143			8.66	30
Dieldrin	0.0667	0.0711	0.0769	107	115	54.0-141			7.86	29
Endosulfan I	0.0667	0.0613	0.0654	91.8	98.0	54.0-141			6.49	29

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200654-1 03/02/17 14:45 • (LCSD) R3200654-2 03/02/17 14:58

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Endosulfan II	0.0667	0.0625	0.0669	93.7	100	53.0-140			6.72	28
Endosulfan sulfate	0.0667	0.0604	0.0641	90.6	96.0	52.0-141			5.87	29
Endrin	0.0667	0.0641	0.0682	96.1	102	52.0-137			6.21	29
Endrin aldehyde	0.0667	0.0564	0.0536	84.5	80.4	30.0-127			5.05	31
Endrin ketone	0.0667	0.0650	0.0698	97.4	105	51.0-139			7.12	28
Heptachlor	0.0667	0.0647	0.0700	96.9	105	53.0-144			7.86	29
Heptachlor epoxide	0.0667	0.0623	0.0674	93.5	101	54.0-137			7.81	28
Hexachlorobenzene	0.0667	0.0590	0.0633	88.4	94.9	50.0-135			7.09	28
Methoxychlor	0.0667	0.0707	0.0741	106	111	49.0-145			4.72	29
(S) Decachlorobiphenyl				*74.7*	*82.6*	*10.0-148*				
(S) Tetrachloro-m-xylene				*78.4*	*85.5*	*21.0-146*				

L893093-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893093-06 03/02/17 16:15 • (MS) R3200654-4 03/02/17 16:28 • (MSD) R3200654-5 03/02/17 16:40

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Aldrin	0.0684	U	0.0605	0.0617	88.4	90.2	1	19.0-152			1.98	24
Alpha BHC	0.0684	U	0.0630	0.0653	92.1	95.4	1	39.0-152			3.55	21
Beta BHC	0.0684	U	0.0585	0.0600	85.4	87.7	1	38.0-150			2.63	20
Delta BHC	0.0684	U	0.0612	0.0633	89.4	92.5	1	34.0-155			3.41	21
Gamma BHC	0.0684	U	0.0615	0.0635	89.9	92.7	1	38.0-153			3.04	21
4,4-DDD	0.0684	U	0.0711	0.0712	104	104	1	22.0-160			0.140	25
4,4-DDE	0.0684	U	0.0581	0.0584	84.9	85.3	1	10.0-160			0.530	27
4,4-DDT	0.0684	U	0.0648	0.0638	94.6	93.3	1	10.0-160			1.47	28
Dieldrin	0.0684	U	0.0706	0.0714	103	104	1	30.0-158			1.14	25
Endosulfan I	0.0684	U	0.0609	0.0615	88.9	89.9	1	31.0-155			1.06	25
Endosulfan II	0.0684	U	0.0624	0.0634	91.2	92.6	1	32.0-156			1.51	25
Endosulfan sulfate	0.0684	U	0.0615	0.0615	89.9	89.9	1	31.0-158			0.0200	24
Endrin	0.0684	U	0.0636	0.0641	92.9	93.6	1	30.0-149			0.730	25
Endrin aldehyde	0.0684	U	0.0632	0.0634	92.3	92.6	1	20.0-157			0.330	26
Endrin ketone	0.0684	U	0.0654	0.0657	95.6	96.0	1	32.0-154			0.440	23
Heptachlor	0.0684	U	0.0633	0.0646	92.5	94.4	1	18.0-160			2.11	23
Heptachlor epoxide	0.0684	U	0.0614	0.0627	89.8	91.6	1	31.0-154			2.03	25
Hexachlorobenzene	0.0684	U	0.0567	0.0589	82.9	86.1	1	26.0-146			3.76	21
Methoxychlor	0.0684	U	0.0724	0.0711	106	104	1	10.0-160			1.80	27
(S) Decachlorobiphenyl					*73.6*	*72.6*		*10.0-148*				
(S) Tetrachloro-m-xylene					*75.0*	*77.2*		*21.0-146*				

Method Blank (MB)

(MB) R3201180-3 03/05/17 03:39

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Anthracene	U		0.00728	0.0330
Acenaphthene	U		0.00737	0.0330
Acenaphthylene	U		0.00751	0.0330
Benzo(a)anthracene	U		0.00428	0.0330
Benzo(a)pyrene	U		0.00502	0.0330
Benzo(b)fluoranthene	U		0.00695	0.0330
Benzo(g,h,i)perylene	U		0.00721	0.0330
Benzo(k)fluoranthene	U		0.00506	0.0330
Chrysene	U		0.00785	0.0330
Dibenz(a,h)anthracene	U		0.00591	0.0330
Fluoranthene	U		0.00708	0.0330
Fluorene	U		0.00719	0.0330
Indeno(1,2,3-cd)pyrene	U		0.00561	0.0330
Naphthalene	U		0.00513	0.0330
Phenanthrene	U		0.00710	0.0330
Pyrene	U		0.00776	0.0330
(S) Nitrobenzene-d5	*103*			*31.0-146*
(S) 2-Fluorobiphenyl	*96.2*			*31.0-130*
(S) p-Terphenyl-d14	*109*			*20.0-127*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201180-1 03/05/17 02:49 • (LCSD) R3201180-2 03/05/17 03:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.400	0.369	0.395	92.4	98.7	51.0-126			6.60	20
Acenaphthylene	0.400	0.390	0.412	97.5	103	50.0-130			5.43	20
Anthracene	0.400	0.398	0.402	99.4	100	48.0-128			1.06	20
Benzo(a)anthracene	0.400	0.402	0.412	101	103	48.0-127			2.27	20
Benzo(b)fluoranthene	0.400	0.383	0.385	95.9	96.2	44.0-131			0.320	20
Benzo(k)fluoranthene	0.400	0.403	0.423	101	106	48.0-128			4.84	20
Benzo(g,h,i)perylene	0.400	0.418	0.429	105	107	46.0-140			2.60	20
Benzo(a)pyrene	0.400	0.401	0.412	100	103	48.0-136			2.81	20
Chrysene	0.400	0.387	0.391	96.7	97.9	49.0-130			1.18	20
Dibenz(a,h)anthracene	0.400	0.433	0.446	108	111	47.0-135			3.06	20
Fluoranthene	0.400	0.417	0.424	104	106	53.0-131			1.58	20
Fluorene	0.400	0.374	0.396	93.6	98.9	49.0-128			5.55	20
Naphthalene	0.400	0.373	0.385	93.2	96.1	53.0-120			3.06	20
Phenanthrene	0.400	0.382	0.396	95.5	99.0	47.0-129			3.57	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201180-1 03/05/17 02:49 • (LCSD) R3201180-2 03/05/17 03:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Pyrene	0.400	0.383	0.400	95.7	100	50.0-146			4.38	20
Indeno(1,2,3-cd)pyrene	0.400	0.426	0.438	106	110	49.0-136			2.84	20
(S) Nitrobenzene-d5				*99.0*	*104*	*31.0-146*				
(S) 2-Fluorobiphenyl				*95.5*	*99.7*	*31.0-130*				
(S) p-Terphenyl-d14				*105*	*110*	*20.0-127*				

L893370-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893370-01 03/05/17 11:50 • (MS) R3201180-4 03/05/17 12:15 • (MSD) R3201180-5 03/05/17 12:41

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0846	U	0.462	0.419	109	99.1	5	35.0-125			9.75	20
Acenaphthylene	0.0846	U	0.476	0.474	112	112	5	41.0-125			0.320	20
Anthracene	0.0846	U	0.448	0.411	106	97.3	5	19.0-132			8.61	20
Benzo(a)anthracene	0.0846	0.119	0.530	0.488	97.2	87.2	5	13.0-130			8.26	22
Benzo(b)fluoranthene	0.0846	0.168	0.550	0.502	90.3	79.1	5	10.0-133			8.99	25
Benzo(k)fluoranthene	0.0846	0.0468	0.500	0.463	107	98.5	5	19.0-125			7.54	26
Benzo(g,h,i)perylene	0.0846	0.150	0.721	0.526	135	88.9	5	10.0-138		J3	31.4	24
Benzo(a)pyrene	0.0846	0.131	0.544	0.490	97.7	85.0	5	10.0-139			10.4	24
Chrysene	0.0846	0.118	0.511	0.477	92.9	84.8	5	16.0-133			6.89	21
Dibenz(a,h)anthracene	0.0846	U	0.596	0.412	141	97.4	5	21.0-129	J5	J3	36.5	24
Fluoranthene	0.0846	0.189	0.581	0.506	92.8	75.0	5	10.0-142			13.9	21
Fluorene	0.0846	U	0.404	0.418	95.6	98.8	5	31.0-126			3.27	20
Naphthalene	0.0846	U	0.484	0.435	114	103	5	39.0-123			10.5	20
Phenanthrene	0.0846	0.0619	0.463	0.443	94.9	90.1	5	19.0-132			4.55	20
Pyrene	0.0846	0.158	0.700	0.504	128	81.7	5	11.0-150		J3	32.6	22
Indeno(1,2,3-cd)pyrene	0.0846	0.0965	0.673	0.492	136	93.5	5	13.0-133	J5	J3	31.1	24
(S) Nitrobenzene-d5					*123*	*113*		*31.0-146*				
(S) 2-Fluorobiphenyl					*103*	*102*		*31.0-130*				
(S) p-Terphenyl-d14					*130*	*85.1*		*20.0-127*	J1			

Method Blank (MB)

(MB) R3200182-3 03/01/17 09:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0140	0.0500
Acenaphthene	U		0.0100	0.0500
Acenaphthylene	U		0.0120	0.0500
Benzo(a)anthracene	U		0.00410	0.0500
Benzo(a)pyrene	U		0.0116	0.0500
Benzo(b)fluoranthene	0.00232	J	0.00212	0.0500
Benzo(g,h,i)perylene	0.00234	J	0.00227	0.0500
Benzo(k)fluoranthene	U		0.0136	0.0500
Chrysene	U		0.0108	0.0500
Dibenz(a,h)anthracene	U		0.00396	0.0500
Fluoranthene	U		0.0157	0.0500
Fluorene	U		0.00850	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500
Naphthalene	0.0252	J	0.0198	0.250
Phenanthrene	U		0.00820	0.0500
Pyrene	U		0.0117	0.0500
1-Methylnaphthalene	U		0.00821	0.250
2-Methylnaphthalene	U		0.00902	0.250
2-Chloronaphthalene	U		0.00647	0.250
(S) Nitrobenzene-d5	*65.7*			*31.0-160*
(S) 2-Fluorobiphenyl	*104*			*48.0-148*
(S) p-Terphenyl-d14	*99.0*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200182-1 03/01/17 08:49 • (LCSD) R3200182-2 03/01/17 09:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	2.02	2.18	101	109	64.0-142			7.63	20
Acenaphthene	2.00	1.86	1.97	92.9	98.3	66.0-132			5.70	20
Acenaphthylene	2.00	1.77	1.85	88.5	92.7	65.0-132			4.62	20
Benzo(a)anthracene	2.00	1.89	1.97	94.6	98.5	59.0-134			4.08	20
Benzo(a)pyrene	2.00	1.99	2.09	99.4	104	61.0-145			4.99	20
Benzo(b)fluoranthene	2.00	1.96	2.01	98.2	101	57.0-136			2.52	20
Benzo(g,h,i)perylene	2.00	1.93	2.02	96.7	101	54.0-140			4.13	20
Benzo(k)fluoranthene	2.00	2.02	2.17	101	109	57.0-141			7.10	20
Chrysene	2.00	2.00	2.06	99.9	103	63.0-140			3.15	20
Dibenz(a,h)anthracene	2.00	2.00	2.07	99.8	103	49.0-141			3.41	20
Fluoranthene	2.00	2.22	2.33	111	116	65.0-143			4.56	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200182-1 03/01/17 08:49 • (LCSD) R3200182-2 03/01/17 09:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	2.00	1.85	1.92	92.6	96.1	64.0-129			3.75	20
Indeno(1,2,3-cd)pyrene	2.00	2.01	2.09	100	105	53.0-141			4.31	20
Naphthalene	2.00	1.81	1.93	90.5	96.5	68.0-129			6.41	20
Phenanthrene	2.00	1.96	2.05	98.1	102	62.0-132			4.39	20
Pyrene	2.00	1.82	1.88	90.9	94.0	58.0-156			3.33	20
1-Methylnaphthalene	2.00	2.01	2.15	100	108	68.0-137			6.97	20
2-Methylnaphthalene	2.00	1.90	2.02	94.8	101	68.0-134			6.41	20
2-Chloronaphthalene	2.00	1.76	1.88	88.0	93.8	65.0-129			6.30	20
(S) Nitrobenzene-d5				*61.5*	*62.7*	*31.0-160*				
(S) 2-Fluorobiphenyl				*90.9*	*97.1*	*48.0-148*				
(S) p-Terphenyl-d14				*92.1*	*93.6*	*37.0-146*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

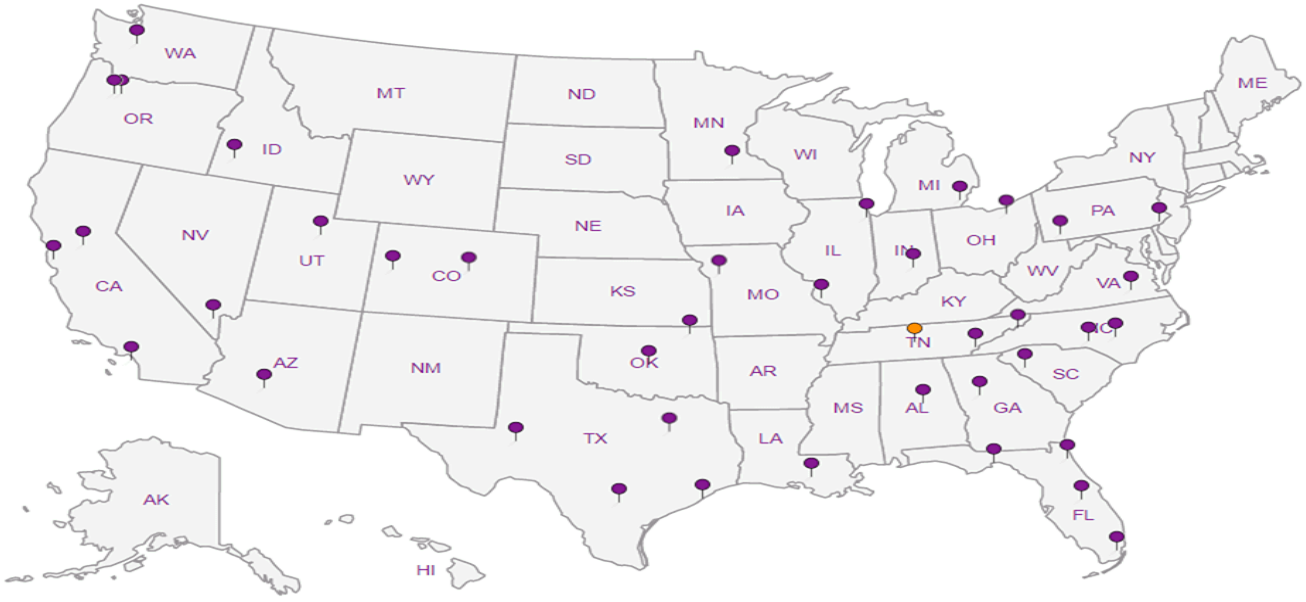
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address: SCS Engineers, 1817 Commons Cr., Yukon OK 73099

Billing Information:

Report to: Dale Daniel

Email To: ddaniel@scsengineers.com

Project Description: 1708 + 1721 NE 23rd

City/State Collected: OKC

Phone: Fax:

Client Project #

Lab Project #

Collected by (print): Dale Daniel

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: Standard

Email? ___No ___Yes
FAX? ___No ___Yes

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 892558

H219

Acctnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	PAH - 8270	RCRA 8 Metals	Organochlorine Pest/Herbicides	Full Scan VOCs - 8260	TPH - low, medium, high fractions						Rem./Contaminant	Sample # (lab only)
SS-01	G	SS	0-1	2-22	1300	1			X									01
SS-01			0-3		1300	2	X	X										02
SS-02			0-3		1400	2	X	X										03
SS-03			0-3		930	2	X	X										04
Field Blank			-		1600	3	X	X		X	X							-07
Equipment Blank			-		1600	3	X	X		X	X							-08

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

Remarks: All methods as required in OK

pH ___ Temp ___

Flow ___ Other ___

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	2-23	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 3.1 °C Bottles Received: 10

Date: 2-24-17 Time: 9:00

Hold #

Condition: (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF: X

ESC LAB SCIENCES
Cooler Receipt Form

Client:	AQUATECCH	SDG#	392558
Cooler Received/Opened On: 2/25/17		Temperature:	3.1
Received By: **Rickey Mosley**			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?			
Preservation Correct / Checked?			

ESC Lab Sciences
Non-Conformance Form

Login #892558	Client: AQUATEOCOK	Date:2/25	Evaluated by:Rickey

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments:

1. **didn't receive Equipment blank sample**
   client sent in Field blank in a 4oz and 2-2 oz. sample is liquid

Client informed by:		Call	x	Email		Voice Mail		Date:2/27/17	Time:1254
TSR Initials:cc	Client Contact: Dale Daniel								

Login Instructions:

1. **client informed**
2. **Pour up 3-40ml HCL vials and 1 -40ml unpreserved vial and log for V8260, GRO, DROOROLVI, PAHSIMLVI.**

Troy Dunlap

ESC Lab Sciences
Non-Conformance Form

Login #892558	Client: AQUATEOCOK	Date:2/25	Evaluated by:Rickey

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: didn't receive Equipment blank sample

Client informed by:		Call	c	Email		Voice Mail		Date:2/27/17	Time:1249
TSR Initials:cc	Client Contact: Dale Daniel								

Login Instructions:

Client informed.

ANALYTICAL REPORT

March 06, 2017

SCS Engineers - OK

Sample Delivery Group:	L892560
Samples Received:	02/25/2017
Project Number:	
Description:	23rd Street 1

Report To: Mr. Dale Daniel
1817 Commons Circle, Suite 1
Yukon, OK 73099

Entire Report Reviewed By:

Craig Cothron
Technical Service Representative

TABLE OF CONTENTS

SB-01 L892560-01 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 10:30 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:18	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:16	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 21:38	03/01/17 21:38	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	03/01/17 04:25	03/01/17 04:25	JHH
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1.04	03/03/17 22:39	03/04/17 13:06	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 13:04	FMB

SB-02 L892560-02 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 11:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:20	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:19	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 22:00	03/01/17 22:00	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	03/01/17 04:48	03/01/17 04:48	JHH
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1.08	03/03/17 22:39	03/04/17 13:19	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 13:27	FMB

SB-03 L892560-03 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 11:30 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:22	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:21	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 22:22	03/01/17 22:22	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	03/01/17 05:11	03/01/17 05:11	JHH
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1	03/03/17 22:39	03/04/17 10:28	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 13:49	FMB

SB-07 L892560-04 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 13:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:25	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:24	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 22:45	03/01/17 22:45	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	03/01/17 05:33	03/01/17 05:33	JHH
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1	03/03/17 22:39	03/04/17 10:41	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 14:12	FMB

DUPLICATE L892560-05 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 00:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:27	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:27	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 23:07	03/01/17 23:07	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	03/01/17 23:52	03/01/17 23:52	DWR
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1.03	03/03/17 22:39	03/04/17 10:53	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 14:35	FMB

EQUIPMENT L892560-06 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 14:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:34	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:29	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 23:29	03/01/17 23:29	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	03/02/17 00:07	03/02/17 00:07	DWR
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1	03/03/17 22:39	03/04/17 11:08	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 14:58	FMB

FIELD L892560-07 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 14:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG956485	1	02/28/17 18:18	03/02/17 11:36	NJB
Metals (ICP) by Method 6010B	WG956159	1	02/27/17 21:04	02/27/17 23:32	ST
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG955854	1	03/01/17 23:52	03/01/17 23:52	LRL
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956965	1	03/03/17 03:29	03/03/17 03:29	JHH
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1.12	03/03/17 22:39	03/04/17 11:22	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG956913	1	03/01/17 23:07	03/02/17 15:21	FMB

TRIP BLANK L892560-09 GW

Collected by: Dale Daniel | Collected date/time: 02/24/17 00:00 | Received date/time: 02/25/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG956389	1	02/28/17 23:27	02/28/17 23:27	JHH

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Technical Service Representative

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:18	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	02/27/2017 23:16	WG956159
Barium,Dissolved	271		5.00	1	02/27/2017 23:16	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:16	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:16	WG956159
Lead,Dissolved	ND		5.00	1	02/27/2017 23:16	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:16	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:16	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	200		100	1	03/01/2017 21:38	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*97.3*		*77.0-122*		*03/01/2017 21:38*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/01/2017 04:25	WG956389
Acrylonitrile	ND		10.0	1	03/01/2017 04:25	WG956389
Benzene	ND		1.00	1	03/01/2017 04:25	WG956389
Bromochloromethane	ND		1.00	1	03/01/2017 04:25	WG956389
Bromodichloromethane	ND		1.00	1	03/01/2017 04:25	WG956389
Bromoform	ND	J4	1.00	1	03/01/2017 04:25	WG956389
Bromomethane	ND		5.00	1	03/01/2017 04:25	WG956389
Carbon disulfide	ND		1.00	1	03/01/2017 04:25	WG956389
Carbon tetrachloride	ND		1.00	1	03/01/2017 04:25	WG956389
Chlorobenzene	ND		1.00	1	03/01/2017 04:25	WG956389
Chlorodibromomethane	ND		1.00	1	03/01/2017 04:25	WG956389
Chloroethane	ND		5.00	1	03/01/2017 04:25	WG956389
Chloroform	ND		5.00	1	03/01/2017 04:25	WG956389
Chloromethane	ND		2.50	1	03/01/2017 04:25	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/01/2017 04:25	WG956389
1,2-Dibromoethane	ND		1.00	1	03/01/2017 04:25	WG956389
Dibromomethane	ND		1.00	1	03/01/2017 04:25	WG956389
1,2-Dichlorobenzene	ND		1.00	1	03/01/2017 04:25	WG956389
1,4-Dichlorobenzene	ND		1.00	1	03/01/2017 04:25	WG956389
1,1-Dichloroethane	ND		1.00	1	03/01/2017 04:25	WG956389
1,2-Dichloroethane	ND		1.00	1	03/01/2017 04:25	WG956389
1,1-Dichloroethene	ND		1.00	1	03/01/2017 04:25	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	03/01/2017 04:25	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	03/01/2017 04:25	WG956389
1,2-Dichloropropane	ND		1.00	1	03/01/2017 04:25	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/01/2017 04:25	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	03/01/2017 04:25	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	03/01/2017 04:25	WG956389
Ethylbenzene	ND		1.00	1	03/01/2017 04:25	WG956389
2-Hexanone	ND		10.0	1	03/01/2017 04:25	WG956389
Iodomethane	ND		10.0	1	03/01/2017 04:25	WG956389
2-Butanone (MEK)	ND		10.0	1	03/01/2017 04:25	WG956389

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/01/2017 04:25	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/01/2017 04:25	WG956389
Styrene	ND		1.00	1	03/01/2017 04:25	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/01/2017 04:25	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/01/2017 04:25	WG956389
Tetrachloroethene	ND		1.00	1	03/01/2017 04:25	WG956389
Toluene	ND		1.00	1	03/01/2017 04:25	WG956389
1,1,1-Trichloroethane	ND		1.00	1	03/01/2017 04:25	WG956389
1,1,2-Trichloroethane	ND		1.00	1	03/01/2017 04:25	WG956389
Trichloroethene	ND		1.00	1	03/01/2017 04:25	WG956389
Trichlorofluoromethane	ND		5.00	1	03/01/2017 04:25	WG956389
1,2,3-Trichloropropane	ND		2.50	1	03/01/2017 04:25	WG956389
Vinyl acetate	ND		10.0	1	03/01/2017 04:25	WG956389
Vinyl chloride	ND		1.00	1	03/01/2017 04:25	WG956389
Xylenes, Total	ND		3.00	1	03/01/2017 04:25	WG956389
(S) Toluene-d8	*98.7*		*80.0-120*		*03/01/2017 04:25*	WG956389
(S) Dibromofluoromethane	*89.3*		*76.0-123*		*03/01/2017 04:25*	WG956389
(S) 4-Bromofluorobenzene	*101*		*80.0-120*		*03/01/2017 04:25*	WG956389

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	173		104	1.04	03/04/2017 13:06	WG956534
C28-C40 Oil Range	ND		104	1.04	03/04/2017 13:06	WG956534
(S) o-Terphenyl	*120*		*31.0-160*		*03/04/2017 13:06*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/02/2017 13:04	WG956913
Acenaphthene	0.114		0.0500	1	03/02/2017 13:04	WG956913
Acenaphthylene	ND		0.0500	1	03/02/2017 13:04	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 13:04	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 13:04	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 13:04	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 13:04	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 13:04	WG956913
Chrysene	ND		0.0500	1	03/02/2017 13:04	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 13:04	WG956913
Fluoranthene	ND		0.0500	1	03/02/2017 13:04	WG956913
Fluorene	ND		0.0500	1	03/02/2017 13:04	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 13:04	WG956913
Naphthalene	ND		0.250	1	03/02/2017 13:04	WG956913
Phenanthrene	ND		0.0500	1	03/02/2017 13:04	WG956913
Pyrene	ND		0.0500	1	03/02/2017 13:04	WG956913
1-Methylnaphthalene	ND		0.250	1	03/02/2017 13:04	WG956913
2-Methylnaphthalene	ND		0.250	1	03/02/2017 13:04	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 13:04	WG956913
(S) Nitrobenzene-d5	*148*		*31.0-160*		*03/02/2017 13:04*	WG956913
(S) 2-Fluorobiphenyl	*83.6*		*48.0-148*		*03/02/2017 13:04*	WG956913
(S) p-Terphenyl-d14	*106*		*37.0-146*		*03/02/2017 13:04*	WG956913

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:20	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	02/27/2017 23:19	WG956159
Barium,Dissolved	293		5.00	1	02/27/2017 23:19	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:19	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:19	WG956159
Lead,Dissolved	ND		5.00	1	02/27/2017 23:19	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:19	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:19	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	216		100	1	03/01/2017 22:00	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*97.5*		*77.0-122*		*03/01/2017 22:00*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/01/2017 04:48	WG956389
Acrylonitrile	ND		10.0	1	03/01/2017 04:48	WG956389
Benzene	ND		1.00	1	03/01/2017 04:48	WG956389
Bromochloromethane	ND		1.00	1	03/01/2017 04:48	WG956389
Bromodichloromethane	ND		1.00	1	03/01/2017 04:48	WG956389
Bromoform	ND	J4	1.00	1	03/01/2017 04:48	WG956389
Bromomethane	ND		5.00	1	03/01/2017 04:48	WG956389
Carbon disulfide	ND		1.00	1	03/01/2017 04:48	WG956389
Carbon tetrachloride	ND		1.00	1	03/01/2017 04:48	WG956389
Chlorobenzene	ND		1.00	1	03/01/2017 04:48	WG956389
Chlorodibromomethane	ND		1.00	1	03/01/2017 04:48	WG956389
Chloroethane	ND		5.00	1	03/01/2017 04:48	WG956389
Chloroform	ND		5.00	1	03/01/2017 04:48	WG956389
Chloromethane	ND		2.50	1	03/01/2017 04:48	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/01/2017 04:48	WG956389
1,2-Dibromoethane	ND		1.00	1	03/01/2017 04:48	WG956389
Dibromomethane	ND		1.00	1	03/01/2017 04:48	WG956389
1,2-Dichlorobenzene	ND		1.00	1	03/01/2017 04:48	WG956389
1,4-Dichlorobenzene	ND		1.00	1	03/01/2017 04:48	WG956389
1,1-Dichloroethane	ND		1.00	1	03/01/2017 04:48	WG956389
1,2-Dichloroethane	ND		1.00	1	03/01/2017 04:48	WG956389
1,1-Dichloroethene	ND		1.00	1	03/01/2017 04:48	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	03/01/2017 04:48	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	03/01/2017 04:48	WG956389
1,2-Dichloropropane	ND		1.00	1	03/01/2017 04:48	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/01/2017 04:48	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	03/01/2017 04:48	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	03/01/2017 04:48	WG956389
Ethylbenzene	ND		1.00	1	03/01/2017 04:48	WG956389
2-Hexanone	ND		10.0	1	03/01/2017 04:48	WG956389
Iodomethane	ND		10.0	1	03/01/2017 04:48	WG956389
2-Butanone (MEK)	ND		10.0	1	03/01/2017 04:48	WG956389

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/01/2017 04:48	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/01/2017 04:48	WG956389
Styrene	ND		1.00	1	03/01/2017 04:48	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/01/2017 04:48	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/01/2017 04:48	WG956389
Tetrachloroethene	ND		1.00	1	03/01/2017 04:48	WG956389
Toluene	ND		1.00	1	03/01/2017 04:48	WG956389
1,1,1-Trichloroethane	ND		1.00	1	03/01/2017 04:48	WG956389
1,1,2-Trichloroethane	ND		1.00	1	03/01/2017 04:48	WG956389
Trichloroethene	ND		1.00	1	03/01/2017 04:48	WG956389
Trichlorofluoromethane	ND		5.00	1	03/01/2017 04:48	WG956389
1,2,3-Trichloropropane	ND		2.50	1	03/01/2017 04:48	WG956389
Vinyl acetate	ND		10.0	1	03/01/2017 04:48	WG956389
Vinyl chloride	ND		1.00	1	03/01/2017 04:48	WG956389
Xylenes, Total	ND		3.00	1	03/01/2017 04:48	WG956389
(S) Toluene-d8	*99.3*		*80.0-120*		*03/01/2017 04:48*	WG956389
(S) Dibromofluoromethane	*88.3*		*76.0-123*		*03/01/2017 04:48*	WG956389
(S) 4-Bromofluorobenzene	*103*		*80.0-120*		*03/01/2017 04:48*	WG956389

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	119		108	1.08	03/04/2017 13:19	WG956534
C28-C40 Oil Range	ND		108	1.08	03/04/2017 13:19	WG956534
(S) o-Terphenyl	*111*		*31.0-160*		*03/04/2017 13:19*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/02/2017 13:27	WG956913
Acenaphthene	0.113		0.0500	1	03/02/2017 13:27	WG956913
Acenaphthylene	ND		0.0500	1	03/02/2017 13:27	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 13:27	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 13:27	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 13:27	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 13:27	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 13:27	WG956913
Chrysene	ND		0.0500	1	03/02/2017 13:27	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 13:27	WG956913
Fluoranthene	ND		0.0500	1	03/02/2017 13:27	WG956913
Fluorene	ND		0.0500	1	03/02/2017 13:27	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 13:27	WG956913
Naphthalene	ND		0.250	1	03/02/2017 13:27	WG956913
Phenanthrene	ND		0.0500	1	03/02/2017 13:27	WG956913
Pyrene	ND		0.0500	1	03/02/2017 13:27	WG956913
1-Methylnaphthalene	ND		0.250	1	03/02/2017 13:27	WG956913
2-Methylnaphthalene	ND		0.250	1	03/02/2017 13:27	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 13:27	WG956913
(S) Nitrobenzene-d5	*154*		*31.0-160*		*03/02/2017 13:27*	WG956913
(S) 2-Fluorobiphenyl	*86.7*		*48.0-148*		*03/02/2017 13:27*	WG956913
(S) p-Terphenyl-d14	*104*		*37.0-146*		*03/02/2017 13:27*	WG956913

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:22	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	02/27/2017 23:21	WG956159
Barium,Dissolved	335		5.00	1	02/27/2017 23:21	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:21	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:21	WG956159
Lead,Dissolved	9.40		5.00	1	02/27/2017 23:21	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:21	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:21	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	5640		100	1	03/01/2017 22:22	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*114*		*77.0-122*		*03/01/2017 22:22*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	70.0		50.0	1	03/01/2017 05:11	WG956389
Acrylonitrile	ND		10.0	1	03/01/2017 05:11	WG956389
Benzene	ND		1.00	1	03/01/2017 05:11	WG956389
Bromochloromethane	ND		1.00	1	03/01/2017 05:11	WG956389
Bromodichloromethane	ND		1.00	1	03/01/2017 05:11	WG956389
Bromoform	ND	J4	1.00	1	03/01/2017 05:11	WG956389
Bromomethane	ND		5.00	1	03/01/2017 05:11	WG956389
Carbon disulfide	ND		1.00	1	03/01/2017 05:11	WG956389
Carbon tetrachloride	ND		1.00	1	03/01/2017 05:11	WG956389
Chlorobenzene	ND		1.00	1	03/01/2017 05:11	WG956389
Chlorodibromomethane	ND		1.00	1	03/01/2017 05:11	WG956389
Chloroethane	ND		5.00	1	03/01/2017 05:11	WG956389
Chloroform	ND		5.00	1	03/01/2017 05:11	WG956389
Chloromethane	ND		2.50	1	03/01/2017 05:11	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/01/2017 05:11	WG956389
1,2-Dibromoethane	ND		1.00	1	03/01/2017 05:11	WG956389
Dibromomethane	ND		1.00	1	03/01/2017 05:11	WG956389
1,2-Dichlorobenzene	ND		1.00	1	03/01/2017 05:11	WG956389
1,4-Dichlorobenzene	ND		1.00	1	03/01/2017 05:11	WG956389
1,1-Dichloroethane	ND		1.00	1	03/01/2017 05:11	WG956389
1,2-Dichloroethane	ND		1.00	1	03/01/2017 05:11	WG956389
1,1-Dichloroethene	ND		1.00	1	03/01/2017 05:11	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	03/01/2017 05:11	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	03/01/2017 05:11	WG956389
1,2-Dichloropropane	ND		1.00	1	03/01/2017 05:11	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/01/2017 05:11	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	03/01/2017 05:11	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	03/01/2017 05:11	WG956389
Ethylbenzene	ND		1.00	1	03/01/2017 05:11	WG956389
2-Hexanone	ND		10.0	1	03/01/2017 05:11	WG956389
Iodomethane	ND		10.0	1	03/01/2017 05:11	WG956389
2-Butanone (MEK)	ND		10.0	1	03/01/2017 05:11	WG956389

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/01/2017 05:11	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/01/2017 05:11	WG956389
Styrene	ND		1.00	1	03/01/2017 05:11	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/01/2017 05:11	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/01/2017 05:11	WG956389
Tetrachloroethene	ND		1.00	1	03/01/2017 05:11	WG956389
Toluene	ND		1.00	1	03/01/2017 05:11	WG956389
1,1,1-Trichloroethane	ND		1.00	1	03/01/2017 05:11	WG956389
1,1,2-Trichloroethane	ND		1.00	1	03/01/2017 05:11	WG956389
Trichloroethene	ND		1.00	1	03/01/2017 05:11	WG956389
Trichlorofluoromethane	ND		5.00	1	03/01/2017 05:11	WG956389
1,2,3-Trichloropropane	ND		2.50	1	03/01/2017 05:11	WG956389
Vinyl acetate	ND		10.0	1	03/01/2017 05:11	WG956389
Vinyl chloride	ND		1.00	1	03/01/2017 05:11	WG956389
Xylenes, Total	ND		3.00	1	03/01/2017 05:11	WG956389
(S) Toluene-d8	*99.5*		*80.0-120*		*03/01/2017 05:11*	WG956389
(S) Dibromofluoromethane	*83.5*		*76.0-123*		*03/01/2017 05:11*	WG956389
(S) 4-Bromofluorobenzene	*78.9*	J2	*80.0-120*		*03/01/2017 05:11*	WG956389

