

St. Paul's Transit Site
300 St. Paul's Boulevard
Norfolk, Virginia

Limited Phase II Environmental Site Assessment

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1 INTRODUCTION

SCS Engineers (SCS) has completed a limited Phase II Environmental Site Assessment (ESA) for the St. Paul's Transit Site located on the city block bounded by Wood Street (north), Market Street (south), Fenchurch Street (east) and St Pauls Boulevard (west) in Norfolk, Virginia (Site Location Map; **Figure 1** in **Appendix A**). The property parcels that make up the Subject Site are described in the Norfolk Tax Records as:

Parcels A & B-1, Parcel C-1, Pt Parcel C1, Parcel C-2, Unit 8, Unit 1 Popeyes, and Unit 18

300 St. Paul's Blvd.
450 St Paul's Blvd.
501 Wood St.
450 Posey Ln.

Partial Properties: Parcel 48; 338 ft 805-821 Mariner St.; Blks A,B,C,H,I,J & Pt G Tdwtr Pk; and 54.3 ft & Parcel 46

201 Chapel St.
317 Chapel St.
450 Walke St.
830 Holt St.

The parcels (totaling approximately 40 acres) are currently developed with two fast-food restaurants (Popeye's and McDonalds), a Shell gasoline service station, the Hampton Roads Transit (HRT) bus terminal, the Norfolk Fire Station No. 1, parking lots, portions of the Tidewater Gardens residential units, and a vacant lot. A Site Features Map is provided as **Figure 2** in **Appendix A**.

A Phase I ESA of the Subject Site was completed by SCS in May 2019; a summary is provided as **Section 1.1.1** of this report. As two Recognized Environmental Conditions (RECs), three HRECs, and two Business Environmental Risks (BERs), were identified, SCS recommended that a limited Phase II ESA be conducted.

The field work for the limited Phase II ESA was performed by SCS between January and March 2020. The assessment included advancing seventeen (originally proposed sixteen) direct-push borings to collect both soil and groundwater samples.

1.1 PROPERTY HISTORY & BACKGROUND

1.1.1 Phase I ESA Summary

The following is a summary of the May 2019 Phase I ESA findings.

According to historical record sources, the Subject Site has been developed, and occupied by numerous roadways, commercial entities, and dwellings between 1887 and 1950. After the 1950s, but before 1970, the Subject Site was reconfigured and redeveloped into a single block with commercial structures that included a gasoline service station, auto repair facility, and dry cleaners. By 2008, the Subject Site configuration is consistent with present day visual observations made during the Subject Site reconnaissance. The western portion of the property is developed with six structures, while the remaining areas of the Subject Site are paved parking lots, portions of the Tidewater Gardens dwellings, and a vacant lot. The structures include a Popeye's, McDonalds, Shell gasoline station and associated canopy, HRT bus terminal shelters, and Norfolk Fire Station No. 1.

Recognized Environmental Conditions (RECs)

- Historical sources indicate that the property was occupied by an automotive repair facility (Roland's Auto Service Center) and dry cleaners (Dry Cleaning of Virginia Beach) for over 30 years (1970 to 2006). The long-term use of the property for these services indicates a potential for subsurface contamination.
- Historical information sources indicate multiple USTs in use on the Subject Site from at least 1970 to the present, including Roland's Auto Service Center, Amoco, Holiday Foods/Texaco, and Shell gasoline station. The long-term use of USTs at the Subject Site is considered an environmental concern and a REC.

Historical Recognized Environmental Conditions (HRECs)

- An Emergency Response Notification report from 1995 for a surficial spill of approximately 150-gallons of diesel fuel is considered a HREC. According to the EDR database report, the spill was reportedly contained and cleaned up. However, information concerning the investigation and remedial actions was not obtained, which is considered a data gap.
- The former Amoco #2033 - Tanks database listing. Information obtained from the Virginia Department of Environmental Quality (VDEQ) indicated a release resulting from UST use at this former facility. Free product was found in the groundwater. Environmental investigations were performed, including the removal of USTs and associated lines. Residual and dissolved phase petroleum contaminant levels were relatively low and the VDEQ issued a no further action letter in August 1994. The former release and resulting environmental investigations performed, including the closure of the case, is considered a HREC to the Subject Site.
- A former leaking tank associated with the Norfolk Redevelopment and Housing Authority (NRHA) - Tidewater Park database listing. Free product in soils were discovered during the removal of USTs. Environmental investigation reports were obtained from the VDEQ, which summarize abatement measures taken. Based on these reports and low levels of subsurface contamination, the VDEQ issued a no further action letter in August 1994. The former release, resulting environmental investigations and remedial actions, and case closure from VDEQ is considered a HREC to the Subject Site.