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2210		100	1	03/04/2017 10:28	WG956534
C28-C40 Oil Range	ND		100	1	03/04/2017 10:28	WG956534
(S) o-Terphenyl	*98.9*		*31.0-160*		*03/04/2017 10:28*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	0.0613		0.0500	1	03/02/2017 13:49	WG956913
Acenaphthene	0.524		0.0500	1	03/02/2017 13:49	WG956913
Acenaphthylene	0.137		0.0500	1	03/02/2017 13:49	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 13:49	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 13:49	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 13:49	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 13:49	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 13:49	WG956913
Chrysene	ND		0.0500	1	03/02/2017 13:49	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 13:49	WG956913
Fluoranthene	0.0956		0.0500	1	03/02/2017 13:49	WG956913
Fluorene	0.147		0.0500	1	03/02/2017 13:49	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 13:49	WG956913
Naphthalene	8.65		0.250	1	03/02/2017 13:49	WG956913
Phenanthrene	0.211		0.0500	1	03/02/2017 13:49	WG956913
Pyrene	0.0593		0.0500	1	03/02/2017 13:49	WG956913
1-Methylnaphthalene	31.5		0.250	1	03/02/2017 13:49	WG956913
2-Methylnaphthalene	9.59		0.250	1	03/02/2017 13:49	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 13:49	WG956913
(S) Nitrobenzene-d5	*180*	J1	*31.0-160*		*03/02/2017 13:49*	WG956913
(S) 2-Fluorobiphenyl	*76.6*		*48.0-148*		*03/02/2017 13:49*	WG956913
(S) p-Terphenyl-d14	*110*		*37.0-146*		*03/02/2017 13:49*	WG956913

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:25	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	10.3		10.0	1	02/27/2017 23:24	WG956159
Barium,Dissolved	53.4		5.00	1	02/27/2017 23:24	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:24	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:24	WG956159
Lead,Dissolved	ND		5.00	1	02/27/2017 23:24	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:24	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:24	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	ND		100	1	03/01/2017 22:45	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*96.4*		*77.0-122*		*03/01/2017 22:45*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/01/2017 05:33	WG956389
Acrylonitrile	ND		10.0	1	03/01/2017 05:33	WG956389
Benzene	ND		1.00	1	03/01/2017 05:33	WG956389
Bromochloromethane	ND		1.00	1	03/01/2017 05:33	WG956389
Bromodichloromethane	ND		1.00	1	03/01/2017 05:33	WG956389
Bromoform	ND	J4	1.00	1	03/01/2017 05:33	WG956389
Bromomethane	ND		5.00	1	03/01/2017 05:33	WG956389
Carbon disulfide	ND		1.00	1	03/01/2017 05:33	WG956389
Carbon tetrachloride	ND		1.00	1	03/01/2017 05:33	WG956389
Chlorobenzene	ND		1.00	1	03/01/2017 05:33	WG956389
Chlorodibromomethane	ND		1.00	1	03/01/2017 05:33	WG956389
Chloroethane	ND		5.00	1	03/01/2017 05:33	WG956389
Chloroform	ND		5.00	1	03/01/2017 05:33	WG956389
Chloromethane	ND		2.50	1	03/01/2017 05:33	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/01/2017 05:33	WG956389
1,2-Dibromoethane	ND		1.00	1	03/01/2017 05:33	WG956389
Dibromomethane	ND		1.00	1	03/01/2017 05:33	WG956389
1,2-Dichlorobenzene	ND		1.00	1	03/01/2017 05:33	WG956389
1,4-Dichlorobenzene	ND		1.00	1	03/01/2017 05:33	WG956389
1,1-Dichloroethane	ND		1.00	1	03/01/2017 05:33	WG956389
1,2-Dichloroethane	ND		1.00	1	03/01/2017 05:33	WG956389
1,1-Dichloroethene	ND		1.00	1	03/01/2017 05:33	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	03/01/2017 05:33	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	03/01/2017 05:33	WG956389
1,2-Dichloropropane	ND		1.00	1	03/01/2017 05:33	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/01/2017 05:33	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	03/01/2017 05:33	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	03/01/2017 05:33	WG956389
Ethylbenzene	ND		1.00	1	03/01/2017 05:33	WG956389
2-Hexanone	ND		10.0	1	03/01/2017 05:33	WG956389
Iodomethane	ND		10.0	1	03/01/2017 05:33	WG956389
2-Butanone (MEK)	ND		10.0	1	03/01/2017 05:33	WG956389

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/01/2017 05:33	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/01/2017 05:33	WG956389
Styrene	ND		1.00	1	03/01/2017 05:33	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/01/2017 05:33	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/01/2017 05:33	WG956389
Tetrachloroethene	ND		1.00	1	03/01/2017 05:33	WG956389
Toluene	ND		1.00	1	03/01/2017 05:33	WG956389
1,1,1-Trichloroethane	ND		1.00	1	03/01/2017 05:33	WG956389
1,1,2-Trichloroethane	ND		1.00	1	03/01/2017 05:33	WG956389
Trichloroethene	ND		1.00	1	03/01/2017 05:33	WG956389
Trichlorofluoromethane	ND		5.00	1	03/01/2017 05:33	WG956389
1,2,3-Trichloropropane	ND		2.50	1	03/01/2017 05:33	WG956389
Vinyl acetate	ND		10.0	1	03/01/2017 05:33	WG956389
Vinyl chloride	ND		1.00	1	03/01/2017 05:33	WG956389
Xylenes, Total	ND		3.00	1	03/01/2017 05:33	WG956389
(S) Toluene-d8	*99.6*		*80.0-120*		*03/01/2017 05:33*	WG956389
(S) Dibromofluoromethane	*81.4*		*76.0-123*		*03/01/2017 05:33*	WG956389
(S) 4-Bromofluorobenzene	*101*		*80.0-120*		*03/01/2017 05:33*	WG956389

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	409		100	1	03/04/2017 10:41	WG956534
C28-C40 Oil Range	134		100	1	03/04/2017 10:41	WG956534
(S) o-Terphenyl	*122*		*31.0-160*		*03/04/2017 10:41*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/02/2017 14:12	WG956913
Acenaphthene	ND		0.0500	1	03/02/2017 14:12	WG956913
Acenaphthylene	ND		0.0500	1	03/02/2017 14:12	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 14:12	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 14:12	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 14:12	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 14:12	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 14:12	WG956913
Chrysene	ND		0.0500	1	03/02/2017 14:12	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 14:12	WG956913
Fluoranthene	ND		0.0500	1	03/02/2017 14:12	WG956913
Fluorene	ND		0.0500	1	03/02/2017 14:12	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 14:12	WG956913
Naphthalene	ND		0.250	1	03/02/2017 14:12	WG956913
Phenanthrene	ND		0.0500	1	03/02/2017 14:12	WG956913
Pyrene	ND		0.0500	1	03/02/2017 14:12	WG956913
1-Methylnaphthalene	ND		0.250	1	03/02/2017 14:12	WG956913
2-Methylnaphthalene	ND		0.250	1	03/02/2017 14:12	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 14:12	WG956913
(S) Nitrobenzene-d5	*151*		*31.0-160*		*03/02/2017 14:12*	WG956913
(S) 2-Fluorobiphenyl	*85.7*		*48.0-148*		*03/02/2017 14:12*	WG956913
(S) p-Terphenyl-d14	*105*		*37.0-146*		*03/02/2017 14:12*	WG956913

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:27	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	02/27/2017 23:27	WG956159
Barium,Dissolved	237		5.00	1	02/27/2017 23:27	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:27	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:27	WG956159
Lead,Dissolved	7.81		5.00	1	02/27/2017 23:27	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:27	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:27	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	6470		100	1	03/01/2017 23:07	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*117*		*77.0-122*		*03/01/2017 23:07*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/01/2017 23:52	WG956389
Acrylonitrile	ND		10.0	1	03/01/2017 23:52	WG956389
Benzene	ND		1.00	1	03/01/2017 23:52	WG956389
Bromochloromethane	ND		1.00	1	03/01/2017 23:52	WG956389
Bromodichloromethane	ND		1.00	1	03/01/2017 23:52	WG956389
Bromoform	ND	J4	1.00	1	03/01/2017 23:52	WG956389
Bromomethane	ND		5.00	1	03/01/2017 23:52	WG956389
Carbon disulfide	ND		1.00	1	03/01/2017 23:52	WG956389
Carbon tetrachloride	ND		1.00	1	03/01/2017 23:52	WG956389
Chlorobenzene	ND		1.00	1	03/01/2017 23:52	WG956389
Chlorodibromomethane	ND		1.00	1	03/01/2017 23:52	WG956389
Chloroethane	ND		5.00	1	03/01/2017 23:52	WG956389
Chloroform	ND		5.00	1	03/01/2017 23:52	WG956389
Chloromethane	ND		2.50	1	03/01/2017 23:52	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/01/2017 23:52	WG956389
1,2-Dibromoethane	ND		1.00	1	03/01/2017 23:52	WG956389
Dibromomethane	ND		1.00	1	03/01/2017 23:52	WG956389
1,2-Dichlorobenzene	ND		1.00	1	03/01/2017 23:52	WG956389
1,4-Dichlorobenzene	ND		1.00	1	03/01/2017 23:52	WG956389
1,1-Dichloroethane	ND		1.00	1	03/01/2017 23:52	WG956389
1,2-Dichloroethane	ND		1.00	1	03/01/2017 23:52	WG956389
1,1-Dichloroethene	ND		1.00	1	03/01/2017 23:52	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	03/01/2017 23:52	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	03/01/2017 23:52	WG956389
1,2-Dichloropropane	ND		1.00	1	03/01/2017 23:52	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/01/2017 23:52	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	03/01/2017 23:52	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	03/01/2017 23:52	WG956389
Ethylbenzene	ND		1.00	1	03/01/2017 23:52	WG956389
2-Hexanone	ND		10.0	1	03/01/2017 23:52	WG956389
Iodomethane	ND		10.0	1	03/01/2017 23:52	WG956389
2-Butanone (MEK)	ND		10.0	1	03/01/2017 23:52	WG956389

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/01/2017 23:52	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/01/2017 23:52	WG956389
Styrene	ND		1.00	1	03/01/2017 23:52	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/01/2017 23:52	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/01/2017 23:52	WG956389
Tetrachloroethene	ND		1.00	1	03/01/2017 23:52	WG956389
Toluene	ND		1.00	1	03/01/2017 23:52	WG956389
1,1,1-Trichloroethane	ND		1.00	1	03/01/2017 23:52	WG956389
1,1,2-Trichloroethane	ND		1.00	1	03/01/2017 23:52	WG956389
Trichloroethene	ND		1.00	1	03/01/2017 23:52	WG956389
Trichlorofluoromethane	ND		5.00	1	03/01/2017 23:52	WG956389
1,2,3-Trichloropropane	ND		2.50	1	03/01/2017 23:52	WG956389
Vinyl acetate	ND		10.0	1	03/01/2017 23:52	WG956389
Vinyl chloride	ND		1.00	1	03/01/2017 23:52	WG956389
Xylenes, Total	ND		3.00	1	03/01/2017 23:52	WG956389
(S) Toluene-d8	*108*		*80.0-120*		*03/01/2017 23:52*	WG956389
(S) Dibromofluoromethane	*102*		*76.0-123*		*03/01/2017 23:52*	WG956389
(S) 4-Bromofluorobenzene	*92.5*		*80.0-120*		*03/01/2017 23:52*	WG956389

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2440		103	1.03	03/04/2017 10:53	WG956534
C28-C40 Oil Range	ND		103	1.03	03/04/2017 10:53	WG956534
(S) o-Terphenyl	*95.8*		*31.0-160*		*03/04/2017 10:53*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	0.0695		0.0500	1	03/02/2017 14:35	WG956913
Acenaphthene	0.549		0.0500	1	03/02/2017 14:35	WG956913
Acenaphthylene	0.150		0.0500	1	03/02/2017 14:35	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 14:35	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 14:35	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 14:35	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 14:35	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 14:35	WG956913
Chrysene	ND		0.0500	1	03/02/2017 14:35	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 14:35	WG956913
Fluoranthene	0.154		0.0500	1	03/02/2017 14:35	WG956913
Fluorene	0.160		0.0500	1	03/02/2017 14:35	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 14:35	WG956913
Naphthalene	9.13		0.250	1	03/02/2017 14:35	WG956913
Phenanthrene	0.243		0.0500	1	03/02/2017 14:35	WG956913
Pyrene	0.104		0.0500	1	03/02/2017 14:35	WG956913
1-Methylnaphthalene	32.6		0.250	1	03/02/2017 14:35	WG956913
2-Methylnaphthalene	10.5		0.250	1	03/02/2017 14:35	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 14:35	WG956913
(S) Nitrobenzene-d5	*164*	J1	*31.0-160*		*03/02/2017 14:35*	WG956913
(S) 2-Fluorobiphenyl	*77.4*		*48.0-148*		*03/02/2017 14:35*	WG956913
(S) p-Terphenyl-d14	*105*		*37.0-146*		*03/02/2017 14:35*	WG956913

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:34	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	02/27/2017 23:29	WG956159
Barium,Dissolved	ND		5.00	1	02/27/2017 23:29	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:29	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:29	WG956159
Lead,Dissolved	ND		5.00	1	02/27/2017 23:29	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:29	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:29	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	ND		100	1	03/01/2017 23:29	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*96.8*		*77.0-122*		*03/01/2017 23:29*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/02/2017 00:07	WG956389
Acrylonitrile	ND		10.0	1	03/02/2017 00:07	WG956389
Benzene	ND		1.00	1	03/02/2017 00:07	WG956389
Bromochloromethane	ND		1.00	1	03/02/2017 00:07	WG956389
Bromodichloromethane	ND		1.00	1	03/02/2017 00:07	WG956389
Bromoform	ND	J4	1.00	1	03/02/2017 00:07	WG956389
Bromomethane	ND		5.00	1	03/02/2017 00:07	WG956389
Carbon disulfide	ND		1.00	1	03/02/2017 00:07	WG956389
Carbon tetrachloride	ND		1.00	1	03/02/2017 00:07	WG956389
Chlorobenzene	ND		1.00	1	03/02/2017 00:07	WG956389
Chlorodibromomethane	ND		1.00	1	03/02/2017 00:07	WG956389
Chloroethane	ND		5.00	1	03/02/2017 00:07	WG956389
Chloroform	ND		5.00	1	03/02/2017 00:07	WG956389
Chloromethane	ND		2.50	1	03/02/2017 00:07	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/02/2017 00:07	WG956389
1,2-Dibromoethane	ND		1.00	1	03/02/2017 00:07	WG956389
Dibromomethane	ND		1.00	1	03/02/2017 00:07	WG956389
1,2-Dichlorobenzene	ND		1.00	1	03/02/2017 00:07	WG956389
1,4-Dichlorobenzene	ND		1.00	1	03/02/2017 00:07	WG956389
1,1-Dichloroethane	ND		1.00	1	03/02/2017 00:07	WG956389
1,2-Dichloroethane	ND		1.00	1	03/02/2017 00:07	WG956389
1,1-Dichloroethene	ND		1.00	1	03/02/2017 00:07	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	03/02/2017 00:07	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	03/02/2017 00:07	WG956389
1,2-Dichloropropane	ND		1.00	1	03/02/2017 00:07	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/02/2017 00:07	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	03/02/2017 00:07	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	03/02/2017 00:07	WG956389
Ethylbenzene	ND		1.00	1	03/02/2017 00:07	WG956389
2-Hexanone	ND		10.0	1	03/02/2017 00:07	WG956389
Iodomethane	ND		10.0	1	03/02/2017 00:07	WG956389
2-Butanone (MEK)	ND		10.0	1	03/02/2017 00:07	WG956389

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/02/2017 00:07	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/02/2017 00:07	WG956389
Styrene	ND		1.00	1	03/02/2017 00:07	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/02/2017 00:07	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/02/2017 00:07	WG956389
Tetrachloroethene	ND		1.00	1	03/02/2017 00:07	WG956389
Toluene	ND		1.00	1	03/02/2017 00:07	WG956389
1,1,1-Trichloroethane	ND		1.00	1	03/02/2017 00:07	WG956389
1,1,2-Trichloroethane	ND		1.00	1	03/02/2017 00:07	WG956389
Trichloroethene	ND		1.00	1	03/02/2017 00:07	WG956389
Trichlorofluoromethane	ND		5.00	1	03/02/2017 00:07	WG956389
1,2,3-Trichloropropane	ND		2.50	1	03/02/2017 00:07	WG956389
Vinyl acetate	ND		10.0	1	03/02/2017 00:07	WG956389
Vinyl chloride	ND		1.00	1	03/02/2017 00:07	WG956389
Xylenes, Total	ND		3.00	1	03/02/2017 00:07	WG956389
(S) Toluene-d8	*104*		*80.0-120*		*03/02/2017 00:07*	WG956389
(S) Dibromofluoromethane	*102*		*76.0-123*		*03/02/2017 00:07*	WG956389
(S) 4-Bromofluorobenzene	*109*		*80.0-120*		*03/02/2017 00:07*	WG956389

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		100	1	03/04/2017 11:08	WG956534
C28-C40 Oil Range	ND		100	1	03/04/2017 11:08	WG956534
(S) o-Terphenyl	*115*		*31.0-160*		*03/04/2017 11:08*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/02/2017 14:58	WG956913
Acenaphthene	ND		0.0500	1	03/02/2017 14:58	WG956913
Acenaphthylene	ND		0.0500	1	03/02/2017 14:58	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 14:58	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 14:58	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 14:58	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 14:58	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 14:58	WG956913
Chrysene	ND		0.0500	1	03/02/2017 14:58	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 14:58	WG956913
Fluoranthene	ND		0.0500	1	03/02/2017 14:58	WG956913
Fluorene	ND		0.0500	1	03/02/2017 14:58	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 14:58	WG956913
Naphthalene	ND		0.250	1	03/02/2017 14:58	WG956913
Phenanthrene	ND		0.0500	1	03/02/2017 14:58	WG956913
Pyrene	ND		0.0500	1	03/02/2017 14:58	WG956913
1-Methylnaphthalene	ND		0.250	1	03/02/2017 14:58	WG956913
2-Methylnaphthalene	ND		0.250	1	03/02/2017 14:58	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 14:58	WG956913
(S) Nitrobenzene-d5	*144*		*31.0-160*		*03/02/2017 14:58*	WG956913
(S) 2-Fluorobiphenyl	*86.2*		*48.0-148*		*03/02/2017 14:58*	WG956913
(S) p-Terphenyl-d14	*111*		*37.0-146*		*03/02/2017 14:58*	WG956913

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND		0.200	1	03/02/2017 11:36	WG956485

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	02/27/2017 23:32	WG956159
Barium,Dissolved	ND		5.00	1	02/27/2017 23:32	WG956159
Cadmium,Dissolved	ND		2.00	1	02/27/2017 23:32	WG956159
Chromium,Dissolved	ND		10.0	1	02/27/2017 23:32	WG956159
Lead,Dissolved	ND		5.00	1	02/27/2017 23:32	WG956159
Selenium,Dissolved	ND		10.0	1	02/27/2017 23:32	WG956159
Silver,Dissolved	ND		5.00	1	02/27/2017 23:32	WG956159

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	ND		100	1	03/01/2017 23:52	WG955854
(S) a,a,a-Trifluorotoluene(FID)	*96.6*		*77.0-122*		*03/01/2017 23:52*	WG955854

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/03/2017 03:29	WG956965
Acrylonitrile	ND		10.0	1	03/03/2017 03:29	WG956965
Benzene	ND		1.00	1	03/03/2017 03:29	WG956965
Bromochloromethane	ND		1.00	1	03/03/2017 03:29	WG956965
Bromodichloromethane	ND		1.00	1	03/03/2017 03:29	WG956965
Bromoform	ND		1.00	1	03/03/2017 03:29	WG956965
Bromomethane	ND		5.00	1	03/03/2017 03:29	WG956965
Carbon disulfide	ND		1.00	1	03/03/2017 03:29	WG956965
Carbon tetrachloride	ND		1.00	1	03/03/2017 03:29	WG956965
Chlorobenzene	ND		1.00	1	03/03/2017 03:29	WG956965
Chlorodibromomethane	ND		1.00	1	03/03/2017 03:29	WG956965
Chloroethane	ND		5.00	1	03/03/2017 03:29	WG956965
Chloroform	ND		5.00	1	03/03/2017 03:29	WG956965
Chloromethane	ND		2.50	1	03/03/2017 03:29	WG956965
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/03/2017 03:29	WG956965
1,2-Dibromoethane	ND		1.00	1	03/03/2017 03:29	WG956965
Dibromomethane	ND		1.00	1	03/03/2017 03:29	WG956965
1,2-Dichlorobenzene	ND		1.00	1	03/03/2017 03:29	WG956965
1,4-Dichlorobenzene	ND		1.00	1	03/03/2017 03:29	WG956965
1,1-Dichloroethane	ND		1.00	1	03/03/2017 03:29	WG956965
1,2-Dichloroethane	ND		1.00	1	03/03/2017 03:29	WG956965
1,1-Dichloroethene	ND		1.00	1	03/03/2017 03:29	WG956965
cis-1,2-Dichloroethene	ND		1.00	1	03/03/2017 03:29	WG956965
trans-1,2-Dichloroethene	ND		1.00	1	03/03/2017 03:29	WG956965
1,2-Dichloropropane	ND		1.00	1	03/03/2017 03:29	WG956965
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/03/2017 03:29	WG956965
cis-1,3-Dichloropropene	ND		1.00	1	03/03/2017 03:29	WG956965
trans-1,3-Dichloropropene	ND		1.00	1	03/03/2017 03:29	WG956965
Ethylbenzene	ND		1.00	1	03/03/2017 03:29	WG956965
2-Hexanone	ND		10.0	1	03/03/2017 03:29	WG956965
Iodomethane	ND		10.0	1	03/03/2017 03:29	WG956965
2-Butanone (MEK)	ND		10.0	1	03/03/2017 03:29	WG956965

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		5.00	1	03/03/2017 03:29	WG956965
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/03/2017 03:29	WG956965
Styrene	ND		1.00	1	03/03/2017 03:29	WG956965
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/03/2017 03:29	WG956965
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/03/2017 03:29	WG956965
Tetrachloroethene	ND		1.00	1	03/03/2017 03:29	WG956965
Toluene	ND		1.00	1	03/03/2017 03:29	WG956965
1,1,1-Trichloroethane	ND		1.00	1	03/03/2017 03:29	WG956965
1,1,2-Trichloroethane	ND		1.00	1	03/03/2017 03:29	WG956965
Trichloroethene	ND		1.00	1	03/03/2017 03:29	WG956965
Trichlorofluoromethane	ND		5.00	1	03/03/2017 03:29	WG956965
1,2,3-Trichloropropane	ND		2.50	1	03/03/2017 03:29	WG956965
Vinyl acetate	ND		10.0	1	03/03/2017 03:29	WG956965
Vinyl chloride	ND		1.00	1	03/03/2017 03:29	WG956965
Xylenes, Total	ND		3.00	1	03/03/2017 03:29	WG956965
(S) Toluene-d8	*102*		*80.0-120*		*03/03/2017 03:29*	WG956965
(S) Dibromofluoromethane	*97.1*		*76.0-123*		*03/03/2017 03:29*	WG956965
(S) 4-Bromofluorobenzene	*102*		*80.0-120*		*03/03/2017 03:29*	WG956965

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		112	1.12	03/04/2017 11:22	WG956534
C28-C40 Oil Range	ND		112	1.12	03/04/2017 11:22	WG956534
(S) o-Terphenyl	*120*		*31.0-160*		*03/04/2017 11:22*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0500	1	03/02/2017 15:21	WG956913
Acenaphthene	ND		0.0500	1	03/02/2017 15:21	WG956913
Acenaphthylene	ND		0.0500	1	03/02/2017 15:21	WG956913
Benzo(a)anthracene	ND		0.0500	1	03/02/2017 15:21	WG956913
Benzo(a)pyrene	ND		0.0500	1	03/02/2017 15:21	WG956913
Benzo(b)fluoranthene	ND		0.0500	1	03/02/2017 15:21	WG956913
Benzo(g,h,i)perylene	ND		0.0500	1	03/02/2017 15:21	WG956913
Benzo(k)fluoranthene	ND		0.0500	1	03/02/2017 15:21	WG956913
Chrysene	ND		0.0500	1	03/02/2017 15:21	WG956913
Dibenz(a,h)anthracene	ND		0.0500	1	03/02/2017 15:21	WG956913
Fluoranthene	ND		0.0500	1	03/02/2017 15:21	WG956913
Fluorene	ND		0.0500	1	03/02/2017 15:21	WG956913
Indeno(1,2,3-cd)pyrene	ND		0.0500	1	03/02/2017 15:21	WG956913
Naphthalene	ND		0.250	1	03/02/2017 15:21	WG956913
Phenanthrene	ND		0.0500	1	03/02/2017 15:21	WG956913
Pyrene	ND		0.0500	1	03/02/2017 15:21	WG956913
1-Methylnaphthalene	ND		0.250	1	03/02/2017 15:21	WG956913
2-Methylnaphthalene	ND		0.250	1	03/02/2017 15:21	WG956913
2-Chloronaphthalene	ND		0.250	1	03/02/2017 15:21	WG956913
(S) Nitrobenzene-d5	*150*		*31.0-160*		*03/02/2017 15:21*	WG956913
(S) 2-Fluorobiphenyl	*86.1*		*48.0-148*		*03/02/2017 15:21*	WG956913
(S) p-Terphenyl-d14	*118*		*37.0-146*		*03/02/2017 15:21*	WG956913

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		50.0	1	02/28/2017 23:27	WG956389
Acrylonitrile	ND		10.0	1	02/28/2017 23:27	WG956389
Benzene	ND		1.00	1	02/28/2017 23:27	WG956389
Bromochloromethane	ND		1.00	1	02/28/2017 23:27	WG956389
Bromodichloromethane	ND		1.00	1	02/28/2017 23:27	WG956389
Bromoform	ND	J4	1.00	1	02/28/2017 23:27	WG956389
Bromomethane	ND		5.00	1	02/28/2017 23:27	WG956389
Carbon disulfide	ND		1.00	1	02/28/2017 23:27	WG956389
Carbon tetrachloride	ND		1.00	1	02/28/2017 23:27	WG956389
Chlorobenzene	ND		1.00	1	02/28/2017 23:27	WG956389
Chlorodibromomethane	ND		1.00	1	02/28/2017 23:27	WG956389
Chloroethane	ND		5.00	1	02/28/2017 23:27	WG956389
Chloroform	ND		5.00	1	02/28/2017 23:27	WG956389
Chloromethane	ND		2.50	1	02/28/2017 23:27	WG956389
1,2-Dibromo-3-Chloropropane	ND		5.00	1	02/28/2017 23:27	WG956389
1,2-Dibromoethane	ND		1.00	1	02/28/2017 23:27	WG956389
Dibromomethane	ND		1.00	1	02/28/2017 23:27	WG956389
1,2-Dichlorobenzene	ND		1.00	1	02/28/2017 23:27	WG956389
1,4-Dichlorobenzene	ND		1.00	1	02/28/2017 23:27	WG956389
1,1-Dichloroethane	ND		1.00	1	02/28/2017 23:27	WG956389
1,2-Dichloroethane	ND		1.00	1	02/28/2017 23:27	WG956389
1,1-Dichloroethene	ND		1.00	1	02/28/2017 23:27	WG956389
cis-1,2-Dichloroethene	ND		1.00	1	02/28/2017 23:27	WG956389
trans-1,2-Dichloroethene	ND		1.00	1	02/28/2017 23:27	WG956389
1,2-Dichloropropane	ND		1.00	1	02/28/2017 23:27	WG956389
trans-1,4-Dichloro-2-butene	ND		2.50	1	02/28/2017 23:27	WG956389
cis-1,3-Dichloropropene	ND		1.00	1	02/28/2017 23:27	WG956389
trans-1,3-Dichloropropene	ND		1.00	1	02/28/2017 23:27	WG956389
Ethylbenzene	ND		1.00	1	02/28/2017 23:27	WG956389
2-Hexanone	ND		10.0	1	02/28/2017 23:27	WG956389
Iodomethane	ND		10.0	1	02/28/2017 23:27	WG956389
2-Butanone (MEK)	ND		10.0	1	02/28/2017 23:27	WG956389
Methylene Chloride	ND		5.00	1	02/28/2017 23:27	WG956389
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	02/28/2017 23:27	WG956389
Styrene	ND		1.00	1	02/28/2017 23:27	WG956389
1,1,1,2-Tetrachloroethane	ND		1.00	1	02/28/2017 23:27	WG956389
1,1,2,2-Tetrachloroethane	ND		1.00	1	02/28/2017 23:27	WG956389
Tetrachloroethene	ND		1.00	1	02/28/2017 23:27	WG956389
Toluene	ND		1.00	1	02/28/2017 23:27	WG956389
1,1,1-Trichloroethane	ND		1.00	1	02/28/2017 23:27	WG956389
1,1,2-Trichloroethane	ND		1.00	1	02/28/2017 23:27	WG956389
Trichloroethene	ND		1.00	1	02/28/2017 23:27	WG956389
Trichlorofluoromethane	ND		5.00	1	02/28/2017 23:27	WG956389
1,2,3-Trichloropropane	ND		2.50	1	02/28/2017 23:27	WG956389
Vinyl acetate	ND		10.0	1	02/28/2017 23:27	WG956389
Vinyl chloride	ND		1.00	1	02/28/2017 23:27	WG956389
Xylenes, Total	ND		3.00	1	02/28/2017 23:27	WG956389
(S) Toluene-d8	*100*		*80.0-120*		*02/28/2017 23:27*	WG956389
(S) Dibromofluoromethane	*92.0*		*76.0-123*		*02/28/2017 23:27*	WG956389
(S) 4-Bromofluorobenzene	*104*		*80.0-120*		*02/28/2017 23:27*	WG956389

Method Blank (MB)

(MB) R3200501-2 03/02/17 10:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Mercury,Dissolved	U		0.0490	0.200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200501-4 03/02/17 10:44 • (LCSD) R3200501-6 03/02/17 10:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Mercury,Dissolved	3.00	3.33	3.53	111	118	80-120			6	20

L892501-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892501-02 03/02/17 11:06 • (MS) R3200501-7 03/02/17 11:09 • (MSD) R3200501-8 03/02/17 11:11

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury,Dissolved	3.00	ND	3.15	3.11	105	104	1	75-125			1	20

Method Blank (MB)

(MB) R3199708-1 02/27/17 22:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Arsenic,Dissolved	U		6.50	10.0
Barium,Dissolved	U		1.70	5.00
Cadmium,Dissolved	U		0.700	2.00
Chromium,Dissolved	U		1.40	10.0
Lead,Dissolved	U		1.90	5.00
Selenium,Dissolved	U		7.40	10.0
Silver,Dissolved	U		2.80	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3199708-2 02/27/17 22:40 • (LCSD) R3199708-3 02/27/17 22:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	1000	1020	1010	102	101	80-120			1	20
Barium,Dissolved	1000	1040	1020	104	102	80-120			2	20
Cadmium,Dissolved	1000	1030	1010	103	101	80-120			2	20
Chromium,Dissolved	1000	1030	1020	103	102	80-120			2	20
Lead,Dissolved	1000	1030	1000	103	100	80-120			2	20
Selenium,Dissolved	1000	1030	1010	103	101	80-120			2	20
Silver,Dissolved	200	194	190	97	95	80-120			2	20

L892501-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L892501-01 02/27/17 22:46 • (MS) R3199708-5 02/27/17 22:51 • (MSD) R3199708-6 02/27/17 22:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic,Dissolved	1000	ND	1050	1050	105	105	1	75-125			0	20
Barium,Dissolved	1000	39.8	1060	1060	102	102	1	75-125			0	20
Cadmium,Dissolved	1000	ND	1040	1030	104	103	1	75-125			0	20
Chromium,Dissolved	1000	ND	1030	1060	103	106	1	75-125			3	20
Lead,Dissolved	1000	15.7	1050	1050	103	103	1	75-125			0	20
Selenium,Dissolved	1000	ND	1060	1060	106	106	1	75-125			0	20
Silver,Dissolved	200	ND	194	194	97	97	1	75-125			0	20

Method Blank (MB)

(MB) R3200598-3 03/01/17 13:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
(S) a,a,a-Trifluorotoluene(FID)	*97.4*			*77.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200598-1 03/01/17 12:30 • (LCSD) R3200598-2 03/01/17 12:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5500	6220	6450	113	117	71.0-136			3.68	20
(S) a,a,a-Trifluorotoluene(FID)				*101*	*104*	*77.0-122*				

Method Blank (MB)

(MB) R3200125-3 02/28/17 21:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,4-Dichlorobenzene	U		0.274	1.00
trans-1,4-Dichloro-2-butene	U		0.866	2.50
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	2.74		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	1.23		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Iodomethane	U		1.71	10.0
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.319	1.00

Method Blank (MB)

(MB) R3200125-3 02/28/17 21:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
Vinyl acetate	U		1.63	10.0
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*99.7*			*80.0-120*
(S) Dibromofluoromethane	*92.1*			*76.0-123*
(S) 4-Bromofluorobenzene	*103*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200125-1 02/28/17 19:23 • (LCSD) R3200125-2 02/28/17 19:46