Controlled Recognized Environmental Conditions (CRECs)

- Controlled RECs were not identified during completion of the May 2019 Phase I ESA.

Business Environmental Risk (BER)

- The use of the Subject Site as a gasoline service station with two USTs on-site (Shell gasoline station) and the use of an emergency generator UST at the Norfolk Fire Station No. 1.
- The relatively long-term use of the property as an automotive repair facility and a drycleaners, as well as numerous USTs being used on-site and the resulting subsurface contamination.

Vapor Encroachment Condition:

- Based on the information obtained for the Phase I ESA, the potential for impacts from off-site sources is considered low, and the off-site sources do not represent a potential vapor encroachment condition (VEC) to the Subject Site.

Adjoining Properties of Environmental Interest

The areas surrounding the Subject Site were developed with residential and commercial properties with the additional development of commercial properties occurring over the years. The adjacent U.S. Post Office, located to the east/northeast is of potential concern to the Subject Site.

1.2 INVESTIGATION OBJECTIVES

Due to the past uses of potential environmental concern on the Subject Site and adjoining properties, SCS recommended that a limited subsurface assessment be conducted to evaluate the potential for soil and groundwater to have been impacted by currently regulated substances. Our recommendations included advancement of seventeen (originally proposed sixteen) direct-push borings to an approximate depth of 12 feet below ground surface (bgs).

This limited Phase II ESA was conducted in general conformance with the methods described in the Field Sampling Plan (FSP) for Limited Phase II Environmental Site Assessment for Petroleum Sites by SCS Engineers dated January 8, 2020. The use of the methods described in the FSP provides a framework for employing good commercial and customary practices in conducting Phase II ESAs.

Regulatory screening and reporting levels were used when comparing the Subject Site's detected soil and groundwater constituent concentrations. Screening and reporting levels serve as indicators of potential problems that generally require further investigation. The Virginia Voluntary Remediation Program (VRP) Tier II Screening Levels - Residential Table 2.0 dated June 2019, the EPA Region III Screening Levels (RSLs) Summary Table - Residential Soil April 2019, as well as the VDEQ Storage Tank Program reporting levels were used to evaluate the detected constituent concentrations.

1.3 LIMITATIONS

It should be understood our findings and conclusions presented will not be scientific certainties, but rather opinions based on our professional judgment concerning the significance of the data reviewed or obtained during the course of the study. SCS does not and cannot represent that the Subject Site contains 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 report has been prepared solely for the City of Norfolk (City) for its use and reliance in understanding the soil and groundwater conditions at the Subject Site. 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 and SCS, we may be available to discuss findings and opinions related specifically to other parties' unique risk management concerns related to the Subject Site.

2 PHYSICAL SETTING INFORMATION

2.1 TOPOGRAPHY AND SURFACE WATER CHARACTERISTICS

A topographic map for the Subject Site's vicinity was reviewed and is summarized as follows:

Reported Elevation	Approximately 10 feet above mean sea level.
Reported Slope Direction	The topography of the Subject Site is generally flat, with surfaces graded towards the perimeter of the property and towards bisecting roadways within the property. Storm drains are located throughout the property along the perimeter of the property, as well as along bisecting roadways.
Source	United States Geological Survey 7.5 Minute Topographic Maps, Norfolk South, Virginia, 2013.

2.2 REGIONAL GEOLOGY

The Subject Site is located in the Atlantic Coastal Plain physiographic province, which consists of an eastward-thickening wedge of stratified, unconsolidated to semi-consolidated alluvial and marine deposits. The sediments consist primarily of sand, clay, silt, and gravel with various amounts of shell material that range in age from Cretaceous to Holocene. Underlying the Coastal Plain sediments is a basement rock surface composed of igneous and metamorphic rocks that range in age from Precambrian to Paleozoic. The consolidated rock basement surface forms the basal limit of the Coastal Plain hydrogeologic system, greater than 2,000 feet below the ground surface. Near-surface soil conditions at the Subject Site may have been altered by construction and other activities associated with present day development.