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	125	178	179	142	143	10.0-160			0.550	23
Acrylonitrile	125	116	116	92.5	93.1	60.0-142			0.620	20
Benzene	25.0	20.2	20.3	80.8	81.2	69.0-123			0.470	20
Bromodichloromethane	25.0	25.3	24.8	101	99.0	76.0-120			2.36	20
Bromochloromethane	25.0	23.0	23.5	91.9	94.1	76.0-122			2.35	20
Bromoform	25.0	38.0	37.4	152	150	67.0-132	J4	J4	1.60	20
Bromomethane	25.0	13.2	12.0	53.0	47.9	18.0-160			10.0	20
Carbon disulfide	25.0	19.3	19.1	77.1	76.5	55.0-127			0.840	20
Carbon tetrachloride	25.0	20.5	21.1	81.9	84.2	63.0-122			2.77	20
Chlorobenzene	25.0	27.5	27.1	110	108	79.0-121			1.59	20
Chlorodibromomethane	25.0	30.0	28.9	120	115	75.0-125			3.91	20
Chloroethane	25.0	17.1	17.2	68.5	69.0	47.0-152			0.700	20
Chloroform	25.0	20.1	19.8	80.5	79.0	72.0-121			1.90	20
Chloromethane	25.0	19.2	19.7	76.8	78.8	48.0-139			2.51	20
1,2-Dibromo-3-Chloropropane	25.0	29.0	29.5	116	118	64.0-127			1.82	20
1,2-Dibromoethane	25.0	27.1	26.0	109	104	77.0-123			4.42	20
Dibromomethane	25.0	26.3	25.2	105	101	78.0-120			3.95	20
1,2-Dichlorobenzene	25.0	26.3	26.2	105	105	80.0-120			0.210	20
1,4-Dichlorobenzene	25.0	24.8	24.5	99.1	98.1	77.0-120			1.09	20
trans-1,4-Dichloro-2-butene	25.0	32.6	32.1	130	128	55.0-134			1.54	20
1,1-Dichloroethane	25.0	20.7	20.8	83.0	83.3	70.0-126			0.350	20
1,2-Dichloroethane	25.0	20.9	19.9	83.7	79.5	67.0-126			5.16	20
1,1-Dichloroethene	25.0	20.7	20.6	82.6	82.5	64.0-129			0.100	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200125-1 02/28/17 19:23 • (LCSD) R3200125-2 02/28/17 19:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	20.2	20.6	80.8	82.3	73.0-120			1.79	20
trans-1,2-Dichloroethene	25.0	20.1	19.8	80.2	79.4	71.0-121			1.07	20
1,2-Dichloropropane	25.0	27.3	26.4	109	106	75.0-125			3.22	20
cis-1,3-Dichloropropene	25.0	29.1	28.3	116	113	79.0-123			2.77	20
trans-1,3-Dichloropropene	25.0	29.9	29.2	120	117	74.0-127			2.40	20
Ethylbenzene	25.0	25.9	25.4	103	102	77.0-120			1.71	20
2-Hexanone	125	177	174	142	139	58.0-147			2.20	20
Iodomethane	125	84.6	92.5	67.7	74.0	57.0-140			8.87	20
2-Butanone (MEK)	125	114	116	91.3	93.0	37.0-158			1.78	20
Methylene Chloride	25.0	19.8	19.3	79.0	77.4	66.0-121			2.09	20
4-Methyl-2-pentanone (MIBK)	125	166	162	133	130	59.0-143			2.25	20
Styrene	25.0	28.7	26.7	115	107	78.0-124			7.30	20
1,1,1,2-Tetrachloroethane	25.0	28.6	27.5	114	110	75.0-122			3.79	20
1,1,2,2-Tetrachloroethane	25.0	26.7	25.8	107	103	71.0-122			3.36	20
Tetrachloroethene	25.0	31.0	31.3	124	125	70.0-127			0.980	20
Toluene	25.0	24.6	24.4	98.4	97.7	77.0-120			0.620	20
1,1,1-Trichloroethane	25.0	19.7	19.9	78.9	79.4	68.0-122			0.660	20
1,1,2-Trichloroethane	25.0	25.6	25.2	102	101	78.0-120			1.49	20
Trichloroethene	25.0	26.7	27.4	107	110	78.0-120			2.57	20
Trichlorofluoromethane	25.0	20.9	20.8	83.6	83.1	56.0-137			0.600	20
1,2,3-Trichloropropane	25.0	27.0	26.2	108	105	72.0-124			2.98	20
Vinyl acetate	125	170	160	136	128	46.0-160			5.97	20
Vinyl chloride	25.0	20.8	21.8	83.4	87.0	64.0-133			4.30	20
Xylenes, Total	75.0	78.7	77.7	105	104	77.0-120			1.28	20
(S) Toluene-d8				*98.6*	*98.4*	*80.0-120*				
(S) Dibromofluoromethane				*81.8*	*79.2*	*76.0-123*				
(S) 4-Bromofluorobenzene				*103*	*99.4*	*80.0-120*				

L891742-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L891742-02 03/01/17 01:22 • (MS) R3200125-4 02/28/17 22:19 • (MSD) R3200125-5 02/28/17 22:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	ND	101	71.0	80.8	56.8	1	10.0-139		J3	35.0	25
Acrylonitrile	125	ND	68.2	46.9	54.6	37.6	1	46.0-159		J3 J6	37.0	23
Benzene	25.0	ND	12.6	9.61	50.5	38.4	1	34.0-147		J3	27.1	20
Bromodichloromethane	25.0	ND	13.5	10.2	54.0	40.8	1	52.0-135		J3 J6	27.8	20
Bromochloromethane	25.0	ND	14.1	10.5	56.5	41.9	1	53.0-138		J3 J6	29.7	20
Bromoform	25.0	ND	18.2	13.1	72.7	52.3	1	50.0-146		J3	32.6	20

L891742-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L891742-02 03/01/17 01:22 • (MS) R3200125-4 02/28/17 22:19 • (MSD) R3200125-5 02/28/17 22:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromomethane	25.0	ND	8.54	6.56	34.2	26.2	1	10.0-160		J3	26.2	23
Carbon disulfide	25.0	ND	12.9	9.73	51.5	38.9	1	10.0-147		J3	27.7	20
Carbon tetrachloride	25.0	ND	13.2	10.2	52.6	40.7	1	41.0-138		J3 J6	25.5	20
Chlorobenzene	25.0	ND	15.3	11.3	61.1	45.3	1	52.0-141		J3 J6	29.7	20
Chlorodibromomethane	25.0	ND	14.8	11.1	59.2	44.2	1	54.0-142		J3 J6	29.0	20
Chloroethane	25.0	ND	11.5	8.96	45.8	35.8	1	23.0-160		J3	24.5	20
Chloroform	25.0	ND	12.2	9.12	48.6	36.5	1	50.0-139	J6	J3 J6	28.5	20
Chloromethane	25.0	ND	13.1	10.1	52.2	40.5	1	14.0-151		J3	25.3	20
1,2-Dibromo-3-Chloropropane	25.0	ND	13.9	9.82	55.6	39.3	1	49.0-144		J3 J6	34.5	24
1,2-Dibromoethane	25.0	ND	14.0	9.83	55.8	39.3	1	54.0-140		J3 J6	34.7	20
Dibromomethane	25.0	ND	13.7	10.0	54.9	40.1	1	53.0-138		J3 J6	31.2	20
1,2-Dichlorobenzene	25.0	ND	13.5	10.1	53.9	40.5	1	56.0-139	J6	J3 J6	28.5	20
1,4-Dichlorobenzene	25.0	ND	13.0	10.1	52.2	40.6	1	53.0-136	J6	J3 J6	24.9	20
trans-1,4-Dichloro-2-butene	25.0	ND	15.8	11.3	63.4	45.2	1	40.0-150		J3	33.6	21
1,1-Dichloroethane	25.0	ND	13.0	10.1	52.0	40.3	1	47.0-143		J3 J6	25.3	20
1,2-Dichloroethane	25.0	ND	11.7	8.51	46.9	34.0	1	47.0-141	J6	J3 J6	31.9	20
1,1-Dichloroethene	25.0	ND	14.0	10.8	55.8	43.1	1	31.0-148		J3	25.7	20
cis-1,2-Dichloroethene	25.0	ND	12.6	9.52	50.2	38.1	1	43.0-142		J3 J6	27.5	20
trans-1,2-Dichloroethene	25.0	ND	13.0	9.99	51.8	40.0	1	36.0-141		J3	25.9	20
1,2-Dichloropropane	25.0	ND	15.0	11.2	59.8	44.6	1	51.0-141		J3 J6	29.1	20
cis-1,3-Dichloropropene	25.0	ND	15.0	11.3	60.2	45.1	1	53.0-139		J3 J6	28.6	20
trans-1,3-Dichloropropene	25.0	ND	15.4	10.6	61.7	42.2	1	51.0-143		J3 J6	37.4	20
Ethylbenzene	25.0	ND	14.8	11.3	59.1	45.2	1	42.0-147		J3	26.7	20
2-Hexanone	125	ND	94.7	63.2	75.8	50.6	1	36.0-145		J3	40.0	23
Iodomethane	125	ND	44.8	36.7	35.9	29.4	1	30.0-151		J6	19.9	20
2-Butanone (MEK)	125	ND	66.2	45.2	53.0	36.1	1	12.0-149		J3	37.7	24
Methylene Chloride	25.0	ND	12.1	9.28	48.2	37.1	1	42.0-135		J3 J6	26.1	20
4-Methyl-2-pentanone (MIBK)	125	ND	86.6	62.1	69.3	49.7	1	44.0-160		J3	33.0	22
Styrene	25.0	ND	15.0	11.0	59.9	43.9	1	47.0-147		J3 J6	30.9	20
1,1,1,2-Tetrachloroethane	25.0	ND	15.3	11.3	61.0	45.2	1	52.0-140		J3 J6	29.8	20
1,1,2,2-Tetrachloroethane	25.0	ND	13.7	9.67	54.9	38.7	1	46.0-149		J3 J6	34.7	20
Tetrachloroethene	25.0	ND	19.4	14.6	77.4	58.5	1	38.0-147		J3	27.8	20
Toluene	25.0	ND	14.3	11.0	57.1	44.2	1	42.0-141		J3	25.5	20
1,1,1-Trichloroethane	25.0	ND	12.7	9.91	50.7	39.6	1	46.0-140		J3 J6	24.4	20
1,1,2-Trichloroethane	25.0	ND	13.6	9.74	54.4	39.0	1	54.0-139		J3 J6	33.0	20
Trichloroethene	25.0	ND	16.3	12.7	65.2	50.8	1	32.0-156		J3	24.9	20
Trichlorofluoromethane	25.0	ND	12.9	10.2	51.5	40.8	1	32.0-152		J3	23.1	20
1,2,3-Trichloropropane	25.0	ND	14.4	10.1	57.7	40.3	1	54.0-143		J3 J6	35.6	21
Vinyl acetate	125	ND	96.3	68.6	77.1	54.9	1	30.0-160		J3	33.7	20
Vinyl chloride	25.0	ND	14.3	10.9	57.1	43.6	1	24.0-153		J3	26.8	20

L891742-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L891742-02 03/01/17 01:22 • (MS) R3200125-4 02/28/17 22:19 • (MSD) R3200125-5 02/28/17 22:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Xylenes, Total	75.0	ND	44.7	33.5	59.6	44.7	1	41.0-148		J3 J6	28.6	20
(S) Toluene-d8					*97.9*	*98.8*		*80.0-120*				
(S) Dibromofluoromethane					*84.1*	*83.8*		*76.0-123*				
(S) 4-Bromofluorobenzene					*102*	*99.2*		*80.0-120*				

Method Blank (MB)

(MB) R3201151-3 03/03/17 00:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,4-Dichlorobenzene	U		0.274	1.00
trans-1,4-Dichloro-2-butene	U		0.866	2.50
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Iodomethane	U		1.71	10.0
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.319	1.00

Method Blank (MB)

(MB) R3201151-3 03/03/17 00:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
Vinyl acetate	U		1.63	10.0
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*101*			*80.0-120*
(S) Dibromofluoromethane	*96.0*			*76.0-123*
(S) 4-Bromofluorobenzene	*103*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201151-1 03/02/17 22:35 • (LCSD) R3201151-2 03/02/17 22:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	86.8	91.8	69.4	73.4	10.0-160			5.62	23
Acrylonitrile	125	107	108	85.9	86.7	60.0-142			0.980	20
Benzene	25.0	24.4	24.7	97.5	98.8	69.0-123			1.40	20
Bromodichloromethane	25.0	23.7	24.0	94.9	96.1	76.0-120			1.28	20
Bromochloromethane	25.0	23.2	23.4	92.9	93.8	76.0-122			0.910	20
Bromoform	25.0	27.6	28.0	110	112	67.0-132			1.46	20
Bromomethane	25.0	25.9	24.8	104	99.1	18.0-160			4.48	20
Carbon disulfide	25.0	24.6	25.1	98.2	100	55.0-127			2.18	20
Carbon tetrachloride	25.0	24.1	23.2	96.3	92.7	63.0-122			3.76	20
Chlorobenzene	25.0	26.7	27.5	107	110	79.0-121			2.85	20
Chlorodibromomethane	25.0	26.7	26.9	107	107	75.0-125			0.530	20
Chloroethane	25.0	23.2	23.8	92.8	95.1	47.0-152			2.43	20
Chloroform	25.0	24.3	24.6	97.1	98.3	72.0-121			1.25	20
Chloromethane	25.0	20.0	20.2	80.1	80.8	48.0-139			0.860	20
1,2-Dibromo-3-Chloropropane	25.0	24.6	25.0	98.6	99.9	64.0-127			1.36	20
1,2-Dibromoethane	25.0	25.9	26.4	104	106	77.0-123			1.97	20
Dibromomethane	25.0	24.5	24.5	97.9	98.1	78.0-120			0.270	20
1,2-Dichlorobenzene	25.0	26.5	26.7	106	107	80.0-120			0.580	20
1,4-Dichlorobenzene	25.0	25.5	26.2	102	105	77.0-120			2.65	20
trans-1,4-Dichloro-2-butene	25.0	26.2	25.0	105	100	55.0-134			4.91	20
1,1-Dichloroethane	25.0	23.5	24.1	94.1	96.5	70.0-126			2.51	20
1,2-Dichloroethane	25.0	23.1	23.2	92.6	92.7	67.0-126			0.0700	20
1,1-Dichloroethene	25.0	25.0	25.9	99.9	103	64.0-129			3.50	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201151-1 03/02/17 22:35 • (LCSD) R3201151-2 03/02/17 22:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	24.5	24.6	98.0	98.6	73.0-120			0.530	20
trans-1,2-Dichloroethene	25.0	24.7	25.1	98.9	100	71.0-121			1.59	20
1,2-Dichloropropane	25.0	23.8	24.5	95.3	98.2	75.0-125			2.98	20
cis-1,3-Dichloropropene	25.0	25.9	25.9	104	104	79.0-123			0.200	20
trans-1,3-Dichloropropene	25.0	25.6	25.7	102	103	74.0-127			0.570	20
Ethylbenzene	25.0	25.9	26.7	103	107	77.0-120			3.22	20
2-Hexanone	125	118	120	94.0	95.9	58.0-147			1.99	20
Iodomethane	125	135	138	108	110	57.0-140			1.88	20
2-Butanone (MEK)	125	97.6	101	78.1	80.8	37.0-158			3.44	20
Methylene Chloride	25.0	23.5	23.3	94.2	93.4	66.0-121			0.830	20
4-Methyl-2-pentanone (MIBK)	125	122	122	97.4	97.6	59.0-143			0.140	20
Styrene	25.0	26.8	27.4	107	109	78.0-124			1.90	20
1,1,1,2-Tetrachloroethane	25.0	25.9	26.6	104	106	75.0-122			2.68	20
1,1,2,2-Tetrachloroethane	25.0	25.0	25.2	99.9	101	71.0-122			1.01	20
Tetrachloroethene	25.0	25.9	26.5	104	106	70.0-127			2.19	20
Toluene	25.0	25.0	25.5	100	102	77.0-120			1.87	20
1,1,1-Trichloroethane	25.0	23.9	24.1	95.6	96.2	68.0-122			0.690	20
1,1,2-Trichloroethane	25.0	25.0	25.7	99.8	103	78.0-120			3.00	20
Trichloroethene	25.0	24.3	25.1	97.4	100	78.0-120			2.92	20
Trichlorofluoromethane	25.0	23.7	24.0	94.9	96.2	56.0-137			1.28	20
1,2,3-Trichloropropane	25.0	25.1	25.4	101	101	72.0-124			0.960	20
Vinyl acetate	125	137	133	110	106	46.0-160			3.02	20
Vinyl chloride	25.0	22.3	22.8	89.2	91.1	64.0-133			2.13	20
Xylenes, Total	75.0	79.2	81.2	106	108	77.0-120			2.49	20
(S) Toluene-d8				*101*	*102*	*80.0-120*				
(S) Dibromofluoromethane				*98.2*	*98.0*	*76.0-123*				
(S) 4-Bromofluorobenzene				*103*	*105*	*80.0-120*				

Method Blank (MB)

(MB) R3201012-1 03/04/17 09:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C10-C28 Diesel Range	U		22.2	100
C28-C40 Oil Range	U		11.8	100
(S) o-Terphenyl	*117*			*31.0-160*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201012-2 03/04/17 10:03 • (LCSD) R3201012-3 03/04/17 10:16

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
C10-C28 Diesel Range	1500	1260	1280	84.1	85.1	50.0-150			1.24	20
(S) o-Terphenyl				*122*	*121*	*31.0-160*				

Method Blank (MB)

(MB) R3200510-3 03/02/17 09:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0140	0.0500
Acenaphthene	U		0.0100	0.0500
Acenaphthylene	U		0.0120	0.0500
Benzo(a)anthracene	U		0.00410	0.0500
Benzo(a)pyrene	U		0.0116	0.0500
Benzo(b)fluoranthene	U		0.00212	0.0500
Benzo(g,h,i)perylene	0.00274	J	0.00227	0.0500
Benzo(k)fluoranthene	U		0.0136	0.0500
Chrysene	U		0.0108	0.0500
Dibenz(a,h)anthracene	U		0.00396	0.0500
Fluoranthene	U		0.0157	0.0500
Fluorene	U		0.00850	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500
Naphthalene	0.0240	J	0.0198	0.250
Phenanthrene	U		0.00820	0.0500
Pyrene	U		0.0117	0.0500
1-Methylnaphthalene	U		0.00821	0.250
2-Methylnaphthalene	U		0.00902	0.250
2-Chloronaphthalene	U		0.00647	0.250
(S) Nitrobenzene-d5	*156*			*31.0-160*
(S) 2-Fluorobiphenyl	*106*			*48.0-148*
(S) p-Terphenyl-d14	*111*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200510-1 03/02/17 08:52 • (LCSD) R3200510-2 03/02/17 09:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	2.01	2.05	101	103	64.0-142			2.11	20
Acenaphthene	2.00	2.11	2.14	106	107	66.0-132			1.39	20
Acenaphthylene	2.00	1.96	2.00	98.2	100	65.0-132			1.96	20
Benzo(a)anthracene	2.00	2.33	2.40	117	120	59.0-134			2.98	20
Benzo(a)pyrene	2.00	2.32	2.40	116	120	61.0-145			3.03	20
Benzo(b)fluoranthene	2.00	2.37	2.31	118	116	57.0-136			2.45	20
Benzo(g,h,i)perylene	2.00	2.22	2.25	111	113	54.0-140			1.21	20
Benzo(k)fluoranthene	2.00	2.40	2.50	120	125	57.0-141			4.19	20
Chrysene	2.00	2.22	2.26	111	113	63.0-140			1.37	20
Dibenz(a,h)anthracene	2.00	2.24	2.26	112	113	49.0-141			0.830	20
Fluoranthene	2.00	2.49	2.48	124	124	65.0-143			0.380	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3200510-1 03/02/17 08:52 • (LCSD) R3200510-2 03/02/17 09:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	2.00	2.22	2.24	111	112	64.0-129			0.680	20
Indeno(1,2,3-cd)pyrene	2.00	2.25	2.27	112	114	53.0-141			1.08	20
Naphthalene	2.00	1.91	1.96	95.7	97.8	68.0-129			2.10	20
Phenanthrene	2.00	2.16	2.15	108	108	62.0-132			0.530	20
Pyrene	2.00	1.99	2.05	99.7	102	58.0-156			2.71	20
1-Methylnaphthalene	2.00	2.19	2.25	109	113	68.0-137			2.83	20
2-Methylnaphthalene	2.00	2.07	2.13	103	106	68.0-134			2.81	20
2-Chloronaphthalene	2.00	1.93	1.96	96.5	98.0	65.0-129			1.60	20
(S) Nitrobenzene-d5				*147*	*152*	*31.0-160*				
(S) 2-Fluorobiphenyl				*98.4*	*97.1*	*48.0-148*				
(S) p-Terphenyl-d14				*103*	*104*	*37.0-146*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

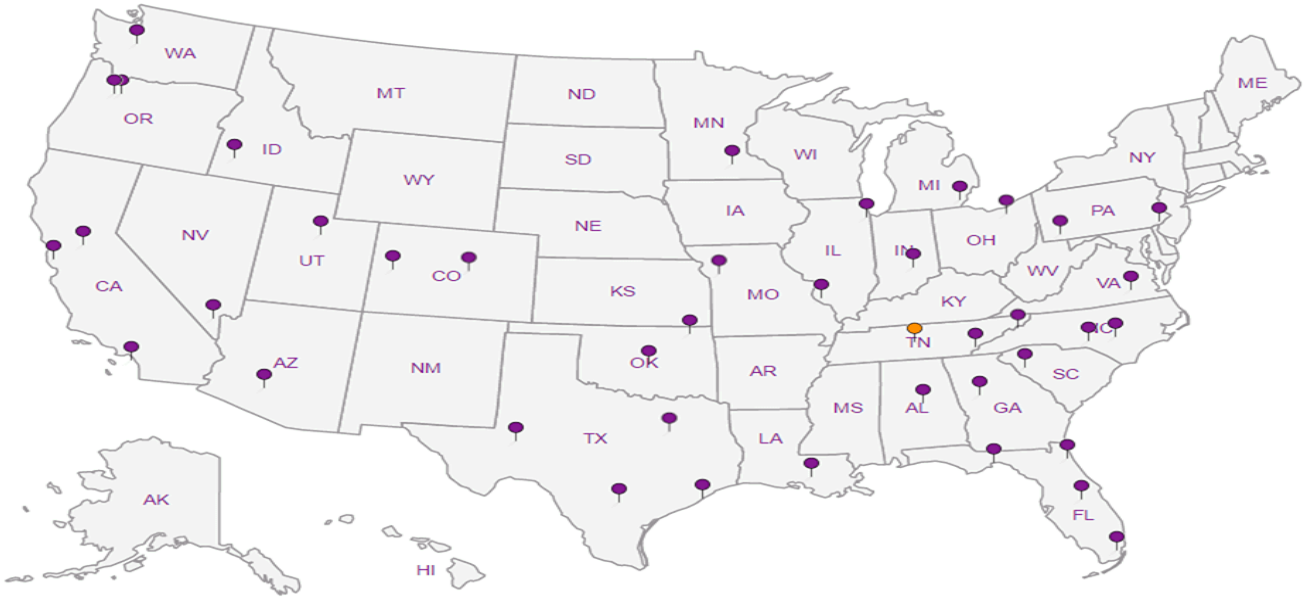
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Company Name/Address: SCS Engineers, 1817 Commons Cr, Yukon, OK 73099

Billing Information:

Report to: Dale Daniel

Email To: ddaniel@scsengineers.com

Project Description: 23rd Street

City/State Collected:

Phone:

Fax:

Client Project #

Lab Project #

Collected by (print): Dale Daniel

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: Standard

Email? ___No ___Yes

FAX? ___No ___Yes

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 892560

I196

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs - 8260	TPH - Low, Medium, High Fraction	PAHs - 8270	RCRA Metals - Filtered								Rem./Contaminant	Sample # (lab only)
SB-01	G	GW	9'	2-24	1030	9	X	X	X	X									01
SB-02			18'		1100	9	X	X	X	X									02
SB-03			9'		1130	9	X	X	X	X									03
SB-07			11'		1300	9	X	X	X	X									04
Duplicate			—		—	9	X	X	X	X									05
Equipment			—		1400	9	X	X	X	X									do
Field			—		1400	9	X	X	X	X									07
TRIP	—	—	—	—	—														-09

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other ___

pH ___ Temp ___

Flow ___ Other ___

Remarks: All Methods required in OK (Filter Metals on samples) excluding Field/equip

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	2-24	1700	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ___

Temp: 2.1 °C Bottles Received: 63+2B

Date: 2-25-14 Time: 9:00

Condition: (lab use only) JW

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: C2

NCF: X

ESC LAB SCIENCES
Cooler Receipt Form

Client: Aquatech	SDG#	89256
Cooler Received/Opened On: 2/25/17	Temperature:	2.1
Received By: Rickey Mosley		
Signature:		

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?		✓	
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?		✓	
Preservation Correct / Checked?		✓	

ESC Lab Sciences
Non-Conformance Form

Login #892560	Client: AQUATEOCOK	Date:2/25	Evaluated by:Matt S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time	x	Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courier
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: trip blanks not marked for analysis

Client informed by:		Call	x	Email		Voice Mail		Date:2/27/17	Time:1249
TSR Initials:cc	Client Contact: Dale Daniel								

Login Instructions:

Log trip blanks for V8260.

ANALYTICAL REPORT

March 10, 2017

SCS Engineers - OK

Sample Delivery Group:	L893322
Samples Received:	03/02/2017
Project Number:	
Description:	1708 & 1721 NE 23rd Street

Report To:

Mr. Dale Daniel
1817 Commons Circle, Suite 1
Yukon, OK 73099

Entire Report Reviewed By:

Craig Cothron
Technical Service Representative

TABLE OF CONTENTS

SV-01 L893322-01 Air

Collected by: D. Daniel
Collected date/time: 02/24/17 10:00
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	2	03/05/17 10:11	03/05/17 10:11	DWR

SV-02 L893322-02 Air

Collected by: D. Daniel
Collected date/time: 02/24/17 10:30
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG959466	10	03/10/17 09:37	03/10/17 09:37	MBF

SV-03 L893322-03 Air

Collected by: D. Daniel
Collected date/time: 02/27/17 16:00
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	80	03/05/17 10:52	03/05/17 10:52	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG958574	1000	03/07/17 23:24	03/07/17 23:24	DWR

SV-04 L893322-04 Air

Collected by: D. Daniel
Collected date/time: 02/27/17 15:30
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	2	03/05/17 11:37	03/05/17 11:37	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG958574	25	03/08/17 00:05	03/08/17 00:05	DWR

SV-05 L893322-05 Air

Collected by: D. Daniel
Collected date/time: 02/27/17 15:00
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	2	03/05/17 12:22	03/05/17 12:22	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG958574	25	03/08/17 00:46	03/08/17 00:46	DWR

DUPLICATE L893322-06 Air

Collected by: D. Daniel
Collected date/time: 02/27/17 15:00
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	2	03/05/17 13:06	03/05/17 13:06	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG958574	20	03/08/17 01:27	03/08/17 01:27	DWR

DUPLICATE L893322-07 Air

Collected by: D. Daniel
Collected date/time: 02/27/17 15:00
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	80	03/05/17 13:48	03/05/17 13:48	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG958379	1000	03/07/17 01:06	03/07/17 01:06	DWR

BA-1 L893322-08 Air

Collected by: D. Daniel
Collected date/time: 02/27/17 16:30
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (MS) by Method TO-15	WG957986	2	03/05/17 14:33	03/05/17 14:33	DWR
Volatile Organic Compounds (MS) by Method TO-15	WG958379	2	03/07/17 01:56	03/07/17 01:56	DWR

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Technical Service Representative

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	17.4	41.4		2	WG957986
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG957986
Benzene	71-43-2	78.10	0.400	1.28	1.25	3.99		2	WG957986
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG957986
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG957986
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG957986
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG957986
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG957986
Carbon disulfide	75-15-0	76.10	0.400	1.24	3.27	10.2		2	WG957986
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG957986
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG957986
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG957986
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG957986
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG957986
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG957986
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG957986
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG957986
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG957986
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG957986
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG957986
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG957986
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG957986
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG957986
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG957986
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG957986
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG957986
Ethanol	64-17-5	46.10	1.26	2.38	10.9	20.5		2	WG957986
Ethylbenzene	100-41-4	106	0.400	1.73	63.7	276		2	WG957986
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG957986
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG957986
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG957986
Heptane	142-82-5	100	0.400	1.64	1.81	7.41		2	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG957986
n-Hexane	110-54-3	86.20	0.400	1.41	0.757	2.67		2	WG957986
Isopropylbenzene	98-82-8	120.20	0.400	1.97	0.803	3.95		2	WG957986
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG957986
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG957986
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	3.26	9.62		2	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG957986
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG957986
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG957986
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG957986
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG957986
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG957986
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG957986
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG957986
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG957986
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	2.00	5.89		2	WG957986
Toluene	108-88-3	92.10	0.400	1.51	40.6	153		2	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG957986
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG957986
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.30	6.38		2	WG957986
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.511	2.51		2	WG957986
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.639	2.98		2	WG957986
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG957986
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG957986
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG957986
m&p-Xylene	1330-20-7	106	0.800	3.47	139	604		2	WG957986
o-Xylene	95-47-6	106	0.400	1.73	61.4	266		2	WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*107*				WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	12.5	29.7	78.2	186		10	WG959466
Allyl chloride	107-05-1	76.53	2.00	6.26	ND	ND		10	WG959466
Benzene	71-43-2	78.10	2.00	6.39	4.39	14.0		10	WG959466
Benzyl Chloride	100-44-7	127	2.00	10.4	ND	ND		10	WG959466
Bromodichloromethane	75-27-4	164	2.00	13.4	ND	ND		10	WG959466
Bromoform	75-25-2	253	6.00	62.1	ND	ND		10	WG959466
Bromomethane	74-83-9	94.90	2.00	7.76	ND	ND		10	WG959466
1,3-Butadiene	106-99-0	54.10	20.0	44.3	ND	ND		10	WG959466
Carbon disulfide	75-15-0	76.10	2.00	6.22	2.88	8.98		10	WG959466
Carbon tetrachloride	56-23-5	154	2.00	12.6	ND	ND		10	WG959466
Chlorobenzene	108-90-7	113	2.00	9.24	ND	ND		10	WG959466
Chloroethane	75-00-3	64.50	2.00	5.28	ND	ND		10	WG959466
Chloroform	67-66-3	119	2.00	9.73	ND	ND		10	WG959466
Chloromethane	74-87-3	50.50	2.00	4.13	ND	ND		10	WG959466
2-Chlorotoluene	95-49-8	126	2.00	10.3	ND	ND		10	WG959466
Cyclohexane	110-82-7	84.20	2.00	6.89	8.82	30.4		10	WG959466
Dibromochloromethane	124-48-1	208	2.00	17.0	ND	ND		10	WG959466
1,2-Dibromoethane	106-93-4	188	2.00	15.4	ND	ND		10	WG959466
1,2-Dichlorobenzene	95-50-1	147	2.00	12.0	ND	ND		10	WG959466
1,3-Dichlorobenzene	541-73-1	147	2.00	12.0	ND	ND		10	WG959466
1,4-Dichlorobenzene	106-46-7	147	2.00	12.0	ND	ND		10	WG959466
1,2-Dichloroethane	107-06-2	99	2.00	8.10	ND	ND		10	WG959466
1,1-Dichloroethane	75-34-3	98	2.00	8.02	ND	ND		10	WG959466
1,1-Dichloroethene	75-35-4	96.90	2.00	7.93	ND	ND		10	WG959466
cis-1,2-Dichloroethene	156-59-2	96.90	2.00	7.93	ND	ND		10	WG959466
trans-1,2-Dichloroethene	156-60-5	96.90	2.00	7.93	ND	ND		10	WG959466
1,2-Dichloropropane	78-87-5	113	2.00	9.24	ND	ND		10	WG959466
cis-1,3-Dichloropropene	10061-01-5	111	2.00	9.08	ND	ND		10	WG959466
trans-1,3-Dichloropropene	10061-02-6	111	2.00	9.08	ND	ND		10	WG959466
1,4-Dioxane	123-91-1	88.10	2.00	7.21	ND	ND		10	WG959466
Ethanol	64-17-5	46.10	6.30	11.9	8.33	15.7		10	WG959466
Ethylbenzene	100-41-4	106	2.00	8.67	90.5	392		10	WG959466
4-Ethyltoluene	622-96-8	120	2.00	9.82	ND	ND		10	WG959466
Trichlorofluoromethane	75-69-4	137.40	2.00	11.2	ND	ND		10	WG959466
Dichlorodifluoromethane	75-71-8	120.92	2.00	9.89	ND	ND		10	WG959466
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	2.00	15.3	ND	ND		10	WG959466
1,2-Dichlorotetrafluoroethane	76-14-2	171	2.00	14.0	ND	ND		10	WG959466
Heptane	142-82-5	100	2.00	8.18	8.29	33.9		10	WG959466
Hexachloro-1,3-butadiene	87-68-3	261	6.30	67.3	ND	ND		10	WG959466
n-Hexane	110-54-3	86.20	2.00	7.05	22.8	80.4		10	WG959466
Isopropylbenzene	98-82-8	120.20	2.00	9.83	ND	ND		10	WG959466
Methylene Chloride	75-09-2	84.90	2.00	6.94	ND	ND		10	WG959466
Methyl Butyl Ketone	591-78-6	100	12.5	51.1	ND	ND		10	WG959466
2-Butanone (MEK)	78-93-3	72.10	12.5	36.9	12.5	ND		10	WG959466
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	12.5	51.2	ND	ND		10	WG959466
Methyl methacrylate	80-62-6	100.12	2.00	8.19	ND	ND		10	WG959466
MTBE	1634-04-4	88.10	2.00	7.21	ND	ND		10	WG959466
Naphthalene	91-20-3	128	6.30	33.0	ND	ND		10	WG959466
2-Propanol	67-63-0	60.10	12.5	30.7	ND	ND		10	WG959466
Propene	115-07-1	42.10	4.00	6.89	ND	ND	J3	10	WG959466
Styrene	100-42-5	104	2.00	8.51	ND	ND		10	WG959466
1,1,2,2-Tetrachloroethane	79-34-5	168	2.00	13.7	ND	ND		10	WG959466
Tetrachloroethylene	127-18-4	166	2.00	13.6	ND	ND		10	WG959466
Tetrahydrofuran	109-99-9	72.10	2.00	5.90	ND	ND		10	WG959466
Toluene	108-88-3	92.10	2.00	7.53	36.6	138		10	WG959466
1,2,4-Trichlorobenzene	120-82-1	181	6.30	46.6	ND	ND		10	WG959466

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	2.00	10.9	ND	ND		10	WG959466
1,1,2-Trichloroethane	79-00-5	133	2.00	10.9	ND	ND		10	WG959466
Trichloroethylene	79-01-6	131	2.00	10.7	ND	ND		10	WG959466
1,2,4-Trimethylbenzene	95-63-6	120	2.00	9.82	3.00	14.7		10	WG959466
1,3,5-Trimethylbenzene	108-67-8	120	2.00	9.82	ND	ND		10	WG959466
2,2,4-Trimethylpentane	540-84-1	114.22	2.00	9.34	3.63	16.9		10	WG959466
Vinyl chloride	75-01-4	62.50	2.00	5.11	ND	ND		10	WG959466
Vinyl Bromide	593-60-2	106.95	2.00	8.75	ND	ND		10	WG959466
Vinyl acetate	108-05-4	86.10	2.00	7.04	ND	ND		10	WG959466
m&p-Xylene	1330-20-7	106	4.00	17.3	309	1340		10	WG959466
o-Xylene	95-47-6	106	2.00	8.67	89.4	388		10	WG959466
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.1*				WG959466

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	318	757		80	WG957986
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG957986
Benzene	71-43-2	78.10	16.0	51.1	ND	ND		80	WG957986
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG957986
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG957986
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG957986
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG957986
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG957986
Carbon disulfide	75-15-0	76.10	16.0	49.8	25.2	78.5	B	80	WG957986
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG957986
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG957986
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG957986
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG957986
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG957986
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG957986
Cyclohexane	110-82-7	84.20	200	689	14200	48900		1000	WG958574
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG957986
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG957986
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG957986
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG957986
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG957986
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG957986
1,1-Dichloroethane	75-34-3	98	16.0	64.1	ND	ND		80	WG957986
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	ND	ND		80	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG957986
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG957986
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG957986
Ethanol	64-17-5	46.10	50.4	95.0	131	248		80	WG957986
Ethylbenzene	100-41-4	106	16.0	69.4	57.8	251		80	WG957986
4-Ethyltoluene	622-96-8	120	16.0	78.5	22.8	112		80	WG957986
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG957986
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG957986
Heptane	142-82-5	100	16.0	65.4	ND	ND		80	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG957986
n-Hexane	110-54-3	86.20	16.0	56.4	3110	10900		80	WG957986
Isopropylbenzene	98-82-8	120.20	16.0	78.7	44.1	217		80	WG957986
Methylene Chloride	75-09-2	84.90	16.0	55.6	ND	ND		80	WG957986
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG957986
2-Butanone (MEK)	78-93-3	72.10	100	295	ND	ND		80	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG957986
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG957986
MTBE	1634-04-4	88.10	16.0	57.7	44.6	161		80	WG957986
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG957986
2-Propanol	67-63-0	60.10	100	246	ND	ND		80	WG957986
Propene	115-07-1	42.10	32.0	55.1	ND	ND		80	WG957986
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG957986
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG957986
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG957986
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG957986
Toluene	108-88-3	92.10	16.0	60.3	ND	ND		80	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	16.0	87.0	ND	ND		80	WG957986
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG957986
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	ND	ND		80	WG957986
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	ND	ND		80	WG957986
2,2,4-Trimethylpentane	540-84-1	114.22	200	934	10000	46800		1000	WG958574
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG957986
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG957986
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG957986
m&p-Xylene	1330-20-7	106	32.0	139	186	805		80	WG957986
o-Xylene	95-47-6	106	16.0	69.4	85.7	371		80	WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*175*		J1		WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*103*				WG958574

Sample Narrative:

TO-15 L893322-03 WG957986: Surrogate failure due to matrix interference.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	23.0	54.7		2	WG957986
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG957986
Benzene	71-43-2	78.10	0.400	1.28	3.00	9.58		2	WG957986
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG957986
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG957986
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG957986
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG957986
1,3-Butadiene	106-99-0	54.10	4.00	8.85	4.66	10.3		2	WG957986
Carbon disulfide	75-15-0	76.10	0.400	1.24	11.1	34.7		2	WG957986
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG957986
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG957986
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG957986
Chloroform	67-66-3	119	0.400	1.95	6.08	29.6		2	WG957986
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG957986
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG957986
Cyclohexane	110-82-7	84.20	0.400	1.38	3.54	12.2		2	WG957986
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG957986
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG957986
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG957986
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG957986
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG957986
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG957986
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG957986
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG957986
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG957986
1,4-Dioxane	123-91-1	88.10	0.400	1.44	8.84	31.8		2	WG957986
Ethanol	64-17-5	46.10	1.26	2.38	14.0	26.3		2	WG957986
Ethylbenzene	100-41-4	106	0.400	1.73	23.6	102		2	WG957986
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG957986
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	0.411	2.31		2	WG957986
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.422	2.09		2	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG957986
Heptane	142-82-5	100	0.400	1.64	8.72	35.6		2	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG957986
n-Hexane	110-54-3	86.20	0.400	1.41	17.5	61.7		2	WG957986
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG957986
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.601	2.09	B	2	WG957986
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	3.03	12.4		2	WG957986
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	4.73	13.9		2	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG957986
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG957986
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG957986
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG957986
2-Propanol	67-63-0	60.10	2.50	6.15	2.89	7.10		2	WG957986
Propene	115-07-1	42.10	10.0	17.2	277	477	J3	25	WG958574
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG957986
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG957986
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG957986
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG957986
Toluene	108-88-3	92.10	0.400	1.51	7.97	30.0		2	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG957986
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG957986
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.47	7.20		2	WG957986
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG957986
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.39	6.51		2	WG957986
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG957986
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG957986
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG957986
m&p-Xylene	1330-20-7	106	0.800	3.47	81.8	354		2	WG957986
o-Xylene	95-47-6	106	0.400	1.73	26.1	113		2	WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*93.7*				WG958574
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*108*				WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	15.1	35.8		2	WG957986
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG957986
Benzene	71-43-2	78.10	0.400	1.28	0.984	3.14		2	WG957986
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG957986
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG957986
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG957986
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG957986
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG957986
Carbon disulfide	75-15-0	76.10	0.400	1.24	5.67	17.6		2	WG957986
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG957986
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG957986
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG957986
Chloroform	67-66-3	119	0.400	1.95	3.86	18.8		2	WG957986
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG957986
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG957986
Cyclohexane	110-82-7	84.20	0.400	1.38	2.55	8.79		2	WG957986
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG957986
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG957986
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG957986
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG957986
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG957986
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG957986
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG957986
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG957986
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG957986
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG957986
Ethanol	64-17-5	46.10	1.26	2.38	25.7	48.4		2	WG957986
Ethylbenzene	100-41-4	106	0.400	1.73	0.477	2.07		2	WG957986
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG957986
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	0.478	2.69		2	WG957986
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.493	2.44		2	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG957986
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG957986
n-Hexane	110-54-3	86.20	0.400	1.41	1.33	4.68		2	WG957986
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG957986
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG957986
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG957986
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG957986
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG957986
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG957986
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG957986
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG957986
Propene	115-07-1	42.10	10.0	17.2	145	249	J3	25	WG958574
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG957986
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG957986
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG957986
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG957986
Toluene	108-88-3	92.10	0.400	1.51	1.87	7.03		2	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG957986
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG957986
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG957986
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG957986
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	0.877	4.10		2	WG957986
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG957986
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG957986
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG957986
m&p-Xylene	1330-20-7	106	0.800	3.47	1.62	7.04		2	WG957986
o-Xylene	95-47-6	106	0.400	1.73	0.519	2.25		2	WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*89.9*				WG958574
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	15.5	36.8		2	WG957986
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG957986
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG957986
Benzyl Chloride	100-44-7	127	4.00	20.8	ND	ND		20	WG958574
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG957986
Bromoform	75-25-2	253	12.0	124	ND	ND		20	WG958574
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG957986
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG957986
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.01	6.24		2	WG957986
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG957986
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG957986
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG957986
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG957986
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG957986
2-Chlorotoluene	95-49-8	126	4.00	20.6	ND	ND		20	WG958574
Cyclohexane	110-82-7	84.20	0.400	1.38	92.0	317		2	WG957986
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG957986
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG957986
1,2-Dichlorobenzene	95-50-1	147	4.00	24.0	ND	ND		20	WG958574
1,3-Dichlorobenzene	541-73-1	147	4.00	24.0	ND	ND		20	WG958574
1,4-Dichlorobenzene	106-46-7	147	4.00	24.0	ND	ND	J4	20	WG958574
1,2-Dichloroethane	107-06-2	99	0.400	1.62	0.989	4.01		2	WG957986
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG957986
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG957986
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG957986
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG957986
Ethanol	64-17-5	46.10	1.26	2.38	7.90	14.9		2	WG957986
Ethylbenzene	100-41-4	106	4.00	17.3	12.5	54.1		20	WG958574
4-Ethyltoluene	622-96-8	120	4.00	19.6	ND	ND		20	WG958574
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG957986
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG957986
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	12.6	135	ND	ND		20	WG958574
n-Hexane	110-54-3	86.20	0.400	1.41	27.8	98.1		2	WG957986
Isopropylbenzene	98-82-8	120.20	4.00	19.7	ND	ND		20	WG958574
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG957986
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG957986
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG957986
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG957986
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG957986
Naphthalene	91-20-3	128	12.6	66.0	ND	ND		20	WG958574
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG957986
Propene	115-07-1	42.10	0.800	1.38	1.97	3.39		2	WG957986
Styrene	100-42-5	104	4.00	17.0	ND	ND		20	WG958574
1,1,2,2-Tetrachloroethane	79-34-5	168	4.00	27.5	ND	ND		20	WG958574
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG957986
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG957986
Toluene	108-88-3	92.10	0.400	1.51	7.83	29.5		2	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	12.6	93.3	ND	ND		20	WG958574

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG957986
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG957986
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	4.00	19.6	4.67	22.9		20	WG958574
1,3,5-Trimethylbenzene	108-67-8	120	4.00	19.6	ND	ND		20	WG958574
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	87.5	409		2	WG957986
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG957986
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG957986
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG957986
m&p-Xylene	1330-20-7	106	8.00	34.7	48.2	209		20	WG958574
o-Xylene	95-47-6	106	4.00	17.3	17.1	74.0		20	WG958574
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*114*				WG958574
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*309*		J1		WG957986

Sample Narrative:

TO-15 L893322-06 WG957986, WG958574: Surrogate failure due to matrix interference.

TO-15 L893322-06 WG957986, WG958574: IS/SURR failed on lower dilution.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	100	238	769	1830		80	WG957986
Allyl chloride	107-05-1	76.53	16.0	50.1	ND	ND		80	WG957986
Benzene	71-43-2	78.10	16.0	51.1	ND	ND		80	WG957986
Benzyl Chloride	100-44-7	127	16.0	83.1	ND	ND		80	WG957986
Bromodichloromethane	75-27-4	164	16.0	107	ND	ND		80	WG957986
Bromoform	75-25-2	253	48.0	497	ND	ND		80	WG957986
Bromomethane	74-83-9	94.90	16.0	62.1	ND	ND		80	WG957986
1,3-Butadiene	106-99-0	54.10	160	354	ND	ND		80	WG957986
Carbon disulfide	75-15-0	76.10	16.0	49.8	30.4	94.6	B	80	WG957986
Carbon tetrachloride	56-23-5	154	16.0	101	ND	ND		80	WG957986
Chlorobenzene	108-90-7	113	16.0	73.9	ND	ND		80	WG957986
Chloroethane	75-00-3	64.50	16.0	42.2	ND	ND		80	WG957986
Chloroform	67-66-3	119	16.0	77.9	ND	ND		80	WG957986
Chloromethane	74-87-3	50.50	16.0	33.0	ND	ND		80	WG957986
2-Chlorotoluene	95-49-8	126	16.0	82.5	ND	ND		80	WG957986
Cyclohexane	110-82-7	84.20	200	689	11600	39900		1000	WG958379
Dibromochloromethane	124-48-1	208	16.0	136	ND	ND		80	WG957986
1,2-Dibromoethane	106-93-4	188	16.0	123	ND	ND		80	WG957986
1,2-Dichlorobenzene	95-50-1	147	16.0	96.2	ND	ND		80	WG957986
1,3-Dichlorobenzene	541-73-1	147	16.0	96.2	ND	ND		80	WG957986
1,4-Dichlorobenzene	106-46-7	147	16.0	96.2	ND	ND		80	WG957986
1,2-Dichloroethane	107-06-2	99	16.0	64.8	ND	ND		80	WG957986
1,1-Dichloroethane	75-34-3	98	16.0	64.1	ND	ND		80	WG957986
1,1-Dichloroethene	75-35-4	96.90	16.0	63.4	ND	ND		80	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	ND	ND		80	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	16.0	63.4	ND	ND		80	WG957986
1,2-Dichloropropane	78-87-5	113	16.0	73.9	ND	ND		80	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	16.0	72.6	ND	ND		80	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	16.0	72.6	ND	ND		80	WG957986
1,4-Dioxane	123-91-1	88.10	16.0	57.7	ND	ND		80	WG957986
Ethanol	64-17-5	46.10	50.4	95.0	198	373		80	WG957986
Ethylbenzene	100-41-4	106	16.0	69.4	36.8	159		80	WG957986
4-Ethyltoluene	622-96-8	120	16.0	78.5	21.8	107		80	WG957986
Trichlorofluoromethane	75-69-4	137.40	16.0	89.9	ND	ND		80	WG957986
Dichlorodifluoromethane	75-71-8	120.92	16.0	79.1	ND	ND		80	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	16.0	123	ND	ND		80	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	16.0	112	ND	ND		80	WG957986
Heptane	142-82-5	100	16.0	65.4	ND	ND		80	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	50.4	538	ND	ND		80	WG957986
n-Hexane	110-54-3	86.20	16.0	56.4	3200	11300		80	WG957986
Isopropylbenzene	98-82-8	120.20	16.0	78.7	38.5	189		80	WG957986
Methylene Chloride	75-09-2	84.90	16.0	55.6	ND	ND		80	WG957986
Methyl Butyl Ketone	591-78-6	100	100	409	ND	ND		80	WG957986
2-Butanone (MEK)	78-93-3	72.10	100	295	ND	ND		80	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	100	409	ND	ND		80	WG957986
Methyl methacrylate	80-62-6	100.12	16.0	65.5	ND	ND		80	WG957986
MTBE	1634-04-4	88.10	16.0	57.7	84.5	305		80	WG957986
Naphthalene	91-20-3	128	50.4	264	ND	ND		80	WG957986
2-Propanol	67-63-0	60.10	100	246	ND	ND		80	WG957986
Propene	115-07-1	42.10	32.0	55.1	ND	ND		80	WG957986
Styrene	100-42-5	104	16.0	68.1	ND	ND		80	WG957986
1,1,2,2-Tetrachloroethane	79-34-5	168	16.0	110	ND	ND		80	WG957986
Tetrachloroethylene	127-18-4	166	16.0	109	ND	ND		80	WG957986
Tetrahydrofuran	109-99-9	72.10	16.0	47.2	ND	ND		80	WG957986
Toluene	108-88-3	92.10	16.0	60.3	ND	ND		80	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	50.4	373	ND	ND		80	WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	16.0	87.0	ND	ND		80	WG957986
1,1,2-Trichloroethane	79-00-5	133	16.0	87.0	ND	ND		80	WG957986
Trichloroethylene	79-01-6	131	16.0	85.7	ND	ND		80	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	16.0	78.5	ND	ND		80	WG957986
1,3,5-Trimethylbenzene	108-67-8	120	16.0	78.5	ND	ND		80	WG957986
2,2,4-Trimethylpentane	540-84-1	114.22	200	934	8970	41900		1000	WG958379
Vinyl chloride	75-01-4	62.50	16.0	40.9	ND	ND		80	WG957986
Vinyl Bromide	593-60-2	106.95	16.0	70.0	ND	ND		80	WG957986
Vinyl acetate	108-05-4	86.10	16.0	56.3	ND	ND		80	WG957986
m&p-Xylene	1330-20-7	106	32.0	139	104	450		80	WG957986
o-Xylene	95-47-6	106	16.0	69.4	49.9	217		80	WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*110*				WG958379
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*168*		J1		WG957986

Sample Narrative:

TO-15 L893322-07 WG957986: Surrogate failure due to matrix interference.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	2.50	5.94	7.20	17.1		2	WG957986
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG957986
Benzene	71-43-2	78.10	0.400	1.28	ND	ND		2	WG957986
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG957986
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG957986
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG957986
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG957986
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG957986
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG957986
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG957986
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG957986
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG957986
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG957986
Chloromethane	74-87-3	50.50	0.400	0.826	0.803	1.66		2	WG957986
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG957986
Cyclohexane	110-82-7	84.20	0.400	1.38	2.65	9.13		2	WG958379
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG957986
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG957986
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG957986
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG957986
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG957986
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG957986
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG957986
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG957986
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG957986
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG957986
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG957986
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG957986
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG957986
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG957986
Ethanol	64-17-5	46.10	1.26	2.38	3.58	6.75		2	WG957986
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG957986
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG957986
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG957986
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	0.486	2.40		2	WG957986
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG957986
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG957986
Heptane	142-82-5	100	0.400	1.64	1.04	4.24		2	WG957986
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG957986
n-Hexane	110-54-3	86.20	0.400	1.41	2.40	8.46		2	WG957986
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG957986
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG957986
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG957986
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG957986
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG957986
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG957986
MTBE	1634-04-4	88.10	0.400	1.44	ND	ND		2	WG957986
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG957986
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG957986
Propene	115-07-1	42.10	0.800	1.38	ND	ND		2	WG957986
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG957986
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG957986
Tetrachloroethylene	127-18-4	166	0.400	2.72	ND	ND		2	WG957986
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG957986
Toluene	108-88-3	92.10	0.400	1.51	0.569	2.14		2	WG957986
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG957986

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG957986
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG957986
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG957986
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	ND	ND		2	WG957986
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	ND	ND		2	WG957986
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	1.78	8.33		2	WG958379
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG957986
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG957986
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG957986
m&p-Xylene	1330-20-7	106	0.800	3.47	ND	ND		2	WG957986
o-Xylene	95-47-6	106	0.400	1.73	ND	ND		2	WG957986
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*102*				WG958379
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.2*				WG957986

Method Blank (MB)

(MB) R3201157-3 03/05/17 09:06

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	0.0846	J	0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3201157-3 03/05/17 09:06

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	0.131	J	0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	0.123	J	0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*94.7*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201157-1 03/05/17 07:38 • (LCSD) R3201157-2 03/05/17 08:21

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.59	3.16	95.6	84.3	52.0-158			12.5	25
Propene	3.75	3.83	3.45	102	92.0	54.0-155			10.5	25
Dichlorodifluoromethane	3.75	4.02	3.93	107	105	69.0-143			2.35	25
1,2-Dichlorotetrafluoroethane	3.75	4.10	4.04	109	108	70.0-130			1.48	25
Chloromethane	3.75	4.25	4.23	113	113	70.0-130			0.500	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201157-1 03/05/17 07:38 • (LCSD) R3201157-2 03/05/17 08:21

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	4.11	4.14	109	110	70.0-130			0.740	25
1,3-Butadiene	3.75	3.98	3.90	106	104	70.0-130			2.15	25
Bromomethane	3.75	3.55	4.39	94.7	117	70.0-130			21.1	25
Chloroethane	3.75	4.27	4.16	114	111	70.0-130			2.46	25
Trichlorofluoromethane	3.75	4.32	4.33	115	115	70.0-130			0.0200	25
1,1,2-Trichlorotrifluoroethane	3.75	4.23	4.26	113	114	70.0-130			0.680	25
1,1-Dichloroethene	3.75	4.33	4.30	115	115	70.0-130			0.820	25
1,1-Dichloroethane	3.75	4.30	4.23	115	113	70.0-130			1.60	25
Acetone	3.75	4.21	3.98	112	106	70.0-130			5.60	25
2-Propanol	3.75	4.32	4.18	115	111	66.0-150			3.34	25
Carbon disulfide	3.75	4.12	3.98	110	106	70.0-130			3.47	25
Methylene Chloride	3.75	3.91	3.77	104	100	70.0-130			3.69	25
MTBE	3.75	4.27	4.28	114	114	70.0-130			0.310	25
trans-1,2-Dichloroethene	3.75	4.36	4.20	116	112	70.0-130			3.68	25
n-Hexane	3.75	4.27	4.30	114	115	70.0-130			0.610	25
Vinyl acetate	3.75	4.39	4.18	117	111	70.0-130			4.96	25
Methyl Ethyl Ketone	3.75	4.38	4.52	117	121	70.0-130			3.30	25
cis-1,2-Dichloroethene	3.75	4.34	4.31	116	115	70.0-130			0.710	25
Chloroform	3.75	4.27	4.33	114	116	70.0-130			1.37	25
Cyclohexane	3.75	4.34	4.36	116	116	70.0-130			0.560	25
1,1,1-Trichloroethane	3.75	4.31	4.35	115	116	70.0-130			0.940	25
Carbon tetrachloride	3.75	4.26	4.31	114	115	70.0-130			1.25	25
Benzene	3.75	4.37	4.37	117	116	70.0-130			0.110	25
1,2-Dichloroethane	3.75	4.53	4.48	121	120	70.0-130			0.920	25
Heptane	3.75	4.32	4.27	115	114	70.0-130			1.20	25
Trichloroethylene	3.75	4.39	4.34	117	116	70.0-130			1.21	25
1,2-Dichloropropane	3.75	4.35	4.30	116	115	70.0-130			1.12	25
1,4-Dioxane	3.75	4.37	4.36	117	116	70.0-152			0.200	25
Bromodichloromethane	3.75	4.39	4.38	117	117	70.0-130			0.310	25
cis-1,3-Dichloropropene	3.75	4.38	4.42	117	118	70.0-130			0.920	25
4-Methyl-2-pentanone (MIBK)	3.75	4.50	4.43	120	118	70.0-142			1.70	25
Toluene	3.75	4.43	4.37	118	117	70.0-130			1.36	25
trans-1,3-Dichloropropene	3.75	4.38	4.29	117	115	70.0-130			1.87	25
1,1,2-Trichloroethane	3.75	4.33	4.30	115	115	70.0-130			0.530	25
Tetrachloroethylene	3.75	4.36	4.37	116	116	70.0-130			0.160	25
Methyl Butyl Ketone	3.75	4.62	4.55	123	121	70.0-150			1.64	25
Dibromochloromethane	3.75	4.47	4.39	119	117	70.0-130			1.83	25
1,2-Dibromoethane	3.75	4.41	4.33	118	115	70.0-130			1.97	25
Chlorobenzene	3.75	4.18	4.14	111	110	70.0-130			1.05	25
Ethylbenzene	3.75	4.50	4.47	120	119	70.0-130			0.620	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201157-1 03/05/17 07:38 • (LCSD) R3201157-2 03/05/17 08:21

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	9.21	9.18	123	122	70.0-130			0.370	25
o-Xylene	3.75	4.53	4.50	121	120	70.0-130			0.600	25
Styrene	3.75	4.68	4.57	125	122	70.0-130			2.28	25
Bromoform	3.75	4.44	4.50	118	120	70.0-130			1.27	25
1,1,2,2-Tetrachloroethane	3.75	4.48	4.47	119	119	70.0-130			0.210	25
4-Ethyltoluene	3.75	4.70	4.68	125	125	70.0-130			0.480	25
1,3,5-Trimethylbenzene	3.75	4.80	4.77	128	127	70.0-130			0.570	25
1,2,4-Trimethylbenzene	3.75	4.68	4.72	125	126	70.0-130			0.910	25
1,3-Dichlorobenzene	3.75	4.63	4.75	124	127	70.0-130			2.45	25
1,4-Dichlorobenzene	3.75	4.72	4.78	126	128	70.0-130			1.39	25
Benzyl Chloride	3.75	4.99	4.94	133	132	70.0-144			0.820	25
1,2-Dichlorobenzene	3.75	4.67	4.67	125	125	70.0-130			0.120	25
1,2,4-Trichlorobenzene	3.75	4.81	4.64	128	124	70.0-155			3.58	25
Hexachloro-1,3-butadiene	3.75	4.74	4.45	126	119	70.0-145			6.40	25
Naphthalene	3.75	4.76	4.69	127	125	70.0-155			1.47	25
Allyl Chloride	3.75	4.27	4.23	114	113	70.0-130			1.07	25
2-Chlorotoluene	3.75	4.60	4.52	123	121	70.0-130			1.71	25
Methyl Methacrylate	3.75	4.45	4.43	119	118	70.0-130			0.510	25
Tetrahydrofuran	3.75	4.24	4.27	113	114	70.0-140			0.920	25
2,2,4-Trimethylpentane	3.75	4.27	4.29	114	115	70.0-130			0.640	25
Vinyl Bromide	3.75	4.23	4.23	113	113	70.0-130			0.0900	25
Isopropylbenzene	3.75	4.55	4.53	121	121	70.0-130			0.350	25
(S) 1,4-Bromofluorobenzene				*99.3*	*100*	*60.0-140*				

Method Blank (MB)

(MB) R3201378-3 03/06/17 15:27

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Cyclohexane	U		0.0534	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
(S) 1,4-Bromofluorobenzene	*90.7*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201378-1 03/06/17 09:29 • (LCSD) R3201378-2 03/06/17 10:17

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Cyclohexane	3.75	3.71	3.68	98.8	98.1	70.0-130			0.710	25
2,2,4-Trimethylpentane	3.75	4.04	4.02	108	107	70.0-130			0.440	25
(S) 1,4-Bromofluorobenzene				*99.6*	*99.6*	*60.0-140*				

Method Blank (MB)

(MB) R3201671-3 03/07/17 11:25

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Benzyl Chloride	U		0.0598	0.200
Bromoform	U		0.0786	0.600
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
Isopropylbenzene	U		0.0563	0.200
Naphthalene	U		0.154	0.630
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
(S) 1,4-Bromofluorobenzene	*93.2*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201671-1 03/07/17 09:57 • (LCSD) R3201671-2 03/07/17 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Propene	3.75	4.12	2.93	110	78.3	54.0-155		J3	33.6	25
Cyclohexane	3.75	4.46	4.47	119	119	70.0-130			0.180	25
Ethylbenzene	3.75	4.61	4.58	123	122	70.0-130			0.570	25
m&p-Xylene	7.50	9.46	9.41	126	125	70.0-130			0.560	25
o-Xylene	3.75	4.61	4.61	123	123	70.0-130			0.110	25
Styrene	3.75	4.85	4.77	129	127	70.0-130			1.66	25
Bromoform	3.75	4.56	4.59	122	122	70.0-130			0.540	25
1,1,2,2-Tetrachloroethane	3.75	4.59	4.57	122	122	70.0-130			0.570	25
4-Ethyltoluene	3.75	4.83	4.78	129	127	70.0-130			1.09	25
1,3,5-Trimethylbenzene	3.75	4.80	4.85	128	129	70.0-130			0.960	25
1,2,4-Trimethylbenzene	3.75	4.88	4.78	130	128	70.0-130			2.03	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201671-1 03/07/17 09:57 • (LCSD) R3201671-2 03/07/17 10:40

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,3-Dichlorobenzene	3.75	4.88	4.79	130	128	70.0-130			1.83	25
1,4-Dichlorobenzene	3.75	4.90	4.88	131	130	70.0-130	J4		0.260	25
Benzyl Chloride	3.75	5.15	4.85	137	129	70.0-144			5.98	25
1,2-Dichlorobenzene	3.75	4.85	4.69	129	125	70.0-130			3.38	25
1,2,4-Trichlorobenzene	3.75	4.95	4.65	132	124	70.0-155			6.12	25
Hexachloro-1,3-butadiene	3.75	4.96	4.71	132	126	70.0-145			5.25	25
Naphthalene	3.75	4.97	4.50	133	120	70.0-155			9.96	25
2-Chlorotoluene	3.75	4.61	4.65	123	124	70.0-130			0.920	25
2,2,4-Trimethylpentane	3.75	4.35	4.37	116	117	70.0-130			0.420	25
Isopropylbenzene	3.75	4.49	4.65	120	124	70.0-130			3.45	25
(S) 1,4-Bromofluorobenzene				*98.9*	*97.0*	*60.0-140*				

Method Blank (MB)

(MB) R3202400-3 03/09/17 22:58

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3202400-3 03/09/17 22:58

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	0.104	J	0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	0.116	J	0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*94.5*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3202400-1 03/09/17 21:31 • (LCSD) R3202400-2 03/09/17 22:13

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	4.07	3.90	108	104	52.0-158			4.28	25
Propene	3.75	3.28	2.17	87.5	57.9	54.0-155		J3	40.8	25
Dichlorodifluoromethane	3.75	3.63	3.20	96.7	85.4	69.0-143			12.4	25
1,2-Dichlorotetrafluoroethane	3.75	3.58	3.38	95.5	90.1	70.0-130			5.83	25
Chloromethane	3.75	3.74	3.80	99.7	101	70.0-130			1.57	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3202400-1 03/09/17 21:31 • (LCSD) R3202400-2 03/09/17 22:13

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.66	3.77	97.7	101	70.0-130			2.95	25
1,3-Butadiene	3.75	3.64	3.79	97.0	101	70.0-130			4.23	25
Bromomethane	3.75	3.71	3.88	99.0	103	70.0-130			4.49	25
Chloroethane	3.75	3.88	3.95	103	105	70.0-130			1.88	25
Trichlorofluoromethane	3.75	4.02	3.99	107	106	70.0-130			0.800	25
1,1,2-Trichlorotrifluoroethane	3.75	3.89	3.91	104	104	70.0-130			0.720	25
1,1-Dichloroethene	3.75	3.89	3.94	104	105	70.0-130			1.29	25
1,1-Dichloroethane	3.75	3.90	3.92	104	104	70.0-130			0.320	25
Acetone	3.75	3.75	3.69	100	98.5	70.0-130			1.59	25
2-Propanol	3.75	3.91	3.89	104	104	66.0-150			0.410	25
Carbon disulfide	3.75	3.71	3.74	99.0	99.8	70.0-130			0.710	25
Methylene Chloride	3.75	3.50	3.46	93.4	92.2	70.0-130			1.28	25
MTBE	3.75	4.02	3.97	107	106	70.0-130			1.24	25
trans-1,2-Dichloroethene	3.75	3.92	3.94	105	105	70.0-130			0.600	25
n-Hexane	3.75	3.88	3.89	104	104	70.0-130			0.270	25
Vinyl acetate	3.75	3.92	3.87	105	103	70.0-130			1.35	25
Methyl Ethyl Ketone	3.75	4.16	4.10	111	109	70.0-130			1.40	25
cis-1,2-Dichloroethene	3.75	3.95	3.95	105	105	70.0-130			0.0400	25
Chloroform	3.75	4.00	3.96	107	106	70.0-130			0.990	25
Cyclohexane	3.75	3.96	3.99	106	107	70.0-130			0.950	25
1,1,1-Trichloroethane	3.75	4.06	4.06	108	108	70.0-130			0.0100	25
Carbon tetrachloride	3.75	4.02	3.98	107	106	70.0-130			1.00	25
Benzene	3.75	3.91	3.91	104	104	70.0-130			0.0100	25
1,2-Dichloroethane	3.75	4.05	4.00	108	107	70.0-130			1.38	25
Heptane	3.75	3.91	3.92	104	105	70.0-130			0.290	25
Trichloroethylene	3.75	3.99	3.96	106	106	70.0-130			0.720	25
1,2-Dichloropropane	3.75	3.89	3.93	104	105	70.0-130			1.15	25
1,4-Dioxane	3.75	4.01	3.93	107	105	70.0-152			2.16	25
Bromodichloromethane	3.75	4.00	3.99	107	106	70.0-130			0.280	25
cis-1,3-Dichloropropene	3.75	4.06	4.04	108	108	70.0-130			0.610	25
4-Methyl-2-pentanone (MIBK)	3.75	3.97	3.97	106	106	70.0-142			0.120	25
Toluene	3.75	3.97	3.98	106	106	70.0-130			0.380	25
trans-1,3-Dichloropropene	3.75	3.93	3.92	105	104	70.0-130			0.350	25
1,1,2-Trichloroethane	3.75	3.98	3.99	106	106	70.0-130			0.0600	25
Tetrachloroethylene	3.75	4.00	3.97	107	106	70.0-130			0.710	25
Methyl Butyl Ketone	3.75	4.06	4.06	108	108	70.0-150			0.0400	25
Dibromochloromethane	3.75	3.99	4.02	106	107	70.0-130			0.930	25
1,2-Dibromoethane	3.75	3.95	3.94	105	105	70.0-130			0.290	25
Chlorobenzene	3.75	3.70	3.80	98.5	101	70.0-130			2.81	25
Ethylbenzene	3.75	4.11	4.16	110	111	70.0-130			1.09	25

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3202400-1 03/09/17 21:31 • (LCSD) R3202400-2 03/09/17 22:13

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	8.48	8.53	113	114	70.0-130			0.550	25
o-Xylene	3.75	4.16	4.12	111	110	70.0-130			1.15	25
Styrene	3.75	4.31	4.19	115	112	70.0-130			2.97	25
Bromoform	3.75	4.12	4.09	110	109	70.0-130			0.710	25
1,1,2,2-Tetrachloroethane	3.75	4.03	4.02	108	107	70.0-130			0.320	25
4-Ethyltoluene	3.75	4.31	4.36	115	116	70.0-130			1.15	25
1,3,5-Trimethylbenzene	3.75	4.35	4.38	116	117	70.0-130			0.680	25
1,2,4-Trimethylbenzene	3.75	4.34	4.33	116	115	70.0-130			0.300	25
1,3-Dichlorobenzene	3.75	4.38	4.28	117	114	70.0-130			2.35	25
1,4-Dichlorobenzene	3.75	4.60	4.58	123	122	70.0-130			0.420	25
Benzyl Chloride	3.75	4.60	4.38	123	117	70.0-144			4.85	25
1,2-Dichlorobenzene	3.75	4.40	4.31	117	115	70.0-130			2.06	25
1,2,4-Trichlorobenzene	3.75	4.50	4.07	120	109	70.0-155			9.93	25
Hexachloro-1,3-butadiene	3.75	4.40	4.19	117	112	70.0-145			4.79	25
Naphthalene	3.75	4.50	3.89	120	104	70.0-155			14.6	25
Allyl Chloride	3.75	3.80	3.89	101	104	70.0-130			2.27	25
2-Chlorotoluene	3.75	4.20	4.16	112	111	70.0-130			1.04	25
Methyl Methacrylate	3.75	3.88	3.84	104	102	70.0-130			1.01	25
Tetrahydrofuran	3.75	3.87	3.88	103	104	70.0-140			0.390	25
2,2,4-Trimethylpentane	3.75	3.92	3.93	104	105	70.0-130			0.470	25
Vinyl Bromide	3.75	3.91	3.92	104	104	70.0-130			0.210	25
Isopropylbenzene	3.75	4.13	4.20	110	112	70.0-130			1.52	25
(S) 1,4-Bromofluorobenzene				*101*	*99.9*	*60.0-140*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

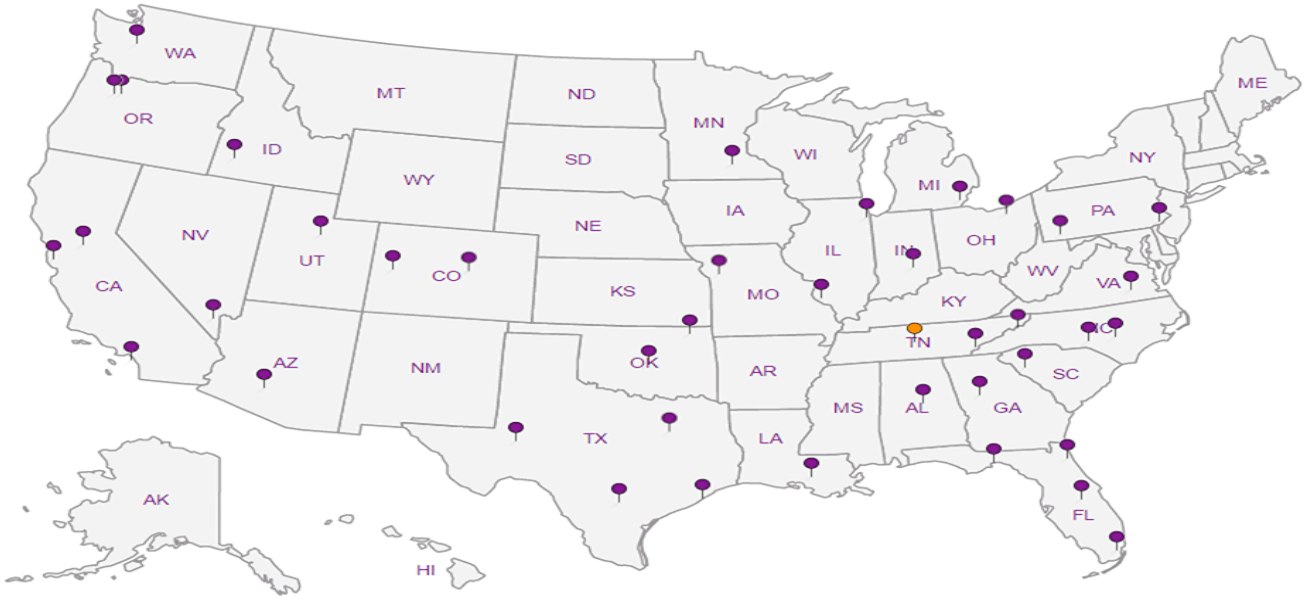
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