According to the Environmental Data Resources' (EDR's) Report Geotcheck Physical Setting Source (in the May 2019 Phase I ESA), the lithology in the vicinity of the Subject Site is described as being from the Cenozoic Era, the Quaternary System, and the Pleistocene Series. The Subject Site is reported to be underlain by Urban Land soils.

2.3 REGIONAL GROUNDWATER CONDITIONS

According to topographic map interpretation, the Subject Site is generally flat. Stormwater is directed to storm drains located throughout the property. The average regional groundwater flow direction is assumed to be to the south/southwest towards the Eastern Branch of the Elizabeth River.

3 FIELD ACTIVITIES

3.1 BORING ADVANCEMENT AND SOIL SAMPLING

Drilling activities were performed on January 21 and 22, 2020, and March 9, 2020 using direct-push services provided by Fishburne Drilling of Chesapeake, Virginia. Soil borings (B-1 through B-17; **Figure 3** in **Appendix A**) were advanced to total depths of approximately 12 feet bgs using a Geoprobe Systems 5410 direct-push rig. The following borings were advanced at the areas of concern:

- one boring (B-1) near the Fire Station's emergency generator
- two borings (B-3 and B-4) at the former Roland's automotive center
- four borings (B-7, 8, 9, and 10) at the former dry cleaners, and
- two borings (B-15 and B-16) down-gradient of the Shell gasoline station tank field.

One additional boring (B-17) was advanced at the former dry cleaners during a second mobilization in order to obtain a duplicate groundwater sample. Seven borings were advanced to provide coverage of the remainder of the property.

Stainless steel rods with two-inch diameter core barrels equipped with disposable acetate liners were hydraulically driven into the subsurface to obtain continuous soil samples from the ground surface to termination of probing at each boring location. Once retrieved, soil was logged by the field engineer in accordance with the Unified Soil Classification System (soil boring logs are included in **Appendix B.**)

Photo ionization detector (PID) field screening of the soil cores was conducted during sample collection using a MiniRAE 3000 volatile organic compound (VOC) monitor equipped with an 11.6 eV lamp. VOC readings above background levels were recorded during the field work and a summary of the highest readings are provided below (**Table 1**).

Table 1. Summary PID Readings

Boring No.	Depth Interval (Feet)	Highest PID Reading	Units
B-1	5-7	0.2	ppm
B-2	0-2	0.2	ppm
B-3	2-4	0.2	ppm
B-4	5.5-6.5	0.6	ppm
B-5	0-3	21.6	ppm
B-6	0-3	0.5	ppm
B-7	3-4	0.4	ppm
B-8	2.5-3.5	138	ppm
B-9	0-1	235	ppm
B-10	3-4.5	0.2	ppm
B-11	0-5	0.0	ppm
B-12	0-6.5	0.0	ppm
B-13	0-7.5	0.0	ppm
B-14	0-7	0.0	ppm
B-15	7	3,520	ppm
B-16	0-5	0.1	ppm

Boring No.	Depth Interval (Feet)	Highest PID Reading	Units
B-17	0-8	0.0	ppm

Notes:

ppm – parts per million

Representative soil samples were collected from each of the seventeen (originally proposed sixteen) borings. Soil samples 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.

The soil samples and coolers were transported to Eurofins (TestAmerica) Laboratories for chemical analysis. The samples were subsequently analyzed for TPH Gasoline-and Diesel Range Organics (Method 8015C), VOCs (Method 8260B), Lead (Method 6010C), and Mercury (Method 7471B). In addition, samples collected from borings B-3 and B-4, were also analyzed for polychlorinated biphenyls (PCBs) (Method 8082A) and SVOCs (Method 8270D). The samples were analyzed and handled according to the laboratory's QA/QC Plan. Equipment and field blanks were not needed because no decontamination of sampling equipment was performed. Laboratory results for soil samples are presented in **Table 2**. The Eurofins analytical laboratory report and chain of custody (COC) documentation are provided in **Appendix C**.