SCS Engineers - OK

17 Commons Circle, Suite 1
Yukon, OK 73099

Billing Information:
Accounts Payable
1817 Commons Circle, Ste 1
Yukon, OK 73099

Pres Chk

Report to: Mr. Dale Daniel

Email To: ddaniel@scsengineers.com

Project Description: 1708 & 1721 NE 23rd Street

City/State Collected: OKC, OK

Phone: 405-265-3960
Fax: 405-601-9782

Client Project #

Lab Project # AQUATEOCOK-1708

Collected by (print): D. Daniel

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	V8260 40mlAmb-HCl	V8260 40mlAmb-HCl-Blk	Remarks	Sample # (lab only)
SV-01		Air	5	2-24	1000	1	X				01
SV-02		Air	5	2-24	1030	1	X				02
SV-03		Air	2	2-27	1600	1	X				03
SV-04		Air	5	2-27	1530	1	X				04
SV-05		Air	5	2-27	1500	1	X				05
Duplicate		Air	|	2-27	|	1	X				06
Duplicate		Air	|	2-27	|	1	X				07
BA-1		Air	|	2-27	1630	1	X				08

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 893372
L164

Acctnum: AQUATEOCOK
Template: T120607
Prelogin: P588632
TSR: 034 - Craig Cothron
PB:
Shipped Via: FedEX Ground

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via: ___ UPS ___ FedEx ___ Courier Lone Star

Tracking # 526 5485 9641

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Trip Blank Received: Yes / No
HCL / MeoH
TBR

	Date:	Time:		
Relinquished by : (Signature)	3/1/17	951	Received by: (Signature)	Temp: Amb. °C Bottles Received: TD 8+8FC
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	If preservation required by Login: Date/Time
Relinquished by : (Signature)	3/1/17	1700	Received for lab by: (Signature)	Date: 3/2/17 Time: 0900

Hold: Condition: NCF / OK

ANALYTICAL REPORT

March 10, 2017

SCS Engineers - OK

Sample Delivery Group:	L893430
Samples Received:	03/02/2017
Project Number:	
Description:	1708 and 1721 NE 23rd

Report To:

Mr. Dale Daniel
1817 Commons Circle, Suite 1
Yukon, OK 73099

Entire Report Reviewed By:

Craig Cothron
Technical Service Representative

TABLE OF CONTENTS

SB-04 L893430-01 GW

Collected by: D. Daniel | Collected date/time: 02/27/17 09:00 | Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG957565	1	03/04/17 09:12	03/06/17 13:46	NJB
Metals (ICP) by Method 6010B	WG958287	1	03/07/17 12:07	03/08/17 02:51	LTB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957745	1	03/03/17 16:08	03/03/17 16:08	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957677	5	03/07/17 17:20	03/07/17 17:20	LRL
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1.02	03/03/17 22:39	03/04/17 11:47	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG957966	1.05	03/05/17 19:41	03/06/17 13:49	FMB

SB-05 L893430-02 GW

Collected by: D. Daniel | Collected date/time: 02/27/17 11:00 | Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG957565	1	03/04/17 09:12	03/06/17 13:49	NJB
Metals (ICP) by Method 6010B	WG958287	9	03/07/17 12:07	03/08/17 02:54	LTB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957745	10	03/03/17 17:36	03/03/17 17:36	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957677	25	03/06/17 11:01	03/06/17 11:01	BMB
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1.33	03/03/17 22:39	03/04/17 11:59	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG957966	1.05	03/05/17 19:41	03/06/17 14:11	FMB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG957966	10.5	03/05/17 19:41	03/07/17 19:10	FMB

SB-06 L893430-03 GW

Collected by: D. Daniel | Collected date/time: 02/27/17 10:00 | Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG957565	1	03/04/17 09:12	03/06/17 13:51	NJB
Metals (ICP) by Method 6010B	WG958287	1	03/07/17 12:07	03/08/17 02:56	LTB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957745	1	03/03/17 17:58	03/03/17 17:58	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957677	5	03/07/17 17:34	03/07/17 17:34	LRL
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1	03/03/17 22:39	03/04/17 11:34	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG957966	1.14	03/05/17 19:41	03/06/17 14:33	FMB

DUPLICATE L893430-04 GW

Collected by: D. Daniel | Collected date/time: 02/27/17 00:00 | Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Mercury by Method 7470A	WG957565	1	03/04/17 09:12	03/06/17 13:53	NJB
Metals (ICP) by Method 6010B	WG958287	1	03/07/17 12:07	03/08/17 03:05	LTB
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG957745	10	03/03/17 18:20	03/03/17 18:20	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957677	25	03/06/17 11:46	03/06/17 11:46	BMB
Semi-Volatile Organic Compounds (GC) by Method SV8015	WG956534	1	03/03/17 22:39	03/04/17 12:13	DMG
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG957966	1.05	03/05/17 19:41	03/06/17 14:55	FMB
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG957966	10.5	03/05/17 19:41	03/09/17 10:57	FMB

TRIP BLANK L893430-05 GW

Collected by: D. Daniel | Collected date/time: 02/27/17 00:00 | Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG957677	1	03/06/17 08:45	03/06/17 08:45	BMB

SB-01 L893430-06 GW

Collected by: D. Daniel
Collected date/time: 02/24/17 10:30
Received date/time: 03/02/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Gravimetric Analysis by Method 2540 C-2011	WG957616	1	03/03/17 13:10	03/03/17 13:41	MMF

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Craig Cothron
Technical Service Representative

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND	J3 J4	0.200	1	03/06/2017 13:46	WG957565

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	03/08/2017 02:51	WG958287
Barium,Dissolved	1890		5.00	1	03/08/2017 02:51	WG958287
Cadmium,Dissolved	ND		2.00	1	03/08/2017 02:51	WG958287
Chromium,Dissolved	ND		10.0	1	03/08/2017 02:51	WG958287
Lead,Dissolved	ND		5.00	1	03/08/2017 02:51	WG958287
Selenium,Dissolved	ND		10.0	1	03/08/2017 02:51	WG958287
Silver,Dissolved	ND		5.00	1	03/08/2017 02:51	WG958287

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	3950		100	1	03/03/2017 16:08	WG957745
(S) a,a,a-Trifluorotoluene(FID)	*110*		*77.0-122*		*03/03/2017 16:08*	WG957745

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	405		250	5	03/07/2017 17:20	WG957677
Acrylonitrile	ND		50.0	5	03/07/2017 17:20	WG957677
Benzene	6.03		5.00	5	03/07/2017 17:20	WG957677
Bromochloromethane	ND		5.00	5	03/07/2017 17:20	WG957677
Bromodichloromethane	ND		5.00	5	03/07/2017 17:20	WG957677
Bromoform	ND		5.00	5	03/07/2017 17:20	WG957677
Bromomethane	ND		25.0	5	03/07/2017 17:20	WG957677
Carbon disulfide	ND		5.00	5	03/07/2017 17:20	WG957677
Carbon tetrachloride	ND		5.00	5	03/07/2017 17:20	WG957677
Chlorobenzene	ND		5.00	5	03/07/2017 17:20	WG957677
Chlorodibromomethane	ND		5.00	5	03/07/2017 17:20	WG957677
Chloroethane	ND		25.0	5	03/07/2017 17:20	WG957677
Chloroform	ND		25.0	5	03/07/2017 17:20	WG957677
Chloromethane	ND		12.5	5	03/07/2017 17:20	WG957677
1,2-Dibromo-3-Chloropropane	ND		25.0	5	03/07/2017 17:20	WG957677
1,2-Dibromoethane	ND		5.00	5	03/07/2017 17:20	WG957677
Dibromomethane	ND		5.00	5	03/07/2017 17:20	WG957677
1,2-Dichlorobenzene	ND	J4	5.00	5	03/07/2017 17:20	WG957677
1,4-Dichlorobenzene	ND		5.00	5	03/07/2017 17:20	WG957677
1,1-Dichloroethane	ND		5.00	5	03/07/2017 17:20	WG957677
1,2-Dichloroethane	ND		5.00	5	03/07/2017 17:20	WG957677
1,1-Dichloroethene	ND		5.00	5	03/07/2017 17:20	WG957677
cis-1,2-Dichloroethene	ND		5.00	5	03/07/2017 17:20	WG957677
trans-1,2-Dichloroethene	ND		5.00	5	03/07/2017 17:20	WG957677
1,2-Dichloropropane	ND		5.00	5	03/07/2017 17:20	WG957677
trans-1,4-Dichloro-2-butene	ND		12.5	5	03/07/2017 17:20	WG957677
cis-1,3-Dichloropropene	ND		5.00	5	03/07/2017 17:20	WG957677
trans-1,3-Dichloropropene	ND		5.00	5	03/07/2017 17:20	WG957677
Ethylbenzene	ND		5.00	5	03/07/2017 17:20	WG957677
2-Hexanone	ND		50.0	5	03/07/2017 17:20	WG957677
Iodomethane	ND		50.0	5	03/07/2017 17:20	WG957677
2-Butanone (MEK)	ND		50.0	5	03/07/2017 17:20	WG957677

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		25.0	5	03/07/2017 17:20	WG957677
4-Methyl-2-pentanone (MIBK)	ND		50.0	5	03/07/2017 17:20	WG957677
Styrene	ND		5.00	5	03/07/2017 17:20	WG957677
1,1,1,2-Tetrachloroethane	ND		5.00	5	03/07/2017 17:20	WG957677
1,1,2,2-Tetrachloroethane	ND		5.00	5	03/07/2017 17:20	WG957677
Tetrachloroethene	ND		5.00	5	03/07/2017 17:20	WG957677
Toluene	ND		5.00	5	03/07/2017 17:20	WG957677
1,1,1-Trichloroethane	ND		5.00	5	03/07/2017 17:20	WG957677
1,1,2-Trichloroethane	ND		5.00	5	03/07/2017 17:20	WG957677
Trichloroethene	ND		5.00	5	03/07/2017 17:20	WG957677
Trichlorofluoromethane	ND		25.0	5	03/07/2017 17:20	WG957677
1,2,3-Trichloropropane	ND		12.5	5	03/07/2017 17:20	WG957677
Vinyl acetate	ND		50.0	5	03/07/2017 17:20	WG957677
Vinyl chloride	ND		5.00	5	03/07/2017 17:20	WG957677
Xylenes, Total	ND		15.0	5	03/07/2017 17:20	WG957677
(S) Toluene-d8	*102*		*80.0-120*		*03/07/2017 17:20*	WG957677
(S) Dibromofluoromethane	*87.4*		*76.0-123*		*03/07/2017 17:20*	WG957677
(S) 4-Bromofluorobenzene	*95.8*		*80.0-120*		*03/07/2017 17:20*	WG957677

Sample Narrative:

8260B L893430-01 WG957677: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3180		102	1.02	03/04/2017 11:47	WG956534
C28-C40 Oil Range	328		102	1.02	03/04/2017 11:47	WG956534
(S) o-Terphenyl	*106*		*31.0-160*		*03/04/2017 11:47*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Acenaphthene	0.156		0.0525	1.05	03/06/2017 13:49	WG957966
Acenaphthylene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Benzo(a)anthracene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Benzo(a)pyrene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Benzo(b)fluoranthene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Benzo(g,h,i)perylene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Benzo(k)fluoranthene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Chrysene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Dibenz(a,h)anthracene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Fluoranthene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Fluorene	0.0605		0.0525	1.05	03/06/2017 13:49	WG957966
Indeno(1,2,3-cd)pyrene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
Naphthalene	30.7		0.262	1.05	03/06/2017 13:49	WG957966
Phenanthrene	0.0525		0.0525	1.05	03/06/2017 13:49	WG957966
Pyrene	ND		0.0525	1.05	03/06/2017 13:49	WG957966
1-Methylnaphthalene	25.7		0.262	1.05	03/06/2017 13:49	WG957966
2-Methylnaphthalene	29.5		0.262	1.05	03/06/2017 13:49	WG957966
2-Chloronaphthalene	ND		0.262	1.05	03/06/2017 13:49	WG957966
(S) Nitrobenzene-d5	*135*		*31.0-160*		*03/06/2017 13:49*	WG957966
(S) 2-Fluorobiphenyl	*113*		*48.0-148*		*03/06/2017 13:49*	WG957966
(S) p-Terphenyl-d14	*113*		*37.0-146*		*03/06/2017 13:49*	WG957966

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND	J3 J4	0.200	1	03/06/2017 13:49	WG957565

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		90.0	9	03/08/2017 02:54	WG958287
Barium,Dissolved	706		45.0	9	03/08/2017 02:54	WG958287
Cadmium,Dissolved	ND		18.0	9	03/08/2017 02:54	WG958287
Chromium,Dissolved	ND		90.0	9	03/08/2017 02:54	WG958287
Lead,Dissolved	ND		45.0	9	03/08/2017 02:54	WG958287
Selenium,Dissolved	ND		90.0	9	03/08/2017 02:54	WG958287
Silver,Dissolved	ND		45.0	9	03/08/2017 02:54	WG958287

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	22000		1000	10	03/03/2017 17:36	WG957745
(S) a,a,a-Trifluorotoluene(FID)	*97.0*		*77.0-122*		*03/03/2017 17:36*	WG957745

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		1250	25	03/06/2017 11:01	WG957677
Acrylonitrile	ND		250	25	03/06/2017 11:01	WG957677
Benzene	806		25.0	25	03/06/2017 11:01	WG957677
Bromochloromethane	ND		25.0	25	03/06/2017 11:01	WG957677
Bromodichloromethane	ND		25.0	25	03/06/2017 11:01	WG957677
Bromoform	ND		25.0	25	03/06/2017 11:01	WG957677
Bromomethane	ND		125	25	03/06/2017 11:01	WG957677
Carbon disulfide	ND		25.0	25	03/06/2017 11:01	WG957677
Carbon tetrachloride	ND		25.0	25	03/06/2017 11:01	WG957677
Chlorobenzene	ND		25.0	25	03/06/2017 11:01	WG957677
Chlorodibromomethane	ND		25.0	25	03/06/2017 11:01	WG957677
Chloroethane	ND		125	25	03/06/2017 11:01	WG957677
Chloroform	ND		125	25	03/06/2017 11:01	WG957677
Chloromethane	ND		62.5	25	03/06/2017 11:01	WG957677
1,2-Dibromo-3-Chloropropane	ND		125	25	03/06/2017 11:01	WG957677
1,2-Dibromoethane	ND		25.0	25	03/06/2017 11:01	WG957677
Dibromomethane	ND		25.0	25	03/06/2017 11:01	WG957677
1,2-Dichlorobenzene	ND	J4	25.0	25	03/06/2017 11:01	WG957677
1,4-Dichlorobenzene	ND		25.0	25	03/06/2017 11:01	WG957677
1,1-Dichloroethane	ND		25.0	25	03/06/2017 11:01	WG957677
1,2-Dichloroethane	ND		25.0	25	03/06/2017 11:01	WG957677
1,1-Dichloroethene	ND		25.0	25	03/06/2017 11:01	WG957677
cis-1,2-Dichloroethene	ND		25.0	25	03/06/2017 11:01	WG957677
trans-1,2-Dichloroethene	ND		25.0	25	03/06/2017 11:01	WG957677
1,2-Dichloropropane	ND		25.0	25	03/06/2017 11:01	WG957677
trans-1,4-Dichloro-2-butene	ND		62.5	25	03/06/2017 11:01	WG957677
cis-1,3-Dichloropropene	ND		25.0	25	03/06/2017 11:01	WG957677
trans-1,3-Dichloropropene	ND		25.0	25	03/06/2017 11:01	WG957677
Ethylbenzene	1040		25.0	25	03/06/2017 11:01	WG957677
2-Hexanone	ND		250	25	03/06/2017 11:01	WG957677
Iodomethane	ND		250	25	03/06/2017 11:01	WG957677
2-Butanone (MEK)	ND		250	25	03/06/2017 11:01	WG957677

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		125	25	03/06/2017 11:01	WG957677
4-Methyl-2-pentanone (MIBK)	ND		250	25	03/06/2017 11:01	WG957677
Styrene	ND		25.0	25	03/06/2017 11:01	WG957677
1,1,1,2-Tetrachloroethane	ND		25.0	25	03/06/2017 11:01	WG957677
1,1,2,2-Tetrachloroethane	ND		25.0	25	03/06/2017 11:01	WG957677
Tetrachloroethene	ND		25.0	25	03/06/2017 11:01	WG957677
Toluene	172		25.0	25	03/06/2017 11:01	WG957677
1,1,1-Trichloroethane	ND		25.0	25	03/06/2017 11:01	WG957677
1,1,2-Trichloroethane	ND		25.0	25	03/06/2017 11:01	WG957677
Trichloroethene	ND		25.0	25	03/06/2017 11:01	WG957677
Trichlorofluoromethane	ND		125	25	03/06/2017 11:01	WG957677
1,2,3-Trichloropropane	ND		62.5	25	03/06/2017 11:01	WG957677
Vinyl acetate	ND		250	25	03/06/2017 11:01	WG957677
Vinyl chloride	ND		25.0	25	03/06/2017 11:01	WG957677
Xylenes, Total	1120		75.0	25	03/06/2017 11:01	WG957677
(S) Toluene-d8	*101*		*80.0-120*		*03/06/2017 11:01*	WG957677
(S) Dibromofluoromethane	*108*		*76.0-123*		*03/06/2017 11:01*	WG957677
(S) 4-Bromofluorobenzene	*97.6*		*80.0-120*		*03/06/2017 11:01*	WG957677

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4970		133	1.33	03/04/2017 11:59	WG956534
C28-C40 Oil Range	ND		133	1.33	03/04/2017 11:59	WG956534
(S) o-Terphenyl	*94.0*		*31.0-160*		*03/04/2017 11:59*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Acenaphthene	0.320		0.0525	1.05	03/06/2017 14:11	WG957966
Acenaphthylene	0.0560		0.0525	1.05	03/06/2017 14:11	WG957966
Benzo(a)anthracene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Benzo(a)pyrene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Benzo(b)fluoranthene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Benzo(g,h,i)perylene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Benzo(k)fluoranthene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Chrysene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Dibenz(a,h)anthracene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Fluoranthene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Fluorene	0.242		0.0525	1.05	03/06/2017 14:11	WG957966
Indeno(1,2,3-cd)pyrene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
Naphthalene	421		2.62	10.5	03/07/2017 19:10	WG957966
Phenanthrene	0.127		0.0525	1.05	03/06/2017 14:11	WG957966
Pyrene	ND		0.0525	1.05	03/06/2017 14:11	WG957966
1-Methylnaphthalene	73.4		0.262	1.05	03/06/2017 14:11	WG957966
2-Methylnaphthalene	119		2.62	10.5	03/07/2017 19:10	WG957966
2-Chloronaphthalene	ND		0.262	1.05	03/06/2017 14:11	WG957966
(S) Nitrobenzene-d5	*147*		*31.0-160*		*03/07/2017 19:10*	WG957966
(S) Nitrobenzene-d5	*124*		*31.0-160*		*03/06/2017 14:11*	WG957966
(S) 2-Fluorobiphenyl	*95.1*		*48.0-148*		*03/07/2017 19:10*	WG957966
(S) 2-Fluorobiphenyl	*109*		*48.0-148*		*03/06/2017 14:11*	WG957966
(S) p-Terphenyl-d14	*111*		*37.0-146*		*03/06/2017 14:11*	WG957966
(S) p-Terphenyl-d14	*98.1*		*37.0-146*		*03/07/2017 19:10*	WG957966

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND	J3 J4	0.200	1	03/06/2017 13:51	WG957565

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	ND		10.0	1	03/08/2017 02:56	WG958287
Barium,Dissolved	1210		5.00	1	03/08/2017 02:56	WG958287
Cadmium,Dissolved	ND		2.00	1	03/08/2017 02:56	WG958287
Chromium,Dissolved	ND		10.0	1	03/08/2017 02:56	WG958287
Lead,Dissolved	ND		5.00	1	03/08/2017 02:56	WG958287
Selenium,Dissolved	ND		10.0	1	03/08/2017 02:56	WG958287
Silver,Dissolved	ND		5.00	1	03/08/2017 02:56	WG958287

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	6340		100	1	03/03/2017 17:58	WG957745
(S) a,a,a-Trifluorotoluene(FID)	*117*		*77.0-122*		*03/03/2017 17:58*	WG957745

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		250	5	03/07/2017 17:34	WG957677
Acrylonitrile	ND		50.0	5	03/07/2017 17:34	WG957677
Benzene	75.8		5.00	5	03/07/2017 17:34	WG957677
Bromochloromethane	ND		5.00	5	03/07/2017 17:34	WG957677
Bromodichloromethane	ND		5.00	5	03/07/2017 17:34	WG957677
Bromoform	ND		5.00	5	03/07/2017 17:34	WG957677
Bromomethane	ND		25.0	5	03/07/2017 17:34	WG957677
Carbon disulfide	ND		5.00	5	03/07/2017 17:34	WG957677
Carbon tetrachloride	ND		5.00	5	03/07/2017 17:34	WG957677
Chlorobenzene	ND		5.00	5	03/07/2017 17:34	WG957677
Chlorodibromomethane	ND		5.00	5	03/07/2017 17:34	WG957677
Chloroethane	ND		25.0	5	03/07/2017 17:34	WG957677
Chloroform	ND		25.0	5	03/07/2017 17:34	WG957677
Chloromethane	ND		12.5	5	03/07/2017 17:34	WG957677
1,2-Dibromo-3-Chloropropane	ND		25.0	5	03/07/2017 17:34	WG957677
1,2-Dibromoethane	ND		5.00	5	03/07/2017 17:34	WG957677
Dibromomethane	ND		5.00	5	03/07/2017 17:34	WG957677
1,2-Dichlorobenzene	ND	J4	5.00	5	03/07/2017 17:34	WG957677
1,4-Dichlorobenzene	ND		5.00	5	03/07/2017 17:34	WG957677
1,1-Dichloroethane	ND		5.00	5	03/07/2017 17:34	WG957677
1,2-Dichloroethane	ND		5.00	5	03/07/2017 17:34	WG957677
1,1-Dichloroethene	ND		5.00	5	03/07/2017 17:34	WG957677
cis-1,2-Dichloroethene	ND		5.00	5	03/07/2017 17:34	WG957677
trans-1,2-Dichloroethene	ND		5.00	5	03/07/2017 17:34	WG957677
1,2-Dichloropropane	ND		5.00	5	03/07/2017 17:34	WG957677
trans-1,4-Dichloro-2-butene	ND		12.5	5	03/07/2017 17:34	WG957677
cis-1,3-Dichloropropene	ND		5.00	5	03/07/2017 17:34	WG957677
trans-1,3-Dichloropropene	ND		5.00	5	03/07/2017 17:34	WG957677
Ethylbenzene	ND		5.00	5	03/07/2017 17:34	WG957677
2-Hexanone	ND		50.0	5	03/07/2017 17:34	WG957677
Iodomethane	ND		50.0	5	03/07/2017 17:34	WG957677
2-Butanone (MEK)	ND		50.0	5	03/07/2017 17:34	WG957677

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		25.0	5	03/07/2017 17:34	WG957677
4-Methyl-2-pentanone (MIBK)	ND		50.0	5	03/07/2017 17:34	WG957677
Styrene	ND		5.00	5	03/07/2017 17:34	WG957677
1,1,1,2-Tetrachloroethane	ND		5.00	5	03/07/2017 17:34	WG957677
1,1,2,2-Tetrachloroethane	ND		5.00	5	03/07/2017 17:34	WG957677
Tetrachloroethene	ND		5.00	5	03/07/2017 17:34	WG957677
Toluene	8.77		5.00	5	03/07/2017 17:34	WG957677
1,1,1-Trichloroethane	ND		5.00	5	03/07/2017 17:34	WG957677
1,1,2-Trichloroethane	ND		5.00	5	03/07/2017 17:34	WG957677
Trichloroethene	ND		5.00	5	03/07/2017 17:34	WG957677
Trichlorofluoromethane	ND		25.0	5	03/07/2017 17:34	WG957677
1,2,3-Trichloropropane	ND		12.5	5	03/07/2017 17:34	WG957677
Vinyl acetate	ND		50.0	5	03/07/2017 17:34	WG957677
Vinyl chloride	ND		5.00	5	03/07/2017 17:34	WG957677
Xylenes, Total	16.0		15.0	5	03/07/2017 17:34	WG957677
(S) Toluene-d8	*103*		*80.0-120*		*03/07/2017 17:34*	WG957677
(S) Dibromofluoromethane	*87.7*		*76.0-123*		*03/07/2017 17:34*	WG957677
(S) 4-Bromofluorobenzene	*99.3*		*80.0-120*		*03/07/2017 17:34*	WG957677

Sample Narrative:

8260B L893430-03 WG957677: Non-target compounds too high to run at a lower dilution.

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	1680		100	1	03/04/2017 11:34	WG956534
C28-C40 Oil Range	ND		100	1	03/04/2017 11:34	WG956534
(S) o-Terphenyl	*97.6*		*31.0-160*		*03/04/2017 11:34*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Acenaphthene	0.220		0.0570	1.14	03/06/2017 14:33	WG957966
Acenaphthylene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Benzo(a)anthracene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Benzo(a)pyrene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Benzo(b)fluoranthene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Benzo(g,h,i)perylene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Benzo(k)fluoranthene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Chrysene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Dibenz(a,h)anthracene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Fluoranthene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Fluorene	0.115		0.0570	1.14	03/06/2017 14:33	WG957966
Indeno(1,2,3-cd)pyrene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
Naphthalene	71.2		0.285	1.14	03/06/2017 14:33	WG957966
Phenanthrene	0.0812		0.0570	1.14	03/06/2017 14:33	WG957966
Pyrene	ND		0.0570	1.14	03/06/2017 14:33	WG957966
1-Methylnaphthalene	24.6		0.285	1.14	03/06/2017 14:33	WG957966
2-Methylnaphthalene	30.5		0.285	1.14	03/06/2017 14:33	WG957966
2-Chloronaphthalene	ND		0.285	1.14	03/06/2017 14:33	WG957966
(S) Nitrobenzene-d5	*139*		*31.0-160*		*03/06/2017 14:33*	WG957966
(S) 2-Fluorobiphenyl	*108*		*48.0-148*		*03/06/2017 14:33*	WG957966
(S) p-Terphenyl-d14	*113*		*37.0-146*		*03/06/2017 14:33*	WG957966

Mercury by Method 7470A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Mercury,Dissolved	ND	J3 J4	0.200	1	03/06/2017 13:53	WG957565

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Arsenic,Dissolved	15.6		10.0	1	03/08/2017 03:05	WG958287
Barium,Dissolved	654		5.00	1	03/08/2017 03:05	WG958287
Cadmium,Dissolved	ND		2.00	1	03/08/2017 03:05	WG958287
Chromium,Dissolved	ND		10.0	1	03/08/2017 03:05	WG958287
Lead,Dissolved	15.9		5.00	1	03/08/2017 03:05	WG958287
Selenium,Dissolved	ND		10.0	1	03/08/2017 03:05	WG958287
Silver,Dissolved	ND		5.00	1	03/08/2017 03:05	WG958287

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TPH (GC/FID) Low Fraction	23000		1000	10	03/03/2017 18:20	WG957745
(S) a,a,a-Trifluorotoluene(FID)	*98.7*		*77.0-122*		*03/03/2017 18:20*	WG957745

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		1250	25	03/06/2017 11:46	WG957677
Acrylonitrile	ND		250	25	03/06/2017 11:46	WG957677
Benzene	801		25.0	25	03/06/2017 11:46	WG957677
Bromochloromethane	ND		25.0	25	03/06/2017 11:46	WG957677
Bromodichloromethane	ND		25.0	25	03/06/2017 11:46	WG957677
Bromoform	ND		25.0	25	03/06/2017 11:46	WG957677
Bromomethane	ND		125	25	03/06/2017 11:46	WG957677
Carbon disulfide	ND		25.0	25	03/06/2017 11:46	WG957677
Carbon tetrachloride	ND		25.0	25	03/06/2017 11:46	WG957677
Chlorobenzene	ND		25.0	25	03/06/2017 11:46	WG957677
Chlorodibromomethane	ND		25.0	25	03/06/2017 11:46	WG957677
Chloroethane	ND		125	25	03/06/2017 11:46	WG957677
Chloroform	ND		125	25	03/06/2017 11:46	WG957677
Chloromethane	ND		62.5	25	03/06/2017 11:46	WG957677
1,2-Dibromo-3-Chloropropane	ND		125	25	03/06/2017 11:46	WG957677
1,2-Dibromoethane	ND		25.0	25	03/06/2017 11:46	WG957677
Dibromomethane	ND		25.0	25	03/06/2017 11:46	WG957677
1,2-Dichlorobenzene	ND	J4	25.0	25	03/06/2017 11:46	WG957677
1,4-Dichlorobenzene	ND		25.0	25	03/06/2017 11:46	WG957677
1,1-Dichloroethane	ND		25.0	25	03/06/2017 11:46	WG957677
1,2-Dichloroethane	ND		25.0	25	03/06/2017 11:46	WG957677
1,1-Dichloroethene	ND		25.0	25	03/06/2017 11:46	WG957677
cis-1,2-Dichloroethene	ND		25.0	25	03/06/2017 11:46	WG957677
trans-1,2-Dichloroethene	ND		25.0	25	03/06/2017 11:46	WG957677
1,2-Dichloropropane	ND		25.0	25	03/06/2017 11:46	WG957677
trans-1,4-Dichloro-2-butene	ND		62.5	25	03/06/2017 11:46	WG957677
cis-1,3-Dichloropropene	ND		25.0	25	03/06/2017 11:46	WG957677
trans-1,3-Dichloropropene	ND		25.0	25	03/06/2017 11:46	WG957677
Ethylbenzene	1050		25.0	25	03/06/2017 11:46	WG957677
2-Hexanone	ND		250	25	03/06/2017 11:46	WG957677
Iodomethane	ND		250	25	03/06/2017 11:46	WG957677
2-Butanone (MEK)	ND		250	25	03/06/2017 11:46	WG957677

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	ND		125	25	03/06/2017 11:46	WG957677
4-Methyl-2-pentanone (MIBK)	ND		250	25	03/06/2017 11:46	WG957677
Styrene	ND		25.0	25	03/06/2017 11:46	WG957677
1,1,1,2-Tetrachloroethane	ND		25.0	25	03/06/2017 11:46	WG957677
1,1,2,2-Tetrachloroethane	ND		25.0	25	03/06/2017 11:46	WG957677
Tetrachloroethene	ND		25.0	25	03/06/2017 11:46	WG957677
Toluene	174		25.0	25	03/06/2017 11:46	WG957677
1,1,1-Trichloroethane	ND		25.0	25	03/06/2017 11:46	WG957677
1,1,2-Trichloroethane	ND		25.0	25	03/06/2017 11:46	WG957677
Trichloroethene	ND		25.0	25	03/06/2017 11:46	WG957677
Trichlorofluoromethane	ND		125	25	03/06/2017 11:46	WG957677
1,2,3-Trichloropropane	ND		62.5	25	03/06/2017 11:46	WG957677
Vinyl acetate	ND		250	25	03/06/2017 11:46	WG957677
Vinyl chloride	ND		25.0	25	03/06/2017 11:46	WG957677
Xylenes, Total	1150		75.0	25	03/06/2017 11:46	WG957677
(S) Toluene-d8	*100*		*80.0-120*		*03/06/2017 11:46*	WG957677
(S) Dibromofluoromethane	*107*		*76.0-123*		*03/06/2017 11:46*	WG957677
(S) 4-Bromofluorobenzene	*97.8*		*80.0-120*		*03/06/2017 11:46*	WG957677

Semi-Volatile Organic Compounds (GC) by Method SV8015

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3630		100	1	03/04/2017 12:13	WG956534
C28-C40 Oil Range	ND		100	1	03/04/2017 12:13	WG956534
(S) o-Terphenyl	*104*		*31.0-160*		*03/04/2017 12:13*	WG956534

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Anthracene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Acenaphthene	0.343		0.0525	1.05	03/06/2017 14:55	WG957966
Acenaphthylene	0.0557		0.0525	1.05	03/06/2017 14:55	WG957966
Benzo(a)anthracene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Benzo(a)pyrene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Benzo(b)fluoranthene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Benzo(g,h,i)perylene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Benzo(k)fluoranthene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Chrysene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Dibenz(a,h)anthracene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Fluoranthene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Fluorene	0.272		0.0525	1.05	03/06/2017 14:55	WG957966
Indeno(1,2,3-cd)pyrene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
Naphthalene	401		2.62	10.5	03/09/2017 10:57	WG957966
Phenanthrene	0.135		0.0525	1.05	03/06/2017 14:55	WG957966
Pyrene	ND		0.0525	1.05	03/06/2017 14:55	WG957966
1-Methylnaphthalene	71.0		0.262	1.05	03/06/2017 14:55	WG957966
2-Methylnaphthalene	102		2.62	10.5	03/09/2017 10:57	WG957966
2-Chloronaphthalene	ND		0.262	1.05	03/06/2017 14:55	WG957966
(S) Nitrobenzene-d5	*171*	J1	*31.0-160*		*03/09/2017 10:57*	WG957966
(S) Nitrobenzene-d5	*119*		*31.0-160*		*03/06/2017 14:55*	WG957966
(S) 2-Fluorobiphenyl	*108*		*48.0-148*		*03/06/2017 14:55*	WG957966
(S) 2-Fluorobiphenyl	*98.1*		*48.0-148*		*03/09/2017 10:57*	WG957966
(S) p-Terphenyl-d14	*103*		*37.0-146*		*03/09/2017 10:57*	WG957966
(S) p-Terphenyl-d14	*119*		*37.0-146*		*03/06/2017 14:55*	WG957966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		50.0	1	03/06/2017 08:45	WG957677
Acrylonitrile	ND		10.0	1	03/06/2017 08:45	WG957677
Benzene	ND		1.00	1	03/06/2017 08:45	WG957677
Bromochloromethane	ND		1.00	1	03/06/2017 08:45	WG957677
Bromodichloromethane	ND		1.00	1	03/06/2017 08:45	WG957677
Bromoform	ND		1.00	1	03/06/2017 08:45	WG957677
Bromomethane	ND		5.00	1	03/06/2017 08:45	WG957677
Carbon disulfide	ND		1.00	1	03/06/2017 08:45	WG957677
Carbon tetrachloride	ND		1.00	1	03/06/2017 08:45	WG957677
Chlorobenzene	ND		1.00	1	03/06/2017 08:45	WG957677
Chlorodibromomethane	ND		1.00	1	03/06/2017 08:45	WG957677
Chloroethane	ND		5.00	1	03/06/2017 08:45	WG957677
Chloroform	ND		5.00	1	03/06/2017 08:45	WG957677
Chloromethane	ND		2.50	1	03/06/2017 08:45	WG957677
1,2-Dibromo-3-Chloropropane	ND		5.00	1	03/06/2017 08:45	WG957677
1,2-Dibromoethane	ND		1.00	1	03/06/2017 08:45	WG957677
Dibromomethane	ND		1.00	1	03/06/2017 08:45	WG957677
1,2-Dichlorobenzene	ND	J4	1.00	1	03/06/2017 08:45	WG957677
1,4-Dichlorobenzene	ND		1.00	1	03/06/2017 08:45	WG957677
1,1-Dichloroethane	ND		1.00	1	03/06/2017 08:45	WG957677
1,2-Dichloroethane	ND		1.00	1	03/06/2017 08:45	WG957677
1,1-Dichloroethene	ND		1.00	1	03/06/2017 08:45	WG957677
cis-1,2-Dichloroethene	ND		1.00	1	03/06/2017 08:45	WG957677
trans-1,2-Dichloroethene	ND		1.00	1	03/06/2017 08:45	WG957677
1,2-Dichloropropane	ND		1.00	1	03/06/2017 08:45	WG957677
trans-1,4-Dichloro-2-butene	ND		2.50	1	03/06/2017 08:45	WG957677
cis-1,3-Dichloropropene	ND		1.00	1	03/06/2017 08:45	WG957677
trans-1,3-Dichloropropene	ND		1.00	1	03/06/2017 08:45	WG957677
Ethylbenzene	ND		1.00	1	03/06/2017 08:45	WG957677
2-Hexanone	ND		10.0	1	03/06/2017 08:45	WG957677
Iodomethane	ND		10.0	1	03/06/2017 08:45	WG957677
2-Butanone (MEK)	ND		10.0	1	03/06/2017 08:45	WG957677
Methylene Chloride	ND		5.00	1	03/06/2017 08:45	WG957677
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	03/06/2017 08:45	WG957677
Styrene	ND		1.00	1	03/06/2017 08:45	WG957677
1,1,1,2-Tetrachloroethane	ND		1.00	1	03/06/2017 08:45	WG957677
1,1,2,2-Tetrachloroethane	ND		1.00	1	03/06/2017 08:45	WG957677
Tetrachloroethene	ND		1.00	1	03/06/2017 08:45	WG957677
Toluene	ND		1.00	1	03/06/2017 08:45	WG957677
1,1,1-Trichloroethane	ND		1.00	1	03/06/2017 08:45	WG957677
1,1,2-Trichloroethane	ND		1.00	1	03/06/2017 08:45	WG957677
Trichloroethene	ND		1.00	1	03/06/2017 08:45	WG957677
Trichlorofluoromethane	ND		5.00	1	03/06/2017 08:45	WG957677
1,2,3-Trichloropropane	ND		2.50	1	03/06/2017 08:45	WG957677
Vinyl acetate	ND		10.0	1	03/06/2017 08:45	WG957677
Vinyl chloride	ND		1.00	1	03/06/2017 08:45	WG957677
Xylenes, Total	ND		3.00	1	03/06/2017 08:45	WG957677
(S) Toluene-d8	*97.3*		*80.0-120*		*03/06/2017 08:45*	WG957677
(S) Dibromofluoromethane	*104*		*76.0-123*		*03/06/2017 08:45*	WG957677
(S) 4-Bromofluorobenzene	*103*		*80.0-120*		*03/06/2017 08:45*	WG957677