3.2 GROUNDWATER SAMPLING

One-inch diameter Schedule 40 PVC (new with threaded flush joints) temporary groundwater monitoring wells (TW-1 through TW-16) were installed immediately following borehole advancement to collect groundwater samples from the upper portion of the saturated zone (shallow sample). The screened sections of the wells were placed from the bottom of the borings (12 feet bgs) to approximately 2 feet bgs (across the top of the water table) with solid PVC pipe to the ground surface. Filter sand was then placed from the bottom of the borings to approximately 6 inches above the top of the screened sections, followed by bentonite pellets (hydrated) to the ground surface. The shallow groundwater samples were subsequently collected from the wells using a peristaltic pump with dedicated tubing on January 27, 29, and 30; and, February 3, 2020. The peristaltic pump tubing inlet was placed at approximately a foot from the bottom of the screened section of the wells. The relative elevations of the tops of the well casings were surveyed, and the water levels in each well were measured prior to sampling. Upon collection of groundwater samples, the temporary wells were abandoned.

Subsequently, upon review of laboratory COCs, it was evident that a duplicate sample was not collected. Since the temporary wells were abandoned, another one-inch diameter Schedule 40 PVC temporary groundwater monitoring well (TW-17) was installed on March 9, 2020. The shallow groundwater samples, including the duplicate sample, were subsequently collected from TW-17 on March 10, 2020.

Field QA/QC sampling included collection of a duplicate groundwater sample (from TW-17). Equipment and field blanks were not needed because no field decontamination of equipment was performed. Groundwater sampling logs are included in **Appendix D**.

Upon collection, groundwater and QA/QC samples were immediately placed on ice and stored at approximately 4°C. Nitrile gloves used during sampling were disposed of following sample collection.

The samples and coolers were transported to Eurofins (TestAmerica) Laboratories for chemical analysis.

Analyses included VOCs (Method 8260B) and TPH Gasoline-and Diesel Range Organics (Method 8015B and C). Additionally, PCBs (Method 8082A) and SVOCs (Method 8270D) were analyzed for groundwater samples collected from TW-3, TW-4, and TW-17. The samples were analyzed and handled according to the laboratory's QA/QC Plan. Laboratory results for groundwater samples are presented in **Table 3**. The Eurofins analytical laboratory report and COC documentation are provided in **Appendix C**.

4 FINDINGS

4.1 GEOLOGY & HYDROGEOLOGY

In general, the Subject Site's geology consists of Cretaceous to Holocene age sediments that include sand, clay, silt, and gravel with various amounts of shell material. Unconsolidated subsurface materials encountered during this investigation consisted primarily of a silty sand layer underlain by a clay layer. The clay is generally gray with orange streaking and is of high plasticity. Below the clay layer is a gray-brown-tan colored silty sand to the bottom of each boring. The silty sand is generally well-graded. Groundwater was generally encountered in the borings at depths ranging from 4 to 8 feet bgs. Soil boring logs are included in **Appendix B**.

4.2 SOIL ANALYTICAL RESULTS

Risk-based screening levels are concentrations derived from standardized equations combining exposure information assumptions with EPA toxicity data. Screening levels are considered by the Agency to be protective for humans over a lifetime; however, are generic and not always applicable to a particular site (i.e., they are calculated without site-specific information). These levels may be recalculated using site-specific data.

Tetrachloroethene (PCE): As shown on Table 2, two boring locations, B-9 and B-10, contained detectable concentrations of tetrachloroethene, also known as perchloroethylene or PCE, above the EPA's Risk-Based RSLs. The detected concentrations were 0.0081 mg/Kg (B-10) and 0.013 mg/Kg (B-9) compared with the EPA Risk-Based RSL of 0.0051 mg/Kg. The concentrations are not above the VRP Tier II Screening Level of 0.045 mg/Kg or EPA's Residential or Industrial RSLs of 24 and 100 mg/Kg, respectively.

Lead: As shown on **Table 2**, all surficial and subsurface soil samples (where analyzed for lead), with the exception of B-3 and B-4, exhibited detections of lead, although not at concentrations above applicable screening or reporting levels. The VRP Tier II Screening Level and EPA Residential RSL for lead is 400 mg/Kg; and, the EPA Industrial RSL for lead is 800 mg/Kg. The detected concentrations ranged from 2.8 to 290 mg/Kg, which is within the range of naturally occurring lead.

Mercury: As shown on **Table 2**, five boring locations, B-5, B-6, B-7, B-8, and B-12, exhibited detectable concentrations of mercury above the EPA's Risk-Based RSLs. The detected concentrations ranged from 0.034 mg/Kg (B-7) to 0.062 mg/Kg (B-12) compared with the EPA Risk-Based RSL of 0.033 mg/Kg. The concentrations are not above the VRP Tier II Screening Level of 1.1 mg/Kg or EPA's Residential or Industrial RSLs of 11 and 46 mg/Kg, respectively.

Petroleum Hydrocarbons (TPH): As shown on **Table 2**, each of the soil samples, with the exception of B-1, B-13 and B-17, exhibited detections of TPH. TPH Diesel Range Organics (DRO) and TPH Gasoline Range Organics (GRO) were detected in soil samples, but not above the VDEQ reporting level of 100 mg/Kg. The TPH (Oil Range Organics (ORO) concentration at B-6 exceeded the VDEQ reporting level at a concentration of 320 mg/Kg.

Table 2. Soil Sampling Results Summary

Sample No.	Depth Interval (feet)	Detected Constituent	Detected Concentration	VRP Tier II Screening Level (2)	EPA Region III Residential RSL (3)	EPA Region III Industrial RSL (4)	EPA Region III Risk-Based RSL (5)	VDEQ Reporting Level (6)	Units
B-1	0-7	Lead	6.1	400	400	800	NA	NA	mg/Kg
B-2	0-5	Gasoline Range Organics	0.48	NA	NA	NA	NA	100	mg/Kg
		Lead	93	400	400	800	NA	NA	mg/Kg
		Mercury	0.26	1.1	11	46	0.033	NA	mg/Kg
B-3	0-6	Diesel Range Organics	17	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	42	NA	NA	NA	NA	100	mg/Kg
B-4	0-6	Diesel Range Organics	18	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	40	NA	NA	NA	NA	100	mg/Kg
B-5	0-4	Diesel Range Organics	23	NA	NA	NA	NA	100	mg/Kg
		Lead	12	400	400	800	NA	NA	mg/Kg
		Mercury	0.041	1.1	11	46	0.033	NA	mg/Kg
B-6	0-5	Oil Range Organics	320	NA	NA	NA	NA	100	mg/Kg
		Lead	19	400	400	800	NA	NA	mg/Kg
		Mercury	0.047	1.1	11	46	0.033	NA	mg/Kg
B-7	0-4	Oil Range Organics	32	NA	NA	NA	NA	100	mg/Kg
		Lead	10	400	400	800	NA	NA	mg/Kg
		Mercury	0.034	1.1	11	46	0.033	NA	mg/Kg
B-8	2-6	Gasoline Range Organics	0.13	NA	NA	NA	NA	100	mg/Kg
		Diesel Range Organics	7.7	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	7.1	NA	NA	NA	NA	100	mg/Kg
		Lead	6.7	400	400	800	NA	NA	mg/Kg
		Mercury	0.038	1.1	11	46	0.033	NA	mg/Kg

Sample No.	Depth Interval (feet)	Detected Constituent	Detected Concentration	VRP Tier II Screening Level (2)	EPA Region III Residential RSL (3)	EPA Region III Industrial RSL (4)	EPA Region III Risk-Based RSL (5)	VDEQ Reporting Level (6)	Units
B-9	0-5	Tetrachloroethene	0.013	0.045	24	100	0.0051	NA	mg/Kg
		Diesel Range Organics	15	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	19	NA	NA	NA	NA	100	mg/Kg
		Lead	5.7	400	400	800	NA	NA	mg/Kg
B-10	0-4.5	Tetrachloroethene	0.0081	0.045	24	100	0.0051	NA	mg/Kg
		Diesel Range Organics	24	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	22	NA	NA	NA	NA	100	mg/Kg
		Lead	3.2	400	400	800	NA	NA	mg/Kg
B-11	0-5	Diesel Range Organics	9.9	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	22	NA	NA	NA	NA	100	mg/Kg
		Lead	9.2	400	400	800	NA	NA	mg/Kg
		Mercury	0.026	1.1	11	46	0.033	NA	mg/Kg
B-12	0-6	Diesel Range Organics	7.9	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	18	NA	NA	NA	NA	100	mg/Kg
		Lead	4.1	400	400	800	NA	NA	mg/Kg
		Mercury	0.062	1.1	11	46	0.033	NA	mg/Kg
B-13	0-7	Lead	4.4	400	400	800	NA	NA	mg/Kg
		Mercury	0.022	1.1	11	46	0.033	NA	mg/Kg
B-14	0-8	Diesel Range Organics	50	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	77	NA	NA	NA	NA	100	mg/Kg
		Lead	290	400	400	800	NA	NA	mg/Kg
		Mercury	0.35	1.1	11	46	0.033	NA	mg/Kg
B-15	0-7	Acetone	0.091	5.74	61,000	670,000	2.9	NA	mg/Kg
		Diesel Range Organics	6	NA	NA	NA	NA	100	mg/Kg
		Lead	2.8	400	400	800	NA	NA	mg/Kg