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Dissolved Solids	1230000		10000	1	03/03/2017 13:41	WG957616

Method Blank (MB)

(MB) R3201153-1 03/03/17 13:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dissolved Solids	3000	J	2820	10000

L893430-06 Original Sample (OS) • Duplicate (DUP)

(OS) L893430-06 03/03/17 13:41 • (DUP) R3201153-4 03/03/17 13:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1230000	1230000	1	0.203		5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201153-2 03/03/17 13:41 • (LCSD) R3201153-3 03/03/17 13:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dissolved Solids	8800000	8610000	8680000	97.8	98.6	85.0-115			0.810	5

Method Blank (MB)

(MB) R3201233-2 03/06/17 13:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Mercury,Dissolved	U		0.0490	0.200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201233-6 03/06/17 16:30 • (LCSD) R3201233-3 03/06/17 13:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Mercury,Dissolved	3.00	3.70	2.91	123	97	80-120	J4	J3	24	20

L893279-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893279-01 03/06/17 13:37 • (MS) R3201233-4 03/06/17 13:39 • (MSD) R3201233-5 03/06/17 13:42

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Mercury,Dissolved	3.00	ND	2.89	2.99	96	100	1	75-125			3	20

Method Blank (MB)

(MB) R3201632-1 03/08/17 02:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Arsenic,Dissolved	U		6.50	10.0
Barium,Dissolved	U		1.70	5.00
Cadmium,Dissolved	U		0.700	2.00
Chromium,Dissolved	U		1.40	10.0
Lead,Dissolved	U		1.90	5.00
Selenium,Dissolved	U		7.40	10.0
Silver,Dissolved	U		2.80	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201632-2 03/08/17 02:35 • (LCSD) R3201632-3 03/08/17 02:37

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Arsenic,Dissolved	1000	1020	1020	102	102	80-120			1	20
Barium,Dissolved	1000	1030	1020	103	102	80-120			1	20
Cadmium,Dissolved	1000	1020	1000	102	100	80-120			1	20
Chromium,Dissolved	1000	1030	1020	103	102	80-120			1	20
Lead,Dissolved	1000	1030	1010	103	101	80-120			1	20
Selenium,Dissolved	1000	1020	1020	102	102	80-120			0	20
Silver,Dissolved	200	191	190	96	95	80-120			1	20

L893815-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893815-06 03/08/17 02:40 • (MS) R3201632-5 03/08/17 02:46 • (MSD) R3201632-6 03/08/17 02:48

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Arsenic,Dissolved	1000	ND	1010	1020	101	102	1	75-125			0	20
Barium,Dissolved	1000	ND	1020	1020	101	101	1	75-125			0	20
Cadmium,Dissolved	1000	ND	1000	1000	100	100	1	75-125			0	20
Chromium,Dissolved	1000	ND	1020	1010	102	101	1	75-125			1	20
Lead,Dissolved	1000	ND	1010	1010	101	101	1	75-125			0	20
Selenium,Dissolved	1000	ND	1020	1010	102	101	1	75-125			0	20
Silver,Dissolved	200	ND	190	189	95	94	1	75-125			1	20

Method Blank (MB)

(MB) R3201223-3 03/03/17 12:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
TPH (GC/FID) Low Fraction	U		31.4	100
(S) a,a,a-Trifluorotoluene(FID)	*100*			*77.0-122*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201223-1 03/03/17 10:47 • (LCSD) R3201223-2 03/03/17 11:34

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
TPH (GC/FID) Low Fraction	5500	5480	6070	99.6	110	71.0-136			10.2	20
(S) a,a,a-Trifluorotoluene(FID)				*101*	*101*	*77.0-122*				

L893430-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893430-01 03/03/17 16:08 • (MS) R3201223-4 03/03/17 16:30 • (MSD) R3201223-5 03/03/17 16:52

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
TPH (GC/FID) Low Fraction	5500	3950	9180	8700	95.1	86.3	1	18.0-160			5.40	20
(S) a,a,a-Trifluorotoluene(FID)					*119*	*116*		*77.0-122*				

Method Blank (MB)

(MB) R3201446-3 03/06/17 06:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,4-Dichlorobenzene	U		0.274	1.00
trans-1,4-Dichloro-2-butene	U		0.866	2.50
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Iodomethane	U		1.71	10.0
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.319	1.00

Method Blank (MB)

(MB) R3201446-3 03/06/17 06:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
Vinyl acetate	U		1.63	10.0
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*97.3*			*80.0-120*
(S) Dibromofluoromethane	*105*			*76.0-123*
(S) 4-Bromofluorobenzene	*101*			*80.0-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201446-1 03/06/17 05:04 • (LCSD) R3201446-2 03/06/17 05:27

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	125	160	161	128	128	10.0-160			0.450	23
Acrylonitrile	125	132	140	106	112	60.0-142			5.62	20
Benzene	25.0	27.7	28.1	111	112	69.0-123			1.36	20
Bromodichloromethane	25.0	25.1	25.8	101	103	76.0-120			2.58	20
Bromochloromethane	25.0	24.3	23.9	97.1	95.6	76.0-122			1.55	20
Bromoform	25.0	26.8	27.8	107	111	67.0-132			3.70	20
Bromomethane	25.0	23.8	23.4	95.0	93.6	18.0-160			1.53	20
Carbon disulfide	25.0	25.8	26.1	103	104	55.0-127			1.13	20
Carbon tetrachloride	25.0	27.9	28.3	112	113	63.0-122			1.57	20
Chlorobenzene	25.0	28.8	29.5	115	118	79.0-121			2.41	20
Chlorodibromomethane	25.0	28.5	29.6	114	118	75.0-125			3.94	20
Chloroethane	25.0	29.0	28.9	116	116	47.0-152			0.250	20
Chloroform	25.0	26.2	27.0	105	108	72.0-121			2.74	20
Chloromethane	25.0	28.3	28.7	113	115	48.0-139			1.36	20
1,2-Dibromo-3-Chloropropane	25.0	27.3	28.0	109	112	64.0-127			2.60	20
1,2-Dibromoethane	25.0	28.2	29.1	113	116	77.0-123			2.93	20
Dibromomethane	25.0	26.2	27.2	105	109	78.0-120			4.04	20
1,2-Dichlorobenzene	25.0	28.8	30.5	115	122	80.0-120		J4	5.63	20
1,4-Dichlorobenzene	25.0	27.3	28.9	109	116	77.0-120			5.72	20
trans-1,4-Dichloro-2-butene	25.0	24.3	25.9	97.4	103	55.0-134			6.10	20
1,1-Dichloroethane	25.0	27.4	27.6	110	110	70.0-126			0.450	20
1,2-Dichloroethane	25.0	26.3	27.6	105	111	67.0-126			4.78	20
1,1-Dichloroethene	25.0	26.3	26.3	105	105	64.0-129			0.160	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201446-1 03/06/17 05:04 • (LCSD) R3201446-2 03/06/17 05:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	26.9	27.3	107	109	73.0-120			1.55	20
trans-1,2-Dichloroethene	25.0	28.3	29.0	113	116	71.0-121			2.21	20
1,2-Dichloropropane	25.0	26.6	27.3	106	109	75.0-125			2.56	20
cis-1,3-Dichloropropene	25.0	29.7	30.8	119	123	79.0-123			3.64	20
trans-1,3-Dichloropropene	25.0	26.4	27.4	106	110	74.0-127			3.71	20
Ethylbenzene	25.0	28.7	29.2	115	117	77.0-120			1.58	20
2-Hexanone	125	151	153	121	123	58.0-147			1.35	20
Iodomethane	125	112	115	89.7	91.9	57.0-140			2.49	20
2-Butanone (MEK)	125	151	153	121	122	37.0-158			1.35	20
Methylene Chloride	25.0	25.3	26.0	101	104	66.0-121			2.76	20
4-Methyl-2-pentanone (MIBK)	125	137	140	110	112	59.0-143			2.15	20
Styrene	25.0	29.0	30.2	116	121	78.0-124			3.79	20
1,1,1,2-Tetrachloroethane	25.0	26.6	26.9	106	108	75.0-122			1.05	20
1,1,2,2-Tetrachloroethane	25.0	24.7	25.6	98.9	102	71.0-122			3.50	20
Tetrachloroethene	25.0	29.0	29.2	116	117	70.0-127			0.470	20
Toluene	25.0	26.9	27.4	108	110	77.0-120			1.96	20
1,1,1-Trichloroethane	25.0	28.3	28.9	113	116	68.0-122			2.00	20
1,1,2-Trichloroethane	25.0	27.0	27.3	108	109	78.0-120			1.24	20
Trichloroethene	25.0	27.4	27.7	110	111	78.0-120			1.16	20
Trichlorofluoromethane	25.0	27.9	28.9	112	116	56.0-137			3.50	20
1,2,3-Trichloropropane	25.0	26.1	26.8	104	107	72.0-124			2.69	20
Vinyl acetate	125	164	169	131	135	46.0-160			3.22	20
Vinyl chloride	25.0	31.4	32.0	126	128	64.0-133			1.73	20
Xylenes, Total	75.0	84.7	87.1	113	116	77.0-120			2.79	20
(S) Toluene-d8				*104*	*104*	*80.0-120*				
(S) Dibromofluoromethane				*103*	*103*	*76.0-123*				
(S) 4-Bromofluorobenzene				*104*	*105*	*80.0-120*				

L893415-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893415-01 03/06/17 14:48 • (MS) R3201446-4 03/06/17 15:56 • (MSD) R3201446-5 03/06/17 16:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	ND	1220	1250	97.8	99.9	10	10.0-139			2.12	25
Acrylonitrile	125	ND	1400	1410	112	113	10	46.0-159			0.920	23
Benzene	25.0	12.7	293	300	112	115	10	34.0-147			2.45	20
Bromodichloromethane	25.0	ND	260	261	104	105	10	52.0-135			0.640	20
Bromochloromethane	25.0	ND	237	224	94.6	89.5	10	53.0-138			5.55	20
Bromoform	25.0	ND	273	271	109	108	10	50.0-146			0.840	20

L893415-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893415-01 03/06/17 14:48 • (MS) R3201446-4 03/06/17 15:56 • (MSD) R3201446-5 03/06/17 16:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromomethane	25.0	ND	221	221	88.5	88.3	10	10.0-160			0.190	23
Carbon disulfide	25.0	ND	256	263	102	105	10	10.0-147			2.91	20
Carbon tetrachloride	25.0	ND	283	289	113	116	10	41.0-138			2.26	20
Chlorobenzene	25.0	ND	283	281	113	112	10	52.0-141			0.710	20
Chlorodibromomethane	25.0	ND	297	286	119	114	10	54.0-142			3.66	20
Chloroethane	25.0	ND	280	284	112	114	10	23.0-160			1.38	20
Chloroform	25.0	ND	271	277	109	111	10	50.0-139			2.06	20
Chloromethane	25.0	ND	270	295	108	118	10	14.0-151			8.68	20
1,2-Dibromo-3-Chloropropane	25.0	ND	268	279	107	111	10	49.0-144			3.95	24
1,2-Dibromoethane	25.0	ND	286	277	115	111	10	54.0-140			3.46	20
Dibromomethane	25.0	ND	267	264	107	106	10	53.0-138			1.05	20
1,2-Dichlorobenzene	25.0	ND	293	299	117	120	10	56.0-139			2.19	20
1,4-Dichlorobenzene	25.0	ND	285	286	114	114	10	53.0-136			0.210	20
trans-1,4-Dichloro-2-butene	25.0	ND	227	230	90.9	92.1	10	40.0-150			1.25	21
1,1-Dichloroethane	25.0	ND	278	283	111	113	10	47.0-143			1.90	20
1,2-Dichloroethane	25.0	ND	275	277	110	111	10	47.0-141			0.510	20
1,1-Dichloroethene	25.0	ND	275	303	110	121	10	31.0-148			9.61	20
cis-1,2-Dichloroethene	25.0	ND	277	282	111	113	10	43.0-142			1.83	20
trans-1,2-Dichloroethene	25.0	ND	279	284	112	113	10	36.0-141			1.49	20
1,2-Dichloropropane	25.0	ND	270	272	108	109	10	51.0-141			0.670	20
cis-1,3-Dichloropropene	25.0	ND	292	298	117	119	10	53.0-139			1.87	20
trans-1,3-Dichloropropene	25.0	ND	260	261	104	104	10	51.0-143			0.440	20
Ethylbenzene	25.0	328	587	598	103	108	10	42.0-147			1.83	20
2-Hexanone	125	ND	1430	1410	115	113	10	36.0-145			1.25	23
Iodomethane	125	ND	1000	1100	80.4	87.7	10	30.0-151			8.76	20
2-Butanone (MEK)	125	ND	1390	1410	111	113	10	12.0-149			1.09	24
Methylene Chloride	25.0	ND	257	258	103	103	10	42.0-135			0.650	20
4-Methyl-2-pentanone (MIBK)	125	ND	1410	1440	113	115	10	44.0-160			1.96	22
Styrene	25.0	ND	296	293	119	117	10	47.0-147			1.01	20
1,1,1,2-Tetrachloroethane	25.0	ND	264	264	106	105	10	52.0-140			0.170	20
1,1,2,2-Tetrachloroethane	25.0	ND	252	247	101	98.6	10	46.0-149			2.13	20
Tetrachloroethene	25.0	ND	278	288	111	115	10	38.0-147			3.23	20
Toluene	25.0	ND	272	279	109	112	10	42.0-141			2.31	20
1,1,1-Trichloroethane	25.0	ND	292	301	117	120	10	46.0-140			3.04	20
1,1,2-Trichloroethane	25.0	ND	279	272	111	109	10	54.0-139			2.54	20
Trichloroethene	25.0	ND	271	282	108	113	10	32.0-156			3.92	20
Trichlorofluoromethane	25.0	ND	281	284	113	114	10	32.0-152			0.910	20
1,2,3-Trichloropropane	25.0	ND	268	263	107	105	10	54.0-143			1.92	21
Vinyl acetate	125	ND	1700	1720	136	137	10	30.0-160			0.990	20
Vinyl chloride	25.0	ND	299	308	120	123	10	24.0-153			3.15	20

L893415-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L893415-01 03/06/17 14:48 • (MS) R3201446-4 03/06/17 15:56 • (MSD) R3201446-5 03/06/17 16:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Xylenes, Total	75.0	144	968	977	110	111	10	41.0-148			0.930	20
(S) Toluene-d8					*104*	*104*		*80.0-120*				
(S) Dibromofluoromethane					*105*	*104*		*76.0-123*				
(S) 4-Bromofluorobenzene					*102*	*102*		*80.0-120*				

Method Blank (MB)

(MB) R3201012-1 03/04/17 09:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
C10-C28 Diesel Range	U		22.2	100
C28-C40 Oil Range	U		11.8	100
(S) o-Terphenyl	*117*			*31.0-160*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201012-2 03/04/17 10:03 • (LCSD) R3201012-3 03/04/17 10:16

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
C10-C28 Diesel Range	1500	1260	1280	84.1	85.1	50.0-150			1.24	20
(S) o-Terphenyl				*122*	*121*	*31.0-160*				

Method Blank (MB)

(MB) R3201225-3 03/06/17 08:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Anthracene	U		0.0140	0.0500
Acenaphthene	U		0.0100	0.0500
Acenaphthylene	U		0.0120	0.0500
Benzo(a)anthracene	U		0.00410	0.0500
Benzo(a)pyrene	U		0.0116	0.0500
Benzo(b)fluoranthene	U		0.00212	0.0500
Benzo(g,h,i)perylene	U		0.00227	0.0500
Benzo(k)fluoranthene	U		0.0136	0.0500
Chrysene	U		0.0108	0.0500
Dibenz(a,h)anthracene	U		0.00396	0.0500
Fluoranthene	U		0.0157	0.0500
Fluorene	U		0.00850	0.0500
Indeno(1,2,3-cd)pyrene	U		0.0148	0.0500
Naphthalene	0.0267	J	0.0198	0.250
Phenanthrene	U		0.00820	0.0500
Pyrene	U		0.0117	0.0500
1-Methylnaphthalene	U		0.00821	0.250
2-Methylnaphthalene	U		0.00902	0.250
2-Chloronaphthalene	U		0.00647	0.250
(S) Nitrobenzene-d5	*119*			*31.0-160*
(S) 2-Fluorobiphenyl	*118*			*48.0-148*
(S) p-Terphenyl-d14	*115*			*37.0-146*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201225-1 03/06/17 08:00 • (LCSD) R3201225-2 03/06/17 08:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Anthracene	2.00	2.45	2.44	123	122	64.0-142			0.310	20
Acenaphthene	2.00	2.28	2.24	114	112	66.0-132			1.78	20
Acenaphthylene	2.00	2.14	2.12	107	106	65.0-132			1.03	20
Benzo(a)anthracene	2.00	2.18	2.16	109	108	59.0-134			0.930	20
Benzo(a)pyrene	2.00	2.33	2.34	116	117	61.0-145			0.260	20
Benzo(b)fluoranthene	2.00	2.25	2.32	112	116	57.0-136			3.14	20
Benzo(g,h,i)perylene	2.00	2.23	2.17	111	108	54.0-140			2.85	20
Benzo(k)fluoranthene	2.00	2.38	2.42	119	121	57.0-141			1.43	20
Chrysene	2.00	2.39	2.37	119	118	63.0-140			0.730	20
Dibenz(a,h)anthracene	2.00	2.23	2.15	112	107	49.0-141			3.80	20
Fluoranthene	2.00	2.65	2.54	132	127	65.0-143			3.95	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3201225-1 03/06/17 08:00 • (LCSD) R3201225-2 03/06/17 08:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluorene	2.00	2.13	2.11	107	106	64.0-129			1.04	20
Indeno(1,2,3-cd)pyrene	2.00	2.28	2.20	114	110	53.0-141			3.59	20
Naphthalene	2.00	2.16	2.10	108	105	68.0-129			2.58	20
Phenanthrene	2.00	2.22	2.16	111	108	62.0-132			2.32	20
Pyrene	2.00	2.31	2.22	116	111	58.0-156			4.12	20
1-Methylnaphthalene	2.00	2.30	2.27	115	114	68.0-137			1.34	20
2-Methylnaphthalene	2.00	2.19	2.14	109	107	68.0-134			2.15	20
2-Chloronaphthalene	2.00	2.20	2.16	110	108	65.0-129			1.98	20
(S) Nitrobenzene-d5				*111*	*115*	*31.0-160*				
(S) 2-Fluorobiphenyl				*110*	*110*	*48.0-148*				
(S) p-Terphenyl-d14				*113*	*106*	*37.0-146*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

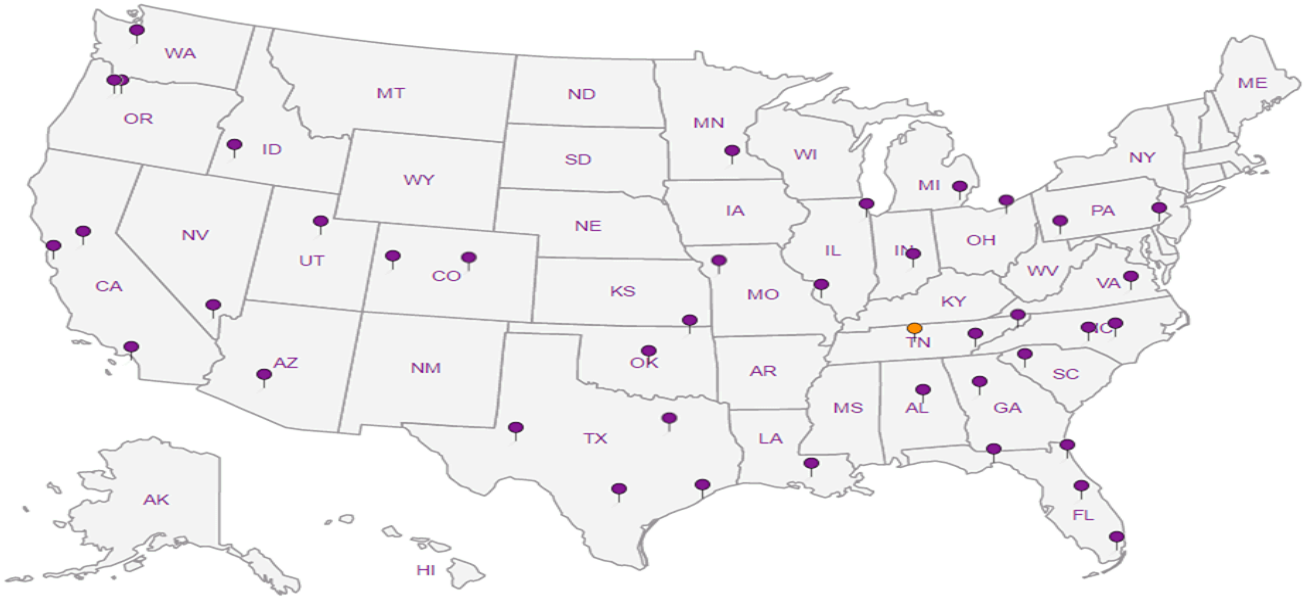
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



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Project Description: 1708 + 1721 NE 23rd

City/State Collected: OKC, OK

Phone:

Fax:

Client Project #

Lab Project #

Collected by (print): D. Daniel

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day 200%
___ Next Day 100%
___ Two Day 50%
___ Three Day 25%

Date Results Needed: Standard

Email? ___No ___Yes

FAX? ___No ___Yes

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	VOCs 8260	PAHs SIM LVI	RCRA 8 Metals (2nd)	TPH - Low, medium, high fraction (2nd)	TDS							Rem./Contaminant	Sample # (lab only)
SB-04	G	GW	7	2-27	900	9	X	X	X	X									-01
SB-05			7		1100	9	X	X	X	X									02
SB-06			8		1000	9	X	X	X	X									03
Duplicate			—	2-27	—	9	X	X	X	X									04
Trip Blank						1	X												05
SB-01		GW	9	2/24	1030	1					X								06

* Matrix: SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other _____

Remarks: All methods as required in OK - Filter metals

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	3/1/17	938	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
	3/1/17	1700	

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ SW

Temp: 2.3 °C Bottles Received: 37 HB

Date: 3-2-17 Time: 0900

Condition: (lab use only) TOH (OK)

COC Seal Intact: ___Y ___N ___NA

pH Checked: SW

NCF:

Chain of Custody Page ___ of ___

ESC LABORATORY SCIENCES

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L893430

E169

Acctnum:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

ESC LAB SCIENCES
Cooler Receipt Form

Client: AQUATECOX	SDG#	L893430	
Cooler Received/Opened On: 3/2/17	Temperature:	2.3	
Received By: Rickey Mosley			
Signature:			

Receipt Check List	NP	Yes	No
COC Seal Present / Intact?	✓		
COC Signed / Accurate?		✓	
Bottles arrive intact?		✓	
Correct bottles used?		✓	
Sufficient volume sent?		✓	
If Applicable			
VOA Zero headspace?		✓	
Preservation Correct / Checked?		✓	

APPENDIX C: FIELD NOTES

SCS Engineers

DAILY PROJECT LOG

Date: 2-21-17 Page: 1 of 1

Project & Task #: 23rd Street Client: OKC Pivot Project

Project Name: 1708-1721 NE 23rd Street

Time	800			
Wind Direction	SE			
Est. Wind MPH	5			
Weather	Sunny			

Time	Activity		
800	SCS / AEI Tailgate Safety		
	Location marking		
	Begin direct-push at SB-04		
	Samples taken at 0-1	RCRA	11-12 RCRA
		VOCs	VOCs
	Noticeable reducing zone	TPH	TPH
	at 10 ft	PAH	PAH
	OVM peak 342 at 11-12		
	Refusal at 15'		
900	Switched to solid-stem		
1030	Temp well set at 29' 15 ft screen		
1100	Begin direct-push at SB-05		
	Clawbit to break up asphalt		
	Samples taken at 0.5-1	RCRA	9-10 RCRA
	OVM peak at 492 at 9-10'	VOCs	VOCs
	Refusal at 15'	TPH	TPH
1130	Decon solid-stem flight	PAH	PAH
1150	Begin solid-stem at SB-05		
	First water at ~14' Drilled to 25'		
	10 ft screen		
1230	Break for lunch		
1300	Begin direct-push at SB-06		
	Clawbit to break concrete		9-10 RCRA
	Samples taken at ~~0.5-1~~	RCRA	VOCs
	Rock in sampler - could not	6-7 VOCs	TPH
	recover surface soils	TPH	PAH
	Refusal ~~at~~ at 11'	PAH	
1330	Begin solid stem at SB-06		
1400	Drilled to 20' 10 screen		
1500	Begin direct-push at SB-07		
	Duplicate taken at 11-12'	0-1 RCRA	11-12 RCRA
1530	Begin solid-stem at SB-07	VOCs	VOCs
	Drilled to 20' 10 ft screen	TPH	TPH
		PAH	PAH
1600	Begin Vapor implant SV-05		
1630	Begin Vapor implant SV-04		
1700	Field / Equip blanks		
	Site cleanup		

By: Present:

SCS Engineers

DAILY PROJECT LOG

Date: 2-22-17 Page: 1 of 1

Project & Task #: Client:

Project Name: 1708+1721 NE 23rd Street

Time	800			
Wind Direction	↗			
Est. Wind MPH	NNW 0-5			
Weather	Sunny			

Time	Activity		
800	Decon pit set up on 1721 NE 23rd Street		
820	Tailgate safety		
830	Begin soil vapor implant SV-03 Probe hole in water! Vapor implant raised to two ft bgs		
930	Begin direct-push at SS-03	RCRA PAH	0-3
1000	Begin at 1721 NE 23rd Begin direct-push at SB-03 Refusal at 9' OVM Peak at 271 at 9' Samples at	0-1 RCRA VOCs TPH PAH	8-9 RCRA VOCs TPH PAH
1020	Begin Solid-stem to 20' at SB-03		
1045	Temp well set - 10 ft screen		
1100	Begin direct-push at SB-02 Refusal at 13' ØOVM	0-1 RCRA VOCs TPH PAH	12-13 RCRA VOCs TPH PAH
1130	Switched to Solid-stem at SB-02 20ft - 10ft screen		
1200	Begin direct-push at SB-01 Refusal at 9'	0-1 RCRA VOCs TPH PAH	8-9 RCRA VOCs TPH PAH
1230	Switched to solid-stem at SB-01 Temp well at 20' 10ft screen	Duplicate taken at 8-9	
1300	Begin direct push at SS-01	0-1 Pest	0-3 RCRA PAH
1330	Begin Soil Vapor implant SV-01		
1400	Begin direct-push at SS-02	0-3 RCRA PAH	
1415	Begin soil vapor implant SV-02		
1445	Begin Decon of equipment / Staging cleanup		
1500	Site spec for QA/QC		
1600	Field / Equipment Blank		

By: Present:

SCS Engineers

DAILY PROJECT LOG

Date: 2-24-17 Page: 1 of 1

Project & Task #: 1721 NE 23rd Client:

Project Name:

Time				
Wind Direction				
Est. Wind MPH				
Weather				

Time	Activity
900	Arrive onsite at 1721 NE 23rd Street
1000	Sample SV-01 Can# 930 Reg# 592 Duplicate can# B41 Reg# 620 IP-29 FP 0 IP-28 FP 0
1030	Sample SV-02 Can# 1458 Reg# 6016 IP-28 FP 15
	Could not complete tube filled with water
	Begin GW sampling at SB-01 - 9'
1100	Begin GW sampling at SB-02 - 18'
1130	Begin GW sampling at SB-03-9' Duplicate taken
1300	Begin GW sampling at SB-07 - 11'
	Water Levels
1721	SB-01 8.82' Water recharged to 100% of SWL rapidly - Three borevolues of water purged
	SB-02 17.71' - Very little water. Could not purge. Sample only
	SB-03 8.36' Rapid recharge to 100% SWL. Strong HC odor - Three borevolues purged.
1708	SB-07 10.54' Slow recharge - Bailed until empty. Sampled

By: Present:

SCS Engineers

DAILY PROJECT LOG

Date: 2-27 Page: 1 of 1

Project & Task #: 1708-1721 NE23rd Client:

Project Name:

Time				
Wind Direction				
Est. Wind MPH				
Weather				

Time	Activity	
900	SCS Arrives onsite Begin GW Sampling SB-04	
	SB-04 6.87' Three boreholes purged	
1000	Begin GW sampling SB-06	
	SB-06 7.26' Three boreholes purged	
1100	Begin GW sampling SB-05 SB-05 6.78' Three boreholes purged Duplicate taken	
1500	Vapor sample at SV-05	Can# 1099 Reg# 592 IP-29 FP-0
1530	Vapor sample at SV-04	Can# 1524 Reg# 615 IP-28 FP0
1600	Vapor sample at SV-03	Can# 1077 Reg# 367 IP-30 FP0
	Duplicate taken	Can# 1488 Reg# 620 IP-28 FP0
1630	Vapor ambient air BA-1	Can# 118 Reg# 587 IP-29 FP0

By: Present:

APPENDIX D: PHOTOGRAPHIC LOG

Geoprobe set up at SB-04

Solid-stem drilling at SB-05 near possible tank pit area

Subsurface vapor implant installation at SV-05

Marked locations of SB-07 and SV-05

Geoprobe setting up near SV-03 location near building

Single-rod direct-push at SS-01

Portable decontamination pit

Decontamination of solid-stem flight
between soil borings

Soil cores in acetate liners

Marked locations at the 1721 NE 23rd Street Property

APPENDIX E: ACM Survey and Project Design

FORMER AUTO REPAIR

1708 NE 23RD STREET

OKLAHOMA CITY, OK 73111

MARCH 13, 2017

ASBESTOS INSPECTION

SERVICES PROVIDED FOR:

SCS Engineers
Attention: Amy Dzialowski, Senior Project Manager
1817 Commons Circle, Suite 1
Yukon, OK 73099
Phone: 405.264.3624
Email: adzialowski@scsengineers.com

SERVICES PROVIDED BY:

Marshall Environmental Management, Incorporated
Jamie Marshall, Asbestos Project Designer
1301 North Martin Luther King Avenue
Oklahoma City, OK 73117
Phone: 405.616.0401
Email: mem@marshallenvironmental.com

TABLE OF CONTENTS

CERTIFICATION

This is to certify that Marshall Environmental Management, Incorporated (MEM) was contracted by Amy Dzialowski, on behalf of SCS Engineers, to conduct a National Emission Standard for Hazardous Air Pollutants (NESHAP) Asbestos Inspection of the Former Auto Repair in Oklahoma City, Oklahoma. This inspection was performed on March 7, 2017, by an Asbestos Hazard Emergency Response Act (AHERA) Inspector, licensed by the Oklahoma Department of Labor (ODOL) and under the direction of an AHERA Management Planner and Project Designer. The findings and analytical data resulting from this inspection are believed to accurately depict the condition and location of material(s) that may contain asbestos on the date this inspection was conducted.

March 13, 2017

Alex Lane IH Associate — *Report Date*

EPA AHERA Certification Asbestos Inspector	*801248*
ODOL License Asbestos Inspector	*400481*

March 13, 2017

Rachel Butler, MS, CIH — *Report Date*
Certified Industrial Hygienist

EPA AHERA Certification Asbestos Inspector	*801347*
ODOL License Asbestos Inspector	*OK400492*

March 13, 2017

Jamie Marshall, MS, CIH — *Report Date*
President

EPA AHERA Certifications	*Asbestos Inspector/Management Planner*	*730731*
	Project Designer	*600653*
ODOL License	*Management Planner*	*OK-MP400477*
	Project Designer	*OK-PD400478*

LABORATORY ANALYSIS PERFORMED BY

Marshall Environmental Management, Incorporated
1301 North Martin Luther King Avenue
Oklahoma City, OK 73117
Laboratory Accreditation: AIHA PAT ID#102334

FORMER AUTO REPAIR
ASBESTOS INSPECTION

On March 3, 2017, MEM completed an Asbestos Inspection of the Former Auto Repair (1708 NE 23rd St. – Oklahoma City, OK 73111) so that a strategy that follows the regulations set forth by the Environmental Protection Agency (EPA) may be prepared for the management and/or abatement (i.e. the removal and disposal) of material(s) that may contain asbestos. The EPA and the ODOL define an Asbestos-Containing Material (ACM) as any material that contains asbestos in concentrations greater than one percent (>1%). As such, ***asbestos-containing window pane caulk, floor tile and transite pipe*** was identified as a result of this inspection. Refer to the table in the Observations and Findings portion of this report for a complete summarization of the location(s) and quantities ACM that were identified as a result of this inspection.