Sample No.	Depth Interval (feet)	Detected Constituent	Detected Concentration	VRP Tier II Screening Level (2)	EPA Region III Residential RSL (3)	EPA Region III Industrial RSL (4)	EPA Region III Risk-Based RSL (5)	VDEQ Reporting Level (6)	Units
B-16	0-5	Diesel Range Organics	26	NA	NA	NA	NA	100	mg/Kg
		Oil Range Organics	50	NA	NA	NA	NA	100	mg/Kg
		Lead	8.3	400	400	800	NA	NA	mg/Kg
B-17	4-8	No Detections	-	-	-	-	-	-	-

Notes:

(1) Samples collected January 21 and 22, 2020, and March 9, 2020.

(2) VRP Tier II Screening Levels - Residential Table 2.0 dated June 2019

(3) EPA Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1) Residential Soil November 2019

(4) EPA RSL Summary Table (TR=1E-06, HQ=1) Industrial Soil November 2019

(5) EPA RSL Summary Table (TR=1E-06, HQ=1) Risk-Based Soil November 2019

(6) VDEQ Reporting Level Storage Tank Program Technical Manual Fourth Edition May 2011

NA - Not Applicable

4.3 GROUNDWATER ANALYTICAL RESULTS

VOCs: Concentrations of the VOCs naphthalene, tetrachloroethene, and benzene exceeded VRP Tier II Screening Levels in groundwater samples collected from TW-3, TW-7, TW-10 and TW-15 (**Table 3**). Tetrachloroethene was detected at a concentration of 7.2 ug/L in the groundwater samples collected from both TW-7 and TW-10 compared to the respective VRP Tier II Screening Level of 5 ug/L. Benzene was detected at a concentration of 5.9 ug/L in the groundwater sample collected from TW-15 compared to the respective VRP Tier II Screening Level of 5 ug/L. The remaining detectable concentrations of VOCs did not exceed applicable screening levels or reporting levels.

Petroleum Hydrocarbons (TPH): TPH DRO and GRO were detected above laboratory reporting limits in groundwater samples collected from temporary groundwater monitoring wells TW-1, TW-2, TW-3, TW-4, TW-6, TW-11, TW-15, and TW-16 (**Table 3**). None of the detected concentrations exceeded applicable screening or reporting levels.

PCBs and SVOCs: PCBs were not detected in the groundwater samples collected from temporary groundwater monitoring wells TW-3 and TW-4. Naphthalene was detected at a concentration of 2.5 ug/L in the groundwater sample collected from TW-3 compared to the respective VRP Tier II Screening Level of 0.61 ug/L.

Table 3. Groundwater Sampling Results Summary

Sample No.	Detected Constituent	Detected Concentration	VRP Tier II Screening Level (2)	EPA Region III RSL (3)	VDEQ Reporting Level (4)	Units
TW-1	Diesel Range Organics	140	NA	NA	1000	ug/L
TW-2	Diesel Range Organics	780	NA	NA	1000	ug/L
TW-3	Naphthalene	2.5	0.61	0.17	NA	ug/L
	Diesel Range Organics	200	NA	NA	1000	ug/L
TW-4	Diesel Range Organics	560	NA	NA	1000	ug/L
TW-5	No Detections	-	-	-	-	-
TW-6	Diesel Range Organics	310	NA	NA	1000	ug/L
TW-7	Tetrachloroethene	7.2	5	5	NA	ug/L
TW-8	No Detections	-	-	-	-	-
TW-9	No Detections	-	-	-	-	-
TW-10	Tetrachloroethene	7.2	5	5	NA	ug/L
TW-11	Diesel Range Organics	760	NA	NA	1000	ug/L
TW-12	No Detections	-	-	-	-	-
TW-13	No Detections	-	-	-	-	-
TW-14	No Detections	-	-	-	-	-
TW-15	Benzene	5.9	5	5	NA	ug/L
	Cyclohexane	3.6	1300	13000	NA	ug/L
	Ethylbenzene	2.2	700	700	NA	ug/L
	Isopropylbenzene	3.2	45	450	NA	ug/L

Sample No.	Detected Constituent	Detected Concentration	VRP Tier II Screening Level (2)	EPA Region III RSL (3)	VDEQ Reporting Level (4)	Units
	Methyl tertiary butyl ether	1.7	140	14	NA	ug/L
	Methylcyclohexane	2.8	NA	NA	NA	ug/L
	Toluene	9	1000	1000	NA	ug/L
	Gasoline Range Organics	500	NA	NA	1000	ug/L
	Diesel Range Organics	300	NA	NA	1000	ug/L
TW-16	Diesel Range Organics	170	NA	NA	1000	ug/L
TW-17	No Detections	-	-	-	-	-

Notes:

(1) Groundwater Samples collected January 27, 29 and 30; February 3 and March 10, 2020.

(2) VRP Tier II Screening Levels - Residential Table 2.0 dated June 2019

(3) EPA Tapwater or Maximum Contaminant Level (MCL), as applicable, Regional Screening Level (RSL) Summary Table (TR=1E-06, HQ=1) November 2019

(4) VDEQ Reporting Level Storage Tank Program Technical Manual Fourth Edition May 2011

NA - Not Applicable

4.4 QUALITY CONTROL ANALYTICAL RESULTS AND DATA VALIDATION

Laboratory QA/QC involves the routine collection and analysis of method reagent blanks, matrix spike and matrix spike duplicate (MS/MSD) samples, and laboratory control samples (LCS). A brief summary of each of these is presented below:

- Method Reagent Blank** – The method reagent blank is deionized water subjected to the same reagents and manipulations to which site samples are subjected. Positive results in the method reagent blank may indicate either contamination of the chemical reagents or the glassware and implements used to store or prepare the sample and resulting solutions.
- Matrix Spike/Matrix Spike Duplicate** – A matrix spike is an aliquot of a field sample with a known concentration of target parameter added to it. A matrix spike duplicate is an intra-laboratory split sample spiked with a known concentration of target parameter. Spiking for each occurs prior to sample analysis. MS/MSD samples are collected for every batch of twenty or fewer samples. Matrix spike recoveries are used to indicate what effect the sample matrix may have on the reported concentration and/or the performance of the sample preparation and analysis.
- Laboratory Control Samples** – These samples generally consist of deionized water injected with the parameters of interest for single parameter methods and selected parameters for multi-parameter methods according to the appropriate analytical method. LCS are prepared and analyzed for each batch containing twenty or fewer samples. LCS recoveries are used to monitor analytical accuracy.

There were MSD recoveries outside control limits for the soil matrix, which the laboratory suspected were due to sample non-homogeneity since the LCS was within limits. Continuing calibration verifications (CCV) were also outside control limits for pyrene; however, pyrene was not detected in the associated samples. Soil samples collected from B-6 and B-7 were diluted due to color and odor, which resulted in elevated laboratory reporting limits for TPH, which was detected in both samples. The soil sample from TW-17 (B-17) was diluted for the VOC analysis to meet the base dilution for the methanol preservation method.

There were LCS and CCV recoveries outside control limits for the aqueous matrix for specific analytes; however, these analytes were not detected in the associated samples.

Field and laboratory QA/QC also involved the collection and analysis of a duplicate field groundwater sample. Duplicates are two separate samples collected independently in such a manner that they equally represent the medium at a given time and location. Co-located samples provide intra-laboratory precision information for the entire measurement system, including sample collection, homogeneity, handling, shipping, storage, preparation, and analysis. TPH-DRO was detected in the method blank during the first extraction and re-extracted for a second analysis and did not exhibit TPH-DRO. **Table 4** summarizes the parameter detection from the method blank extraction and re-extraction. The re-extraction was performed outside the holding time; however, based on the lack of detection in the groundwater sample, this is not a concern.