In accordance with the EPA, the asbestos-containing window pane caulk, floor tile, and transite pipe are considered ***non-friable*** that which cannot be rendered to a powder via hand pressure. Furthermore, the asbestos-containing floor tile and are categorized as ***Category I Non-Friable ACM,*** whereas the window pane caulk and transite pipe are categorized as ***Category II Non-Friable ACM.*** As a result, the abatement of the asbestos-containing window pane caulk, floor tile and transite pipe is not regulated by the ODOL. Therefore, the asbestos-containing window pane caulk and transite pipe must be abated prior to the commencement of certain renovation/demolition activities; whereas the asbestos-containing floor tile can be left in place while demolition activities are taking place so long as the demolition contractor can demonstrate these ACM will not be rendered friable.

Accordingly, the abatement of the asbestos-containing window pane caulk, floor tile and transite pipe must be carried out as ***Class II Work*** in accordance with the Occupational Safety and Health Administration (OSHA). Subsequently, a negative-exposure assessment, adequate training and the appropriate certifications and licensure must be in place prior to the commencement of abatement activities. Though the abatement of the asbestos-containing window pane caulk, floor tile and transite pipe is not regulated by the ODOL, an Asbestos-Abatement Contractor, licensed by the ODOL, is recommended to perform the abatement to ensure that EPA and OSHA compliant methods are utilized. Lastly, an EPA ***National Emission Standard for Hazardous Air Pollutants*** (NESHAP) ***Notification*** must be submitted to and approved by the Oklahoma Department of Environmental Quality (ODEQ) ten business days prior to the commencement of certain abatement/renovation and any demolition activities. The remainder of this Report is comprised of the Sampling Strategy and Methodology, Observations and Findings, Asbestos-Response Actions and Recommendations, Regulatory Review, Limitations of the Survey and the Appendix to this Report.

SAMPLING STRATEGY & METHODOLOGY

In order to collect materials suspected of containing asbestos, each accessible area associated with the building was inspected. The sample collection process included documenting the location, condition, classification and estimated quantity of material(s) suspected of containing asbestos. A specified number of samples were collected from material(s) that are uniform in color and texture and believed to be applied during the same period (i.e. homogenous material). If laboratory analyses determine that the sample(s) contain asbestos, the entirety of the homogenous material(s) is considered asbestos containing. This Asbestos Inspection was conducted in accordance with NESHAP 40-Code of Federal Regulation (CFR) 61 Subpart M. Additionally, each sample collected was submitted for analysis in accordance with the EPA authorized method 600 49-CFR Part 61 § M Asbestos NESHAP Rules. The following are examples of the types of materials that could be visually inspected and/or sampled during this inspection:

SURFACING MATERIAL

- Examples include, but are not limited to, blown or troweled on surfacing material commonly observed on ceilings, walls or structural steel.

THERMAL SYSTEM INSULATION

- Examples include, but are not limited to, insulation on piping, thermal process or Heating Ventilation and Air Conditioning (HVAC) equipment and components.

MISCELLANEOUS MATERIAL

- Examples include, but are not limited, to floor and ceiling tiles, mastics, vinyl sheet-flooring, wallboard, wallboard-tape, and mud or joint compounds.

OBSERVATIONS & FINDINGS

The Former Auto Repair, located at 1708 NE 23rd Street in Oklahoma City, Oklahoma, was constructed circa 1930's, with multiple renovations since. The exterior is comprised of brick and concrete with concrete and drywall interior. Suspect miscellaneous materials sampled included wall systems, ceiling tile and flooring with various caulk and mastics. As such, ***asbestos-containing window pane caulk, floor tile and transite pipe*** was identified within the structures. The following tables summarize the homogenous location, condition, type, category, percent asbestos and estimated quantities of the material(s) that were identified as asbestos-containing within the building. Refer to the Chain of Custody and floor plan, included in the Appendix to this Report, for the materials that were sampled and identified as asbestos containing as part of this inspection.

TABLE I:9X9 FLOOR TILE

LOCATION	CONDITION	TYPE	CATEGORY	% ASBESTOS	TOTAL QUANTITY
ROOM 5	GOOD	MISCELLANEOUS	CAT I NF	7% CHRYSOTILE	~ 625 FT/SQ
ROOM 8	GOOD	MISCELLANEOUS	CAT 1 NF	5% CHRYSOTILE	~225 FT/SQ
TOTAL ESTIMATED QUANTITY		**~ 850 FT/SQ**			
ESTIMATED COST OF REMOVAL		**~ $2,550**			

TABLE II: WINDOW PANE CAULK

LOCATION	CONDITION	TYPE	CATEGORY	% ASBESTOS	TOTAL QUANTITY
ROOM 1 – EXTERIOR SOUTH WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 2 WINDOWS
ROOM 11 – EXTERIOR SOUTH WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 4 WINDOWS
ROOM 12 – EXTERIOR SOUTH WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 1 WINDOW
ROOM 18 – EXTERIOR SOUTH WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 2 WINDOW
ROOM 16 – EXTERIOR SOUTH WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 2 WINDOWS
ROOM 16 – EXTERIOR WEST WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 6 WINDOWS
ROOM 1 – INTERIOR NORTH WALL	GOOD	MISCELLANEOUS	CAT II NF	2% CHRYSOTILE	~ 3 WINDOW
TOTAL ESTIMATED QUANTITY		**~ 20 WINDOWS**			
ESTIMATED COST OF REMOVAL		**~ $2,000**			

TABLE III: TRANSITE PIPE

LOCATION	CONDITION	TYPE	CATEGORY	% ASBESTOS	TOTAL QUANTITY
ROOM 12 - WEST WALL	GOOD	TSI	CAT II NF	10% CROCIDOLITE 5% CHRYSOTILE	~ 10 LINEAR FT
TOTAL ESTIMATED QUANTITY		**~ 10 LINEAR FT**			
ESTIMATED COST OF REMOVAL		**~ $2,500**			

TOTAL ESTIMATED COST

TOTAL ESTIMATED PRICE FOR ABATEMENT	~ $7,050
TOTAL ESTIMATED COST OF THIRD PARTY AIR MONITORING	~ $1,000
TOTAL ESTIMATED COST OF ABATEMENT TO INCLUDE THIRD-PARTY AIR MONITORING	**~ $8,050**

ASBESTOS-RESPONSE ACTIONS

- The window pane caulk, floor tile and transite pipe must be carried out as ***Class II Work*** in accordance with OSHA.
- The window pane caulk and transite pipe must be abated prior to the commencement of certain renovation/demolition activities.
- An EPA *NESHAP Notification* must be submitted to and approved by the ODEQ ten business days prior to the commencement of certain abatement/renovation and any demolition activities.
- A negative-exposure assessment, adequate training and the appropriate certifications and licensure must be in place prior to the commencement of abatement activities.
- An Asbestos-Abatement Contractor, licensed by the ODOL, is recommended to perform the abatement of the asbestos-containing window caulk, chalkboard mastic, floor tile and floor tile mastic.

REGULATORY REVIEW

Asbestos Containing Materials are any materials, which consist of >1% asbestos as defined by the EPA Approved Analytical Method 40 CFR Chapter I, Part 763, Subpart F, Appendix C, referred to as *Interim Method for determination of Asbestos in Bulk Insulation Samples*, using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982. Prior to 1980, asbestos was commonly utilized during construction and found in various building materials. In 1994, OSHA required employers to identify ACM in pre-1980 construction as part of its Standard for Occupational Exposure to Asbestos in Construction (29 CFR 1926.1101). This OSHA standard covers maintenance, repair and removal functions involving ACM or Presumed ACM (PACM). Without asbestos inspections, owners and/or operators must treat suspected ACM as asbestos-containing.

The ODOL regulates the Hazard Communication requirements for public employees as part of the ODOL Public Employees Occupational Safety and Health (PEOSH) Program. The State of Oklahoma Hazard Communication Standard (HAZCOM), revised as of August 2006, is provided in the Oklahoma Asbestos Control Act (OAC) 380 Chapter 45 (http://www.ok.gov/odol/documents/Asbestos_law_rules.pdf). Specific provisions of the OAC Standard (45-15-1) address asbestos notifications and labeling requirements. The labeling requirements specify that asbestos-containing pipe insulation and various equipment insulation, as well as rooms where asbestos is present, be identified with an asbestos warning label. Section 380:45-15-2 requires a notice to employees when ACM are used in acoustical materials on ceilings and walls. The asbestos warning labels are to be readily visible and include the following warning:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY

The EPA requires asbestos inspections in school buildings in grades Kindergarten through 12 as part of the Asbestos Hazard Emergency Response Act (AHERA), which is authorized in 40 CFR 763.6. If asbestos is present within school facilities grades K-12 an Asbestos Management Plan is required, by the Local Educational Authority (LEA), to be in place. The AHERA sampling protocol addresses the systematic sample collection of all forms of ACM in addition to categorizing ACM materials as friable Category I or II non-friable. An AHERA Inspection must also evaluate the condition and the potential for disturbance of ACM.

Along with AHERA, the EPA also regulates commercial asbestos abatement activities. A NESHAP notification must be submitted to the Oklahoma Department of Environmental Quality (ODEQ) ten-business days prior to the initiation of **any** renovation and/or demolition activities where ACM are present in quantities that meet or exceed 160-square feet (ft^2), 260-linear ft. or 35-cubic feet (ft^3). Instructions regarding NESHAP notification requirements and ODEQ compliance are provided on the DEQ website: *http://www.deq.state.ok.us/aqdnew/asbestos/index.htm.* Land disposal requirements are also regulated by the EPA through State Landfill Permits. These efforts are now administered by the ODEQ Air Quality and Land Protection regulations. The ODEQ requires the advance filing of a NESHAP notification when any demolition or renovation activities take place. The NESHAP notification process tracks abated ACM to an ODEQ approved landfill on a project-by-project basis.

The ODOL Asbestos Division regulates asbestos abatement by implementing the rules that govern the abatement of friable ACM. Under the ODOL asbestos rule, OAC 380:50, only adequately licensed contractors can perform asbestos abatement, develop management plans and project designs. All abatement supervisors, abatement workers and asbestos inspectors must be licensed by the ODOL. The ODOL Rules are available on the ODOL web site: *http://www.ok.gov/odol/*.

LIMITATIONS OF SURVEY

Some limitations related to building construction can restrict and/or prevent the complete inspection of hidden or inaccessible building materials, and any locations presenting a hazard to bystanders or the inspector were not assessed. The findings resulting from this inspection are valid as of the date the inspection was performed. However, changes in the condition of a structure may certainly occur with the passage of time whether due to natural processes or the works of man. Additionally, changes in applicable or appropriate standards may also occur possibly resulting from legislation or the expansion of knowledge.

Our investigation was conducted using the degree of care and skill ordinarily exercised by professional consultants under similar circumstances practicing in this or similar localities. Professional services have been performed; results associated with this inspection were obtained and reported in accordance with generally accepted principles and practices. No other representations, either expressed or implied, are made. Marshall Environmental Management, Incorporated is not responsible for independent conclusions, opinions or recommendations made by others. It should also be noted that as-built plans were not available for review or use in the planning of these asbestos inspections.

APPENDIX

CHAIN OF CUSTODY & LABORATORY ANALYSES

FLOOR PLAN

PHOTO ALBUM

CERTIFICATION/LICENSURE

MARSHALL ENVIRONMENTAL MANAGEMENT, INC.
1301 N MARTIN LUTHER KING AVENUE
OKLAHOMA CITY, OK 73117
405.616.0401 | FAX: 405.681.6753 | MEM@marshallenvironmental.com
www.marshallenvironmental.com

CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-PTB-030717-RB	COMPANY	SCS Engineering
PROJECT NAME	Former Auto Repair	ATTENTION	Amy Dzialowski
ADDRESS	1708 NE 23rd	ADDRESS	1917 Commons Circle, Suite 1
CITY / STATE / ZIP	OKC, OK 73111	CITY / STATE / ZIP	Yukon, OK 73099
CONTACT	Amy Dzialowski	PHONE NUMBER	405.264.3624
PHONE NUMBER	405.264.3624	ALTERNATE NO.	
EMAIL ADDRESS	adzialowski@	EMAIL ADDRESS	adzialowski@scsengineers.com

SAMPLE TURN-AROUND-TIME

X	STANDARD (5-7 business)		NEXT DAY		SAME DAY

SAMPLE MATRIX / MEDIA

MP MOLD PLATE | ST SPORE TRAP | TL TAPE LIFT | B BULK | O OTHER_____

SAMPLE IDENTIFICATION NUMBER				SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI			ASBESTOS		OTHER
LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.			TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	
0033	3/7/17	Alm	D1	Room 3- 1x1 Ceiling Tile - N. Ceiling	(H1)					X	
			02	- Center Floor							
			03	- West Ceiling							
			04	Room 3- Texture on Concrete - West Wall	(H2)						
			05	South Wall							
			06	~~East~~ North Wall							
			07	Room 1- NW - Window Pane Caulk.	(H3)						
			08	- N Center -							
			09	N East -							
			10	Room 1- South West - Window Pane Caulk	(H4)						

RELINQUISHED BY (COLLECTED BY)	Rachel Butler	DATE	3/7/17	RELINQUISHED TO	MEM Lab
		TIME	12:00	DATE	3/7/17
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	TIME	12:00
		TIME	11:am	LABORATORY NOTES	accepted

FIELD NOTES: None

METHOD OF SHIPMENT: Hand

PAGE NUMBER: 1 OF 01

MARSHALL ENVIRONMENTAL MANAGEMENT, INC.
1301 N MARTIN LUTHER KING AVENUE
OKLAHOMA CITY, OK 73117
405.616.0401 | FAX: 405.681.6753 | MEM@marshallenvironmental.com
www.marshallenvironmental.com

CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	See pg 1	ADDRESS	see pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

	STANDARD (5-7 business)		NEXT DAY		SAME DAY
X					

SAMPLE MATRIX / MEDIA

MP Mold Plate | ST Spore Trap | TL Tape Lift | B Bulk | O Other_____

SAMPLE IDENTIFICATION NUMBER				SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI			ASBESTOS		OTHER
LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.			TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	
0033	3/7/17	PLM	11	Room 1-North wall- Plaster (NE)	(H5)					X	
			12	↓ ↓ ↓ (N Center)	↓						
			13	↓ ↓ ↓ (NW)	↓						
			14	Room 5- South Wall- Plexture	(H6)						
			15	↓ ↓ Plaster-	↓						
			16	Room 5- North Floor- Brown 9x9	(H7)						
			17	↓ ↓ Black mastic							
			18	Room 5- East Floor - Brown 9x9							
			19	↓ ↓ - Black Mastic							
			20	Room 5- West Floor - Brown 9x9							

RELINQUISHED BY (COLLECTED BY)	Rachel Bates	DATE	3/7/17	RELINQUISHED TO	MEM Lab
		TIME	12:00		
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	LABORATORY NOTES	accepted
		TIME	11:00 am		

DATE 3/7/17 TIME 12:00

FIELD NOTES: None

METHOD OF SHIPMENT: Hand

PAGE NUMBER 2 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	See pg 1	ADDRESS	See pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

	STANDARD (5-7 business)		NEXT DAY		SAME DAY
X					

SAMPLE MATRIX / MEDIA

MP Mold Plate | ST Spore Trap | TL Tape Lift | B Bulk | O Other_____

SAMPLE IDENTIFICATION NUMBER				SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI			ASBESTOS		OTHER
LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.			TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	
0033	3/7/17	pum	21	Room 5- West Floor- Black Mastic	(H7)					X	
			22	Room 7- South wall- Texture	(H6)						
			23	↓ ↓ Plaster	↓						
			24	Room 9- Center Floor- Texture							
			25	↓ ↓ Plaster	↓						
			26	Room 7- 2X4 Ceiling Tile- South	(H8)						
			27	↓ ↓ East	↓						
			28	↓ ↓ West	↓						
			29	Room 7- 12X12 Floor Tile - South	(H9)						
↓	↓	↓	30	↓ Black Mastic ↓	↓					↓	

RELINQUISHED BY (COLLECTED BY)	Rachel Pretzer	DATE	3/7/17	RELINQUISHED TO	MEM Lab	DATE	3/7/17
		TIME	PM			TIME	12:00
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	LABORATORY NOTES	accepted		
		TIME	11:am				

FIELD NOTES: Nine

METHOD OF SHIPMENT: Hand

PAGE NUMBER: 3 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	See pg 1	ADDRESS	See pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

	STANDARD (5-7 business)		NEXT DAY		SAME DAY
X					

SAMPLE MATRIX / MEDIA

MP Mold Plate | ST Spore Trap | TL Tape Lift | B Bulk | O Other_____

SAMPLE IDENTIFICATION NUMBER LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.	SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI: TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	FUNGI: CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	FUNGI: TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	ASBESTOS: AIRBORNE FIBER COUNT (NIOSH 7400)	ASBESTOS: BULK MATERIAL (EPA METHOD 600/R-93-116)	OTHER
0033	3/7/17	PLM	3031	Room 7 - 12x12 Floor Tile - East	(H9)					X	
			32	↓ Black Mastic ↓	↓					↓	
			33	Room 7 - 12x12 Floor Tile - West	↓						
			34	↓ Black Mastic ↓	↓						
			35	Room 7 - SE Wall - Layered Wall Behind Plaster	(H10)						
			36	↓ S Wall ↓ ↓	↓						
			37	↓ S. W. Wall ↓ ↓	↓						
			38	Room 8 - South Floor - Brown Speck 9x9	(H11)						
			39	↓ ↓ Black Mastic	↓						
↓	↓	↓	40	Room 8 - West Floor Brown Speck 9x9	↓					↓	

RELINQUISHED BY (COLLECTED BY)	Paula Dexter	DATE	3/7/17	RELINQUISHED TO	MEM Lab
		TIME	12:00		DATE 3/7/17 TIME 12:00
RECEIVED BY IN LABORATORY	Sindy West	DATE	03/08/17	LABORATORY NOTES	accepted
		TIME	11:00 am		

FIELD NOTES: None

METHOD OF SHIPMENT: Hand

PAGE NUMBER 4 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	See pg 1	ADDRESS	See pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

X	STANDARD (5-7 business		NEXT DAY		SAME DAY

SAMPLE MATRIX / MEDIA

MP MOLD PLATE | ST SPORE TRAP | TL TAPE LIFT | B BULK | O OTHER_____

SAMPLE IDENTIFICATION NUMBER LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.	SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI: TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	FUNGI: CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	FUNGI: TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	ASBESTOS: AIRBORNE FIBER COUNT (NIOSH 7400)	ASBESTOS: BULK MATERIAL (EPA METHOD 600/R-93-116)	OTHER
0033	3/7/17	Pum	41	Room 8- West Flour -Black Mastic	(H11)					X	
			42	Room 8- North Flour- Brown speck 8x9	↓					↓	
			43	↓ ↓ - Black Mastic	↓						
			44	Room 8- Orange 1x1 Ceiling Tile - North	(H12)						
			45	↓ ↓ ↓ East	↓						
			46	↓ ↓ ↓ South	↓						
			47	Room 11- South East- Window Pane Caulk	(H13)						
			48	Room 11- South Center- ↓ ↓ ↓	↓						
			49	Room 11- South West- ↓ ↓ ↓	↓						
			50	Room 11- Drywall- NW. Structure - East	(H14)					↓	

RELINQUISHED BY (COLLECTED BY)	Rachel Baker	DATE	3/7/17	RELINQUISHED TO	MEM Lab
		TIME	13:00		DATE 3/7/17 TIME 13:00
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	LABORATORY NOTES	accepted
		TIME	11:00 am		

FIELD NOTES: NONE

METHOD OF SHIPMENT: Hand

PAGE NUMBER 5 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	see pg 1	ADDRESS	see pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

	STANDARD (5-7 business)		NEXT DAY		SAME DAY
X					

SAMPLE MATRIX / MEDIA

MP MOLD PLATE | ST SPORE TRAP | TL TAPE LIFT | B BULK | O OTHER_____

SAMPLE IDENTIFICATION NUMBER				SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI			ASBESTOS		OTHER
LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.			TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	
0033	3/7/17	pm	51	Room 11 - Drywall - NW structure - South	(H14)					X	
			52	↓ ↓ ↓ - SE	↓					↓	
			53	Room 12 - South Wall - Texture	(H15)						
			54	↓ ↓ - Plaster	↓						
			55	Room 12 - Ceiling S. - Texture							
			56	↓ ↓ - Plaster							
			57	Rom 12 - West Wall - Texture							
			58	↓ ↓ - Plaster	↓						
			59	Room 12 - West - Pipe Cement	(H16)						
			60	Room 13 - South wall - Tape	(H17)					↓	

RELINQUISHED BY (COLLECTED BY)	Isabel Botta	DATE	3/7/17	RELINQUISHED TO	MEM Lab	DATE	3/7/17
		TIME	12:00			TIME	12:00
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	LABORATORY NOTES	accepted		
		TIME	11:00am				

FIELD NOTES: None

METHOD OF SHIPMENT: Hand

PAGE NUMBER: 6 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	See pg 1	ADDRESS	See pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

X	STANDARD (5-7 business		NEXT DAY		SAME DAY

SAMPLE MATRIX / MEDIA

MP MOLD PLATE | ST SPORE TRAP | TL TAPE LIFT | B BULK | O OTHER_____

SAMPLE IDENTIFICATION NUMBER				SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI			ASBESTOS		OTHER
LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.			TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	
0083	3/7/17	PUM	61	Room 13- South Wall- Joint Compound	(H17)					X	
			62	↓ ↓ Drywall	↓					↓	
			63	Room 14- East Wall- Tape							
			64	↓ ↓ Joint Compound							
			65	↓ ↓ Drywall	↓						
			66	Room 13- West Wall - Tape							
			67	↓ ↓ Joint Compound							
			68	↓ ↓ Drywall	↓						
			69	Room 13- North Flor- Flexile Ceiling Tile	(H18)						
↓	↓	↓	70	↓ South Flor- ↓	↓					↓	

RELINQUISHED BY (COLLECTED BY)	Paul C Porter	DATE	3/7/17	RELINQUISHED TO	MEM Lab
		TIME	12:00		DATE 3/7/17 TIME 13:00
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	LABORATORY NOTES	accepted
		TIME	11:00 am		

FIELD NOTES: None

METHOD OF SHIPMENT: Hand

PAGE NUMBER 7 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	
PROJECT NAME		ATTENTION	
ADDRESS	see pg 1	ADDRESS	see pg 1
CITY / STATE / ZIP		CITY / STATE / ZIP	
CONTACT		PHONE NUMBER	
PHONE NUMBER		ALTERNATE NO.	
EMAIL ADDRESS		EMAIL ADDRESS	

SAMPLE TURN-AROUND-TIME

	STANDARD (5-7 business)		NEXT DAY		SAME DAY
X					

SAMPLE MATRIX / MEDIA

MP Mold Plate | ST Spore Trap | TL Tape Lift | B Bulk | O Other_____

SAMPLE IDENTIFICATION NUMBER				SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	FUNGI			ASBESTOS		OTHER
LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.			TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	
0033	3/7/17	Am	71	Room 15- Center Floor- 1ox1e Ceiling Tile	(H18)					X	
			72	Room 16- SW Window- Pane Caulk	(H14)						
			73	↓ NW Window Pane Caulk	↓						
			74	Room ~~15~~ 13- East Wal - Texture	(H19)						
			75	↓ ↓ Plaster							
			76	Room 15- West Wall- Texture							
			77	↓ ↓ Plaster							
			78	Room Ht. 14 ~~East~~ West Wall- Texture							
			79	↓ ↓ Plaster	↓						
			80	Room 17 - East Wall - Texture	(H20)						

RELINQUISHED BY (COLLECTED BY)	Raell Buth	DATE	3/7/17	RELINQUISHED TO	MEM Lab
		TIME	12:00		DATE 3/7/17 TIME 12:00
RECEIVED BY IN LABORATORY	Sandy West	DATE	03/08/17	LABORATORY NOTES	accepted
		TIME	11:00 am		

FIELD NOTES: None

METHOD OF SHIPMENT: Hand

PAGE NUMBER 8 OF 9

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CHAIN OF CUSTODY

PROJECT INFORMATION		CONTACT INFORMATION	
PROJECT NO.	0046-AB-030717-RB	COMPANY	SCS Engineers
PROJECT NAME	Former Auto Repair	ATTENTION	Amy Dzialowski
ADDRESS	1708 NE 23rd Street	ADDRESS	1917 Commons Circle, Suite 1
CITY / STATE / ZIP	OKC, OK 73111	CITY / STATE / ZIP	Yukon, OK 73099
CONTACT	~~Dale Daniels~~ Amy Dzialowski	PHONE NUMBER	405.214.3624
PHONE NUMBER	405.264.3624	ALTERNATE NO.	
EMAIL ADDRESS	adzialowski@scsengineers.com	EMAIL ADDRESS	adzialowski@scsengineers.com

SAMPLE TURN-AROUND-TIME

X	STANDARD (5-7 business)		NEXT DAY		SAME DAY

SAMPLE MATRIX / MEDIA

MP Mold Plate | ST Spore Trap | TL Tape Lift | B Bulk | O Other_____

SAMPLE IDENTIFICATION NUMBER LAB ID.	DATE COLLECTED	MATRIX/MEDIA	FIELD ID.	SAMPLE LOCATION / DESCRIPTION	TIME / UNITS / CONDITION	TOTAL-AIRBORNE FUNGI (ENUMERATION & GENUS ID)	CULTURABLE AIRBORNE FUNGI (ENUMERATION & GENUS ID)	TOTAL-SURFACE FUNGI (SEMI-QUANTITATIVE ENUMERATION & GENUS ID)	AIRBORNE FIBER COUNT (NIOSH 7400)	BULK MATERIAL (EPA METHOD 600/R-93-116)	OTHER
0033	3/7/17	Dust	81	Room 17 - East Wall - Tape	(H20)					X	
			82	Joint Compound							
			83	Drywall							
			84	Room 17 - South Flor - Texture							
			85	Tape							
			86	Joint Compand							
			87	Drywall							
			88	~~Room Flor Ceiling Texture~~ West Wall - Texture (Room 17)							
			89	Tape							
			90/91	Joint Compound / Drywall							

RELINQUISHED BY (COLLECTED BY)	Rachel Bittle	DATE	3/7/17	RELINQUISHED TO	MEMLab
		TIME	12:00		DATE 3/7/17 TIME 12:00
RECEIVED BY IN LABORATORY	Emily West	DATE	03/08/17	LABORATORY NOTES	accepted
		TIME	11:00am		

FIELD NOTES: None.

METHOD OF SHIPMENT: Hand

PAGE NUMBER 9 OF 9

MARSHALL ENVIRONMENTAL MANAGEMENT, INC.

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BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-01	March 7, 2017	Ceiling Tile	COLOR	White	90%	Cellulose
			CONDITION	Good	10%	Paint
		1x1	TYPE	Miscellaneous		
		Room 3	NOTE			
		North Ceiling				
0033-030717-PLM-02	March 7, 2017	Ceiling Tile	COLOR	White	90%	Cellulose
			CONDITION	Good	10%	Paint
		1x1	TYPE	Miscellaneous		
		Room 3	NOTE			
		Center Floor				
0033-030717-PLM-03	March 7, 2017	Ceiling Tile	COLOR	White	90%	Cellulose
			CONDITION	Good	10%	Paint
		1x1	TYPE	Miscellaneous		
		Room 3	NOTE			
		West Ceiling				
0033-030717-PLM-04	March 7, 2017	Texture	COLOR	White	70%	Calcium Carbonate
			CONDITION	Good	15%	Talc
		Room 3	TYPE	Miscellaneous	5%	Cellulose
		On Concrete	NOTE		10%	Paint
		West Wall				
0033-030717-PLM-05	March 7, 2017	Texture	COLOR	White	70%	Calcium Carbonate
			CONDITION	Good	15%	Talc
		Room 3	TYPE	Miscellaneous	5%	Cellulose
		On Concrete	NOTE		10%	Paint
		South Wall				

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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mem@marshallenvironmental.com

BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION				
0033-030717-PLM-06	March 7, 2017	Texture	COLOR	White		NO ASBESTOS DETECTED	
			CONDITION	Good		70%	Calcium Carbonate
		Room 3	TYPE	Miscellaneous		15%	Talc
		On Concrete	NOTE			5%	Cellulose
		North Wall				10%	Paint
0033-030717-PLM-07	March 7, 2017	Window Pane Caulk	COLOR	White		NO ASBESTOS DETECTED	
			CONDITION	Good		80%	Calcium Carbonate
		Room 1	TYPE	Miscellaneous		20%	Aggregate
		NW	NOTE				
0033-030717-PLM-08	March 7, 2017	Window Pane Caulk	COLOR	White	2% Chrysotile	2% ASBESTOS DETECTED	
			CONDITION	Good		78%	Calcium Carbonate
		Room 1	TYPE	Miscellaneous		20%	Aggregate
		N Center	NOTE				
0033-030717-PLM-09	March 7, 2017	Window Pane Caulk	COLOR	White	2% Chrysotile	2% ASBESTOS DETECTED	
			CONDITION	Good		78%	Calcium Carbonate
		Room 1	TYPE	Miscellaneous		20%	Aggregate
		N East	NOTE				
0033-030717-PLM-10	March 7, 2017	Window Pane Caulk	COLOR	White	2% Chrysotile	2% ASBESTOS DETECTED	
			CONDITION	Good		78%	Calcium Carbonate
		Room 1	TYPE	Miscellaneous		20%	Aggregate
		South West	NOTE				

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

MARSHALL ENVIRONMENTAL MANAGEMENT, INC.

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PHONE: 405.616.0401 FAX: 405.681.6753
mem@marshallenvironmental.com

BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-11	March 7, 2017	Plaster	COLOR	Tan	50%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 1	TYPE	Miscellaneous	10%	Paint
		North Wall	NOTE			
		NE				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-12	March 7, 2017	Plaster	COLOR	Tan	50%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 1	TYPE	Miscellaneous	10%	Paint
		North Wall	NOTE			
		N Center				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-13	March 7, 2017	Plaster	COLOR	Tan	50%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 1	TYPE	Miscellaneous	10%	Paint
		North Wall	NOTE			
		NW				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-14	March 7, 2017	Texture	COLOR	Tan	40%	Quartz
			CONDITION	Good	50%	Cementous Material
		Room 5	TYPE	Miscellaneous	10%	Paint
		South Wall	NOTE			
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-15	March 7, 2017	Plaster	COLOR	Tan	60%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 5	TYPE	Miscellaneous		
		South Wall	NOTE			

Sandy West	Sandy West	March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

MARSHALL ENVIRONMENTAL MANAGEMENT, INC.

1301 NORTH MARTIN LUTHER KING AVENUE
OKLAHOMA CITY, OK 73117
PHONE: 405.616.0401 FAX: 405.681.6753
mem@marshallenvironmental.com

BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION					
0033-030717-PLM-16	March 7, 2017	Floor Tile	COLOR	Brown	5%	Chrysotile	70%	Vinyl
			CONDITION	Good			20%	Aggregate
		9x9	TYPE	Miscellaneous			5%	Talc
		Room 5	NOTE					
		North Floor						
0033-030717-PLM-17	March 7, 2017	Mastic	COLOR	Black			100%	Tar
			CONDITION	Good				
		9x9	TYPE	Miscellaneous				
		Room 5	NOTE					
		North Floor						
0033-030717-PLM-18	March 7, 2017	Floor Tile	COLOR	Brown	5%	Chrysotile	70%	Vinyl
			CONDITION	Good			20%	Aggregate
		9x9	TYPE	Miscellaneous			5%	Talc
		Room 5	NOTE					
		East Floor						
0033-030717-PLM-19	March 7, 2017	Mastic	COLOR	Black			100%	Tar
			CONDITION	Good				
		9x9	TYPE	Miscellaneous				
		Room 5	NOTE					
		East Floor						
0033-030717-PLM-20	March 7, 2017	Floor Tile	COLOR	Brown	5%	Chrysotile	70%	Vinyl
			CONDITION	Good			20%	Aggregate
		9x9	TYPE	Miscellaneous			5%	Talc
		Room 5	NOTE					
		West Floor						

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
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BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-21	March 7, 2017	Mastic	COLOR	Black	100%	Tar
			CONDITION	Good		
		9x9	TYPE	Miscellaneous		
		Room 5	NOTE			
		West Floor				
0033-030717-PLM-22	March 7, 2017	Texture	COLOR	White	40%	Quartz
			CONDITION	Good	50%	Cementous Material
		Room 7	TYPE	Miscellaneous	10%	Paint
		South Wall	NOTE			
0033-030717-PLM-23	March 7, 2017	Plaster	COLOR	Tan	40%	Quartz
			CONDITION	Good	55%	Cementous Material
		Room 7	TYPE	Miscellaneous	5%	Hair
		South Wall	NOTE			
0033-030717-PLM-24	March 7, 2017	Texture	COLOR	White	40%	Quartz
			CONDITION	Good	50%	Cementous Material
		Room 9	TYPE	Miscellaneous	10%	Paint
		Center Floor	NOTE			
0033-030717-PLM-25	March 7, 2017	Plaster	COLOR	Tan	40%	Quartz
			CONDITION	Good	55%	Cementous Material
		Room 9	TYPE	Miscellaneous	5%	Hair
		Center Floor	NOTE			

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
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Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
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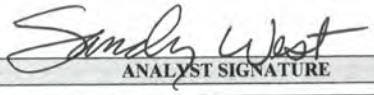
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-26	March 7, 2017	Ceiling Tile	COLOR	Brown	90%	Cellulose
			CONDITION	Good	10%	Paint
		2x4	TYPE	Miscellaneous		
		Room 7	NOTE			
		South				
0033-030717-PLM-27	March 7, 2017	Ceiling Tile	COLOR	Brown	90%	Cellulose
			CONDITION	Good	10%	Paint
		2x4	TYPE	Miscellaneous		
		Room 7	NOTE			
		East				
0033-030717-PLM-28	March 7, 2017	Ceiling Tile	COLOR	Brown	90%	Cellulose
			CONDITION	Good	10%	Paint
		2x4	TYPE	Miscellaneous		
		Room 7	NOTE			
		West				
0033-030717-PLM-29	March 7, 2017	Floor Tile	COLOR	Multi-Color	80%	Vinyl
			CONDITION	Good	20%	Aggregate
		12x12	TYPE	Miscellaneous		
		Room 7	NOTE			
		South				
0033-030717-PLM-30	March 7, 2017	Mastic	COLOR	Yellow	90%	Adhesive
			CONDITION	Good	10%	Aggregate
		12x12	TYPE	Miscellaneous		
		Room 7	NOTE			
		South				

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

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BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	Client	SCS Engineering	Client	SCS Engineering
Project	Former Auto Repair	Attention Title	Amy Dzialowski	Attention Title	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	Address	1817 Commons Circle Suite 1 Yukon, OK 73099	Address	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	Phone	405.264.3624	Phone	405.264.3624
Phone	405.264.3624	Fax	N/A	Fax	N/A
Cell	N/A	Other	N/A	Other	N/A
email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-31	March 7, 2017	Floor Tile	COLOR	Multi-Color	80%	Vinyl
			CONDITION	Good	20%	Aggregate
		12x12	TYPE	Miscellaneous		
		Room 7	NOTE			
		East				
0033-030717-PLM-32	March 7, 2017	Mastic	COLOR	Yellow	90%	Adhesive
			CONDITION	Good	10%	Aggregate
		12x12	TYPE	Miscellaneous		
		Room 7	NOTE			
		East				
0033-030717-PLM-33	March 7, 2017	Floor Tile	COLOR	Multi-Color	80%	Vinyl
			CONDITION	Good	20%	Aggregate
		12x12	TYPE	Miscellaneous		
		Room 7	NOTE			
		West				
0033-030717-PLM-34	March 7, 2017	Mastic	COLOR	Yellow	90%	Adhesive
			CONDITION	Good	10%	Aggregate
		12x12	TYPE	Miscellaneous		
		Room 7	NOTE			
		West				
0033-030717-PLM-35	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 7	TYPE	Miscellaneous		
		SE Wall	NOTE			
		Behind Plaster				

Sandy West	Sandy West	March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
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BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	Client	SCS Engineering	Client	SCS Engineering
Project	Former Auto Repair	Attention Title	Amy Dzialowski	Attention Title	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	Address	1817 Commons Circle Suite 1 Yukon, OK 73099	Address	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	Phone	405.264.3624	Phone	405.264.3624
Phone	405.264.3624	Fax	N/A	Fax	N/A
Cell	N/A	Other	N/A	Other	N/A
email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0033-030717-PLM-36	March 7, 2017	Drywall	COLOR	White			85% Gypsum
			CONDITION	Good			15% Cellulose
		Room 7	TYPE	Miscellaneous			
		S Wall	NOTE				
		Behind Plaster					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0033-030717-PLM-37	March 7, 2017	Drywall	COLOR	White			85% Gypsum
			CONDITION	Good			15% Cellulose
		Room 7	TYPE	Miscellaneous			
		SW Wall	NOTE				
		Behind Plaster					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		5% ASBESTOS DETECTED			
0033-030717-PLM-38	March 7, 2017	Floor Tile	COLOR	Brown	5%	Chrysotile	70%	Vinyl
			CONDITION	Good			25%	Aggregate
		9x9	TYPE	Miscellaneous				
		Room 8	NOTE					
		South Floor						

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED		
0033-030717-PLM-39	March 7, 2017	Mastic	COLOR	Black			100% Tar
			CONDITION	Good			
		9x9	TYPE	Miscellaneous			
		Room 8	NOTE				
		South Floor					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		5% ASBESTOS DETECTED			
0033-030717-PLM-40	March 7, 2017	Floor Tile	COLOR	Brown	5%	Chrysotile	70%	Vinyl
			CONDITION	Good			25%	Aggregate
		9x9	TYPE	Miscellaneous				
		Room 8	NOTE					
		West Floor						

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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mem@marshallenvironmental.com

BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	Client	SCS Engineering	Client	SCS Engineering
Project	Former Auto Repair	Attention Title	Amy Dzialowski	Attention Title	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	Address	1817 Commons Circle Suite 1 Yukon, OK 73099	Address	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	Phone	405.264.3624	Phone	405.264.3624
Phone	405.264.3624	Fax	N/A	Fax	N/A
Cell	N/A	Other	N/A	Other	N/A
email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION					
0033-030717-PLM-41	March 7, 2017	Mastic	COLOR	Black	NO ASBESTOS DETECTED		100%	Tar
			CONDITION	Good				
		9x9	TYPE	Miscellaneous				
		Room 8	NOTE					
		West Floor						
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		5% ASBESTOS DETECTED			
0033-030717-PLM-42	March 7, 2017	Floor Tile	COLOR	Brown	5%	Chrysotile	70%	Vinyl
			CONDITION	Good			25%	Aggregate
		9x9	TYPE	Miscellaneous				
		Room 8	NOTE					
		North Floor						
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED			
0033-030717-PLM-43	March 7, 2017	Mastic	COLOR	Black			100%	Tar
			CONDITION	Good				
		9x9	TYPE	Miscellaneous				
		Room 8	NOTE					
		North Floor						
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED			
0033-030717-PLM-44	March 7, 2017	Ceiling Tile	COLOR	Orange			90%	Cellulose
			CONDITION	Good			10%	Paint
		1x1	TYPE	Miscellaneous				
		Room 8	NOTE					
		North						
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED			
0033-030717-PLM-45	March 7, 2017	Ceiling Tile	COLOR	Orange			90%	Cellulose
			CONDITION	Good			10%	Paint
		1x1	TYPE	Miscellaneous				
		Room 8	NOTE					
		East						

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
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BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION				
0033-030717-PLM-46	March 7, 2017	Ceiling Tile	COLOR	Orange		NO ASBESTOS DETECTED	
			CONDITION	Good		90%	Cellulose
		1x1	TYPE	Miscellaneous		10%	Paint
		Room 8	NOTE				
		South					
0033-030717-PLM-47	March 7, 2017	Window Pane Caulk	COLOR	Light Gray	2%	Chrysotile	98% Calcium Carbonate
			CONDITION	Good			
		Room 11	TYPE	Miscellaneous			
		South East	NOTE				
0033-030717-PLM-48	March 7, 2017	Window Pane Caulk	COLOR	Light Gray	2%	Chrysotile	98% Calcium Carbonate
			CONDITION	Good			
		Room 11	TYPE	Miscellaneous			
		South Center	NOTE				
0033-030717-PLM-49	March 7, 2017	Window Pane Caulk	COLOR	Light Gray	2%	Chrysotile	98% Calcium Carbonate
			CONDITION	Good			
		Room 11	TYPE	Miscellaneous			
		South West	NOTE				
0033-030717-PLM-50	March 7, 2017	Drywall	COLOR	White		NO ASBESTOS DETECTED	
			CONDITION	Good		85%	Gypsum
		Room 11	TYPE	Miscellaneous		15%	Cellulose
		NW Structure	NOTE				
		East					

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
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BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	Client	SCS Engineering	Client	SCS Engineering
Project	Former Auto Repair	Attention Title	Amy Dzialowski	Attention Title	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	Address	1817 Commons Circle Suite 1 Yukon, OK 73099	Address	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	Phone	405.264.3624	Phone	405.264.3624
Phone	405.264.3624	Fax	N/A	Fax	N/A
Cell	N/A	Other	N/A	Other	N/A
email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-51	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 11	TYPE	Miscellaneous		
		NW Structure	NOTE			
		South				
0033-030717-PLM-52	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 11	TYPE	Miscellaneous		
		NW Structure	NOTE			
		SE				
0033-030717-PLM-53	March 7, 2017	Texture	COLOR	White	100%	Paint
			CONDITION	Good		
		Room 12	TYPE	Miscellaneous		
		Wall	NOTE			
		South				
0033-030717-PLM-54	March 7, 2017	Plaster	COLOR	White	60%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 12	TYPE	Miscellaneous		
		Wall	NOTE			
		South				
0033-030717-PLM-55	March 7, 2017	Texture	COLOR	Gray	60%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 12	TYPE	Miscellaneous		
		Ceiling	NOTE			
		South				

Sandy West	Sandy West	March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

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Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
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Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-56	March 7, 2017	Plaster	COLOR	Gray	60%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 12	TYPE	Miscellaneous		
		Ceiling	NOTE			
		South				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-57	March 7, 2017	Texture	COLOR	White	50%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 12	TYPE	Miscellaneous	10%	Paint
		Wall	NOTE			
		West				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-58	March 7, 2017	Plaster	COLOR	Gray	60%	Quartz
			CONDITION	Good	40%	Cementous Material
		Room 12	TYPE	Miscellaneous		
		Wall	NOTE			
		West				

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		15% ASBESTOS DETECTED			
0033-030717-PLM-59	March 7, 2017	Pipe Cement	COLOR	Gray	10%	Crocidolite	85%	Aggregate
			CONDITION	Good	5%	Chrysotile		
		Room 12	TYPE	Miscellaneous				
		West	NOTE					

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-60	March 7, 2017	Tape	COLOR	White	100%	Cellulose
			CONDITION	Good		
		Room 13	TYPE	Miscellaneous		
		Wall	NOTE			
		South				

Sandy West	Sandy West	March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

MARSHALL ENVIRONMENTAL MANAGEMENT, INC.

1301 NORTH MARTIN LUTHER KING AVENUE
OKLAHOMA CITY, OK 73117
PHONE: 405.616.0401 FAX: 405.681.6753
mem@marshallenvironmental.com

BULK ASBESTOS ANALYSIS REPORT

PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	Client	SCS Engineering	Client	SCS Engineering
Project	Former Auto Repair	Attention Title	Amy Dzialowski	Attention Title	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	Address	1817 Commons Circle Suite 1 Yukon, OK 73099	Address	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	Phone	405.264.3624	Phone	405.264.3624
Phone	405.264.3624	Fax	N/A	Fax	N/A
Cell	N/A	Other	N/A	Other	N/A
email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com	email	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-61	March 7, 2017	Joint Compound	COLOR	White	100%	Calcium Carbonate
			CONDITION	Good		
		Room 13	TYPE	Miscellaneous		
		Wall	NOTE			
		South				
0033-030717-PLM-62	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 13	TYPE	Miscellaneous		
		Wall	NOTE			
		South				
0033-030717-PLM-63	March 7, 2017	Tape	COLOR	White	100%	Cellulose
			CONDITION	Good		
		Room 14	TYPE	Miscellaneous		
		Wall	NOTE			
		East				
0033-030717-PLM-64	March 7, 2017	Joint Compound	COLOR	White	100%	Calcium Carbonate
			CONDITION	Good		
		Room 14	TYPE	Miscellaneous		
		Wall	NOTE			
		East				
0033-030717-PLM-65	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 14	TYPE	Miscellaneous		
		Wall	NOTE			
		East				

Sandy West	Sandy West	March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

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Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-66	March 7, 2017	Tape	COLOR	White	100%	Cellulose
			CONDITION	Good		
		Room 13	TYPE	Miscellaneous		
		Wall	NOTE			
		West				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-67	March 7, 2017	Joint Compound	COLOR	White	100%	Calcium Carbonate
			CONDITION	Good		
		Room 13	TYPE	Miscellaneous		
		Wall	NOTE			
		West				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-68	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 13	TYPE	Miscellaneous		
		Wall	NOTE			
		West				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-69	March 7, 2017	Ceiling Tile	COLOR	Gray	90%	Cellulose
			CONDITION	Good	10%	Paint
		16x16	TYPE	Miscellaneous		
		Room 13	NOTE			
		North Floor				
LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-70	March 7, 2017	Ceiling Tile	COLOR	Gray	90%	Cellulose
			CONDITION	Good	10%	Paint
		16x16	TYPE	Miscellaneous		
		Room 13	NOTE			
		South Floor				

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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BULK ASBESTOS ANALYSIS REPORT

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Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
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Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-71	March 7, 2017	Ceiling Tile	COLOR	Gray	90%	Cellulose
			CONDITION	Good	10%	Paint
		16x16	TYPE	Miscellaneous		
		Room 15	NOTE			
		Center Floor				
0033-030717-PLM-72	March 7, 2017	Window Pane Caulk	COLOR	Light Gray	90%	Calcium Carbonate
			CONDITION	Good	10%	Paint
		Room 16	TYPE	Miscellaneous		
		SW	NOTE			
0033-030717-PLM-73	March 7, 2017	Window Pane Caulk	COLOR	Light Gray	90%	Calcium Carbonate
			CONDITION	Good	10%	Paint
		Room 16	TYPE	Miscellaneous		
		NW	NOTE			
0033-030717-PLM-74	March 7, 2017	Texture	COLOR	Beige	40%	Quartz
			CONDITION	Good	50%	Cementous Material
		Room 13	TYPE	Miscellaneous	10%	Paint
		East Wall	NOTE			
0033-030717-PLM-75	March 7, 2017	Plaster	COLOR	Gray	40%	Quartz
			CONDITION	Good	60%	Cementous Material
		Room 13	TYPE	Miscellaneous		
		East Wall	NOTE			

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
AIHA PAT ID# 102334

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Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-76	March 7, 2017	Texture	COLOR	Beige	40%	Quartz
			CONDITION	Good	50%	Cementous Material
		Room 15	TYPE	Miscellaneous	10%	Paint
		West Wall	NOTE			
0033-030717-PLM-77	March 7, 2017	Plaster	COLOR	Gray	40%	Quartz
			CONDITION	Good	60%	Cementous Material
		Room 15	TYPE	Miscellaneous		
		West Wall	NOTE			
0033-030717-PLM-78	March 7, 2017	Texture	COLOR	Beige	40%	Quartz
			CONDITION	Good	60%	Cementous Material
		Room 14	TYPE	Miscellaneous		
		West Wall	NOTE			
0033-030717-PLM-79	March 7, 2017	Plaster	COLOR	Gray	40%	Quartz
			CONDITION	Good	60%	Cementous Material
		Room 14	TYPE	Miscellaneous		
		West Wall	NOTE			
0033-030717-PLM-80	March 7, 2017	Texture	COLOR	White	90%	Calcium Carbonate
			CONDITION	Good	10%	Paint
		Room 17	TYPE	Miscellaneous		
		East Wall	NOTE			

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

Lab Accreditation:
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PROJECT LOCATION		REPORT TO		INVOICE TO	
Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
Project Address	1708 NE 23rd Oklahoma City, OK 73111	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099	**Address**	1817 Commons Circle Suite 1 Yukon, OK 73099
Contact	Amy Dzialowski	**Phone**	405.264.3624	**Phone**	405.264.3624
Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-81	March 7, 2017	Tape	COLOR	White	100%	Cellulose
			CONDITION	Good		
		Room 17	TYPE	Miscellaneous		
		East Wall	NOTE			
0033-030717-PLM-82	March 7, 2017	Joint Compound	COLOR	White	100%	Calcium Carbonate
			CONDITION	Good		
		Room 17	TYPE	Miscellaneous		
		East Wall	NOTE			
0033-030717-PLM-83	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 17	TYPE	Miscellaneous		
		East Wall	NOTE			
0033-030717-PLM-84	March 7, 2017	Texture	COLOR	White	90%	Calcium Carbonate
			CONDITION	Good	10%	Paint
		Room 17	TYPE	Miscellaneous		
		South Floor	NOTE			
0033-030717-PLM-85	March 7, 2017	Tape	COLOR	White	100%	Cellulose
			CONDITION	Good		
		Room 17	TYPE	Miscellaneous		
		South Floor	NOTE			

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

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AIHA PAT ID# 102334

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BULK ASBESTOS ANALYSIS REPORT

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Project Identification	0046-AB-030717-RB	**Client**	SCS Engineering	**Client**	SCS Engineering
Project	Former Auto Repair	**Attention Title**	Amy Dzialowski	**Attention Title**	Amy Dzialowski
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Phone	405.264.3624	**Fax**	N/A	**Fax**	N/A
Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-86	March 7, 2017	Joint Compound	COLOR	White	100%	Calcium Carbonate
			CONDITION	Good		
		Room 17	TYPE	Miscellaneous		
		South Floor	NOTE			
0033-030717-PLM-87	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 17	TYPE	Miscellaneous		
		South Floor	NOTE			
0033-030717-PLM-88	March 7, 2017	Texture	COLOR	White	90%	Calcium Carbonate
			CONDITION	Good	10%	Paint
		Room 17	TYPE	Miscellaneous		
		West Wall	NOTE			
0033-030717-PLM-89	March 7, 2017	Tape	COLOR	White	100%	Cellulose
			CONDITION	Good		
		Room 17	TYPE	Miscellaneous		
		West Wall	NOTE			
0033-030717-PLM-90	March 7, 2017	Joint Compound	COLOR	White	100%	Calcium Carbonate
			CONDITION	Good		
		Room 17	TYPE	Miscellaneous		
		West Wall	NOTE			

Sandy West		March 9, 2017
ANALYST NAME (PRINT)	**ANALYST SIGNATURE**	**DATE ANALYZED**

Polarized Light Microscopy Asbestos Analysis Test Method:
40 CFR Chapter I, Part 763, Subpart F, Appendix A, "Interim Method for determination of Asbestos in Bulk Insulation Samples" using Polarized Light Microscopy (PLM), US EPA 600/M4-82-020 1982.

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Cell	N/A	**Other**	N/A	**Other**	N/A
email	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com	**email**	adzialowski@scsengineers.com

LAB LOG NUMBER	DATE OF SAMPLING	SAMPLE DESCRIPTION/LOCATION	SAMPLE COMPOSITION		NO ASBESTOS DETECTED	
0033-030717-PLM-91	March 7, 2017	Drywall	COLOR	White	85%	Gypsum
			CONDITION	Good	15%	Cellulose
		Room 17	TYPE	Miscellaneous		
		West Wall	NOTE			

ANALYST NAME (PRINT)	ANALYST SIGNATURE	DATE ANALYZED
Sandy West	Sandy West	March 9, 2017

Polarized Light Microscopy Asbestos Analysis Test Method:
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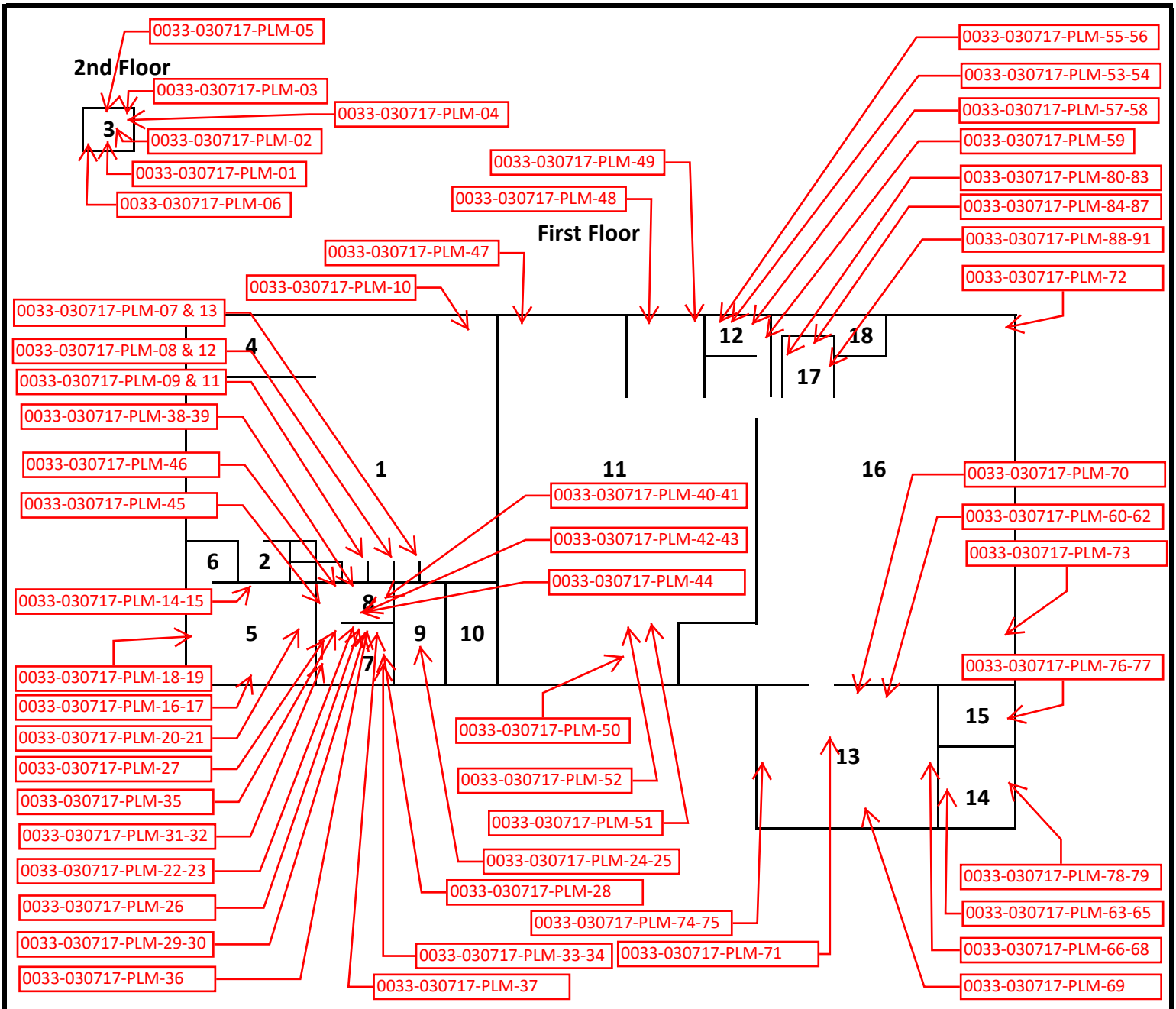


NOT TO SCALE

MEM
MARSHALL ENVIRONMENTAL MANAGEMENT
1301 N Martin Luther King Ave
Oklahoma City, OK 73117
405.616.0401
mem@marshallenvironmental.com

Sample Locations

Former Auto Repair
1708 NE 23rd St.
Oklahoma City, OK 73111

PREPARED BY: SW

DATE: 03/13/2017

JOB NO: 0046-AB-030717-RB

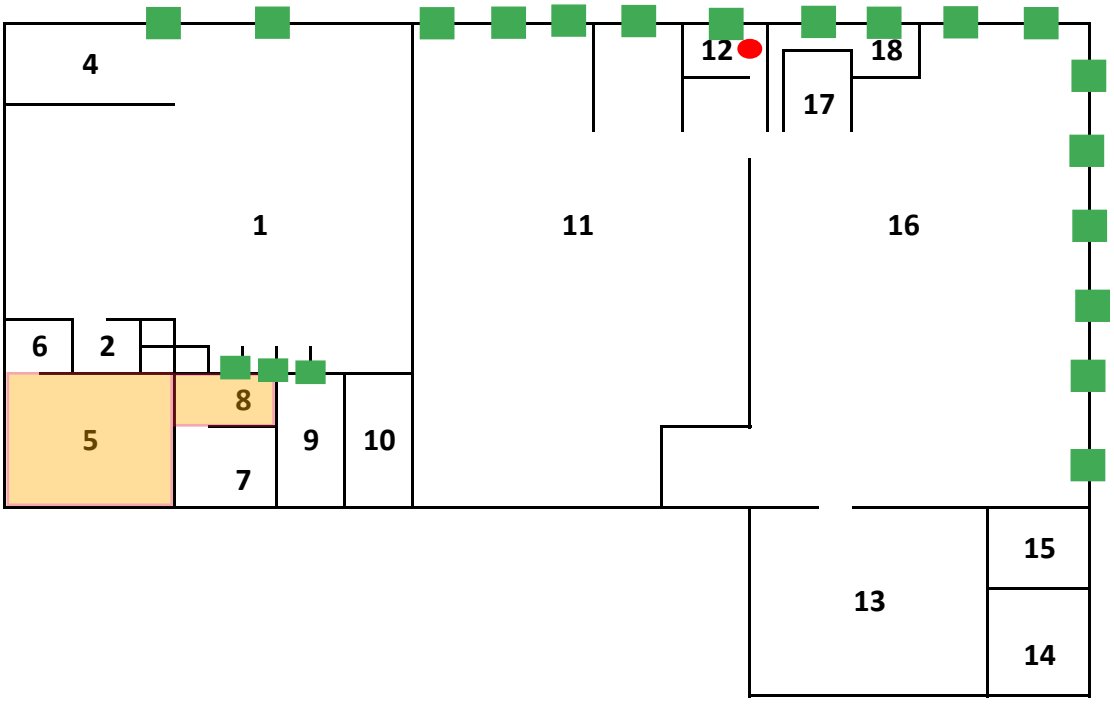
FIGURE

1

2nd Floor

3

First Floor



Asbestos Containing Window Pane Caulk ~ 20 Windows

Asbestos Containing Brown 9x9 Floor Tile ~850-square feet

Asbestos Containing Transite Pipe ~10 linear feet

N

NOT TO SCALE

MEM MARSHALL ENVIRONMENTAL MANAGEMENT
1301 N Martin Luther King Ave
Oklahoma City, OK 73117
405.616.0401
mem@marshallenvironmental.com

ACM Locations

Former Auto Repair
1708 NE 23rd St.
Oklahoma City, OK 73111

PREPARED BY: SW

DATE: 03/13/2017

JOB NO: 0046-AB-030717-RB

FIGURE

2

Photo 1: Room 1 - Asbestos Containing Window Pane Caulk

Photo 2: Room 5 - Asbestos Containing Brown 9x9 Floor Tile

Photo 3: Room 8 - Asbestos Containing Brown Speck 9x9 Floor Tile

Photo 4: Room 11 - Asbestos Containing Window Pane Caulk

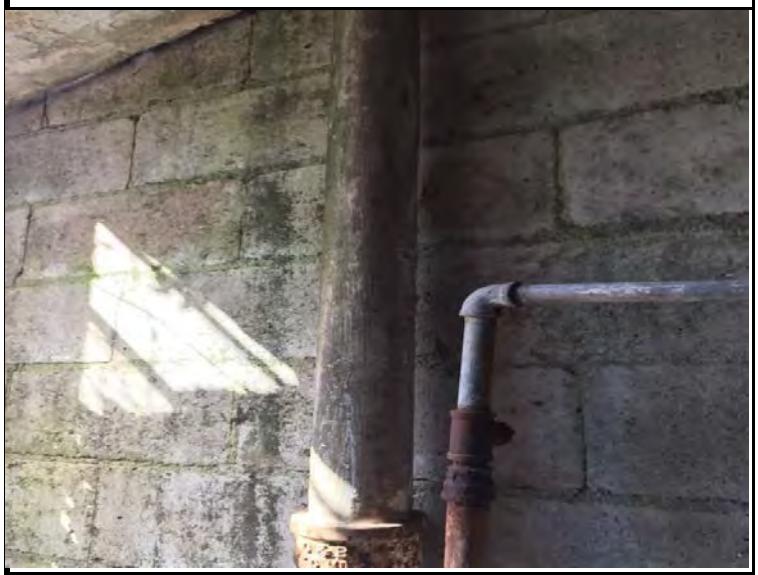


Photo 5: Room 12 - Asbestos Containing Pipe Cement

1301 N Martin Luther King Ave
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405.616.0401
mem@marshallenvironmental.com

Photo Album

Former Auto Repair
1708 NE 23rd Street
Oklahoma City, OK 73111

PREPARED BY: SW

DATE: 03/16/2017

JOB NO: 0046-AB-030717-RB

FORMER AUTO REPAIR

1708 NE 23RD STREET

OKLAHOMA CITY, OKLAHOMA 73111

March 17, 2017

Category II Non-Friable Asbestos
Scope of Work Version 1.0

Prepared For:

SCS Aquaterra
Attention: Amy Dzialowski
1817 Commons Circle, STE 1
Yukon, OK 73099
Phone: 405.264.3624
Email: adzialowski@scsengineers.com

Prepared By:

Marshall Environmental Management, Incorporated
Attention: Jamie Marshall, President
1301 N Martin Luther King Avenue
Oklahoma City, Oklahoma 73117
Phone: 405.616.0401
Email: mem@marshallenvironmental.com

TABLE OF CONTENTS

FORMER AUTO REPAIR

SCOPE OF WORK

SCOPE OF WORK

This Scope of Work has been prepared to allow for the safe and economical removal of non-friable asbestos containing materials (ACM) which include approximately 20 windows with window pane caulk and approximately 10 linear feet of transite pipe at the Former Auto Repair located at 1708 NE 23rd Street in Oklahoma City, Oklahoma in support of the renovation project currently scheduled.

RESPONSIBLE PARTIES & CONSULTANTS

LICENSED ASBESTOS ABATEMENT CONTRACTOR

To Be Determined

LICENSED ASBESTOS PROJECT DESIGNER

Jamie Marshall, MS, CIH – Senior Industrial Hygiene Associate
Marshall Environmental Management, Inc.
1301 N Martin Luther King Avenue
Oklahoma City, Oklahoma 73117
Office: 405.616.0401
Fax: 405.681.6753
Email: jamiemarshall@marshallenvironmental.com

OWNER REPRESENTATIVE

SCS Aquaterra
Attention: Amy Dzialowski
1817 Commons Circle, STE 1
Yukon, OK 73099
Phone: 405.264.3624
Email:adzialowski@scsengineers.com

COMPLIANCE STATEMENT

For the duration of this project all local, state and federal regulations will apply. This includes, but is not limited to, the Occupational Safety and Health Administration (OSHA) Construction Standard for Asbestos, (29 CFR 1926.1101) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos (40 CFR Part 61, Subpart M). Additionally, competent person supervision and work training shall comply with 29 CFR 1926.1101 requirements.

NOTIFICATIONS

A NESHAP notification must be submitted to the Oklahoma Department of Environmental Quality (ODEQ) ten-business days prior to the initiation of **any** renovation and/or demolition activities where ACM are present in quantities that meet or exceed 160-ft^2, 260-linear ft. or 35-cubic ft. ($ft.^3$). It should be noted that if the non-friable ACM is rendered friable, it will be considered Regulated under the ODOL, which will require an ODOL notification.

TRAINING

Workers and supervisors will all be trained in accordance with Class II (Non-Friable) Asbestos Abatement requirements for 29 CFR 1926.1101.

QUANTITY, TYPE & PERCENTAGE OF ACM

Total quantity, type and percentage of non-friable ACM:

- Approximately 20 windows with window pane caulk (2% Chrysotile)
- Approximately 10 linear feet of transite pipe (Assumed)

EGRESS, EMERGENCY ESCAPE ROUTES & FIRE EXTINGUISHER PLACEMENT

No work will be performed without adequate lighting. The work area will be clearly illuminated by droplights, light stands or equivalent lighting. All work will be performed using a buddy system. All power to the area is to be supplied by the GFCI power source. All exit routes from the work area will be clearly marked with signs and highly visible arrows designating the exit path. Emergency lights will be in place where necessary, in all areas that are not properly illuminated to assist in the identification of the exit locations.

Fire extinguishers shall meet the requirements of the OAC Act 380:50-15-14. A minimum of one 1 A:B:C fire extinguisher shall be provided for each 3,000 square feet of the work area, or major fraction thereof travel distance from any point of the work area to the nearest fire. A minimum of two fire extinguishers will be inside the NPC work area. Additionally, a minimum of one fire extinguisher shall be placed in the clean room of the decontamination facility.

Prior to beginning the prep and abatement work, all licensed asbestos workers will be given a briefing on the emergency egress procedures by the asbestos supervisor.

DETAILS OF ABATEMENT PROJECT

This project will consist of one (1) phase with 1 work area. The project duration is estimated to take approximately 1 week to complete. The Licensed Asbestos Contractor will mobilize to begin prep work based upon the notice to proceed and after coordination is confirmed with the Owner Representative. The following sequencing of events shall be used for the abatement:

1) Electrical power that workers have the potential to come in contact with during prep activities will be locked out/tagged out prior to the commencement of prep work.
2) The initial job site setup work shall include the establishment of ground fault circuit interrupters (GFCI's) for use with all portable electric equipment, lighting and the power used by the decontamination unit equipment, HEPA vacuums. The centralized decontamination unit shall be set up as soon as possible for use during all prep work. The boundary of the regulated work area is to be surrounded by asbestos hazard communication warning tape.
3) The work area prep shall comply with the requirements of Class II work as specified in 29 CFR 1926.1101.
4) The Asbestos Abatement Contractor shall establish a centralized decontamination for the decontamination of employees. The decontamination areas shall be defined by caution tape. The employer shall ensure that employees enter and exit the work area through the decontamination area. Workers will use a double suit protocol to egress from each abatement work area and access the central decontamination unit for personal decontamination.
5) When prep is complete, the Asbestos Abatement Contractor will schedule an inspection of each work area with a representative of the Project Designer prior to the commencement of asbestos removal.
6) Once the Prep Inspection is approved, the Asbestos Abatement Contractor may begin the window caulk and transite pipe abatement work. Only asbestos workers wearing the appropriate PPE will be allowed within the asbestos barrier tape. Down-grading of Respiratory Protection shall be determined by project specific air monitoring for personal breathing zone exposure in accordance with the Asbestos Abatement Contractor's Written Respirator Program.
7) Specific work tasks for each ACM shall be followed as outlined below:
    a. The window pane caulk will be abated by removing the entire window intact. Should the window pane caulk be rendered friable, it will become regulated by the ODOL.
    b. The transite pipe will be removed intact. Shall it be cut and rendered friable, it will become regulated by the ODOL.
8) Place windows and pipe in approved, double bagged, polyethylene bags or containers and hand carry to waste to waste trailer.
9) After completion of the final cleaning, the asbestos contractor will schedule a visual and/or final inspection with a representative of the Project Designer. Tear down any prep work and demobilize after approval by the Project Design Representative.
10) Submit all required project documents and waste manifests to the Owner's Representative Project Design Representative to serve as project completion documents.

AIR MONITORING REQUIREMENTS

A negative exposure assessment (For any specific asbestos job that trained employees perform, employers may show that exposures will be below the PELs (i.e., negative exposure assessment) through the following:

- Objective data demonstrating that ACM, or activities involving it, cannot release airborne fibers in excess of the 8-hour TWA PEL or STEL;
- Exposure data obtained within the past 12 months from prior monitoring of work operations closely resembling the employer's current work operations (the work operations that were previously monitored must have been conducted by employees whose training and experience were no more extensive than that of current employees, and the data must show a high degree of certainty that employee exposures will not exceed the 8-hour TWA PEL or STEL under current conditions); or
- Current initial exposure monitoring that used breathing zone air samples representing the 8-hour TWA and 30-minute short-term exposures for each employee in those operations most likely to result in exposures over the 8-hour TWA PEL for the entire asbestos job.

No area or clearance sampling will be required during the window pane caulk abatement, so long as the removal is intact. Should the abatement render the window pane caulk friable, it would become regulated by the ODOL, which would require additional air monitoring.

GENERAL REQUIREMENTS, CODES & REGULATIONS

Wherever conflicts arise within the Project Design General Requirements or Procedures and/or among the applicable Rules and Regulations, the most stringent rules shall apply. This is subject to approval by the Contracting Officer's Representative and other authorities having jurisdiction (e.g. DEQ, OSHA). If allowed by the authority with jurisdiction, a request for a variance can be submitted, provided it is acceptable to the Project Designer and Project Manager. Additionally, fall protection will be required during the roofing material removal phase of the project and all applicable rules and regulations will be implemented.

The Asbestos Abatement Contractor shall abide by this Scope of Work and the requirements, which govern asbestos removal and require notification, worker training, and applicable transportation and disposal requirements for asbestos waste materials to include, but not limited to, the following:

- 29 CFR 1910, OSHA General Industry Standards
- 29 CFR 1926, OSHA Construction Industry Standard
- 29 CFR 1926, 1101 OSHA Asbestos Construction Standard
- 40 CFR 61, Subpart M (NESHAP) enforced by ODEQ
- ANSI Z88.2 latest edition (Respiratory Protection)
- Oklahoma Asbestos Control Act Title 40 Sections 450-456
- OAC 380:50 (All-inclusive), Oklahoma Rules for Abatement of Friable Asbestos Materials
- The Asbestos Hazard Emergency Response Act (AHERA) of 9186 PL (99-519) and rules and regulations adopted by EPA for its implementation, latest edition.
- 49 CFR (USDOT) Hazardous Material Transportation Regulations

- OAC 252:100-40, Air Pollution Control Rules, Control of Emission of Friable Asbestos during Demolition and Renovation Operations (replaces OAC 252:100-41-16)
- OAC 252:515-19, Management of Solid Wastes (DEQ Asbestos Land Protection Division Asbestos Disposal Requirements)
- All Applicable State Statutes, County and City Codes/Ordinances