Table 4. Quality Control Detects Summary

Blank ID	Parameter	Concentration (ug/L)	RL (ug/L)
Method Blank	Diesel Range Organics (DRO)	832	130
Method Blank-RE	Diesel Range Organics (DRO)	<130 H	130

RE = RE-Extraction
 RL = Reporting Limit
 ug/L = micrograms per liter

Relative Percent Difference (RPD) of less than 20% is desirable when comparing the duplicate to the original sample. There were no detections above the laboratory reporting limit and therefore a comparison cannot be made.

To identify analytical data that may not represent valid results, data from the soil and groundwater monitoring events were validated by the laboratory and SCS in accordance with EPA guidance. Samples with parameter detections less than five times that of the blank detections, but greater than the laboratory's Limit of Detection (LOD) are flagged with a "B" qualifier. Samples with common lab contaminant parameter detections less than 10 times that of blank detection, but greater than the laboratory's LOD are flagged with a "B" qualifier. B qualified detections are considered not validated as the detection may be anomalous to due to sampling, laboratory, or transportation errors. TPH DRO was detected in the method blank and in the associated groundwater sample and flagged with a "B". However, upon re-extraction there was no TPH DRO detection in the method blank or the groundwater sample. The laboratory indicated that the original method blank detection is likely the result of laboratory glassware contamination.

5 CONCLUSIONS

Soil: The soil samples (where analyzed for lead) with the exception of soil samples collected from B-3 and B-4, exhibited some detections of lead, although not at concentrations above applicable screening or reporting levels. This supports a conclusion that detected concentrations are primarily indicative of naturally occurring background concentrations. The detected lead concentrations range from 2.8 to 290 mg/Kg, which is below the EPA's Residential RSL of 400 mg/Kg.

PCE was detected in soil samples collected from B-9 and B-10 (near the former drycleaners), at concentrations above the EPA's Risk-Based Screening Level, but below the VRP Tier II and EPA Residential and Industrial RSLs. The detected concentrations were 0.0081 mg/Kg (B-10) and 0.013 mg/Kg (B-9), which are slightly above the EPA's Risk-Based Screening Level of 0.0051 mg/Kg.

Mercury was detected in soil samples collected from five boring locations (B-5, B-6, B-7, B-8, and B-12) at concentrations above the EPA's Risk-Based Screening Level, but below the VRP Tier II and EPA Residential and Industrial RSLs. The detected concentrations ranged from 0.034 mg/Kg (B-7) to 0.062 mg/Kg (B-12), which are slightly above the EPA's Risk-Based RSL of 0.033 mg/Kg.

TPH was detected in each of the soil samples, with the exception of B-1 (fire station), B-13 and B-17. TPH DRO and TPH GRO were detected in soil samples, but not above the VDEQ reporting level of 100 mg/Kg. The TPH ORO concentration at B-6 exceeded the VDEQ reporting level at a concentration of 320 mg/Kg, however, based on the location of the sample (background and not associated with a tank location), the VDEQ was not notified.

The relatively high PID reading on the soil samples from boring B-15 appears to be anomalous since results of chemical analysis of the sample from this boring did not indicate exceedances of applicable screening or action levels. Although, B-15 is located adjacent to an active service station.

Groundwater: Concentrations of the VOCs naphthalene, tetrachloroethene, and benzene exceeded VRP Tier II Screening Levels in groundwater samples collected from TW-3 (former automobile repair), TW-7, TW-10 (former drycleaners) and TW-15 (active service station). The remaining detectable concentrations of VOCs did not exceed applicable screening levels or reporting levels.

TPH DRO and GRO were detected above laboratory reporting limits in groundwater samples collected from temporary groundwater monitoring wells TW-1 (fire station), TW-2, TW-3, TW-4 (former automobile repair station), TW-6, TW-11, TW-15, and TW-16 (active service station). None of the detected concentrations exceeded applicable screening or reporting levels.

Analysis of relative groundwater levels obtained before sampling each temporary groundwater monitoring well indicated that shallow groundwater flow is toward the south/southwest (see **Figure 4** in **Appendix A**).

6 REFERENCES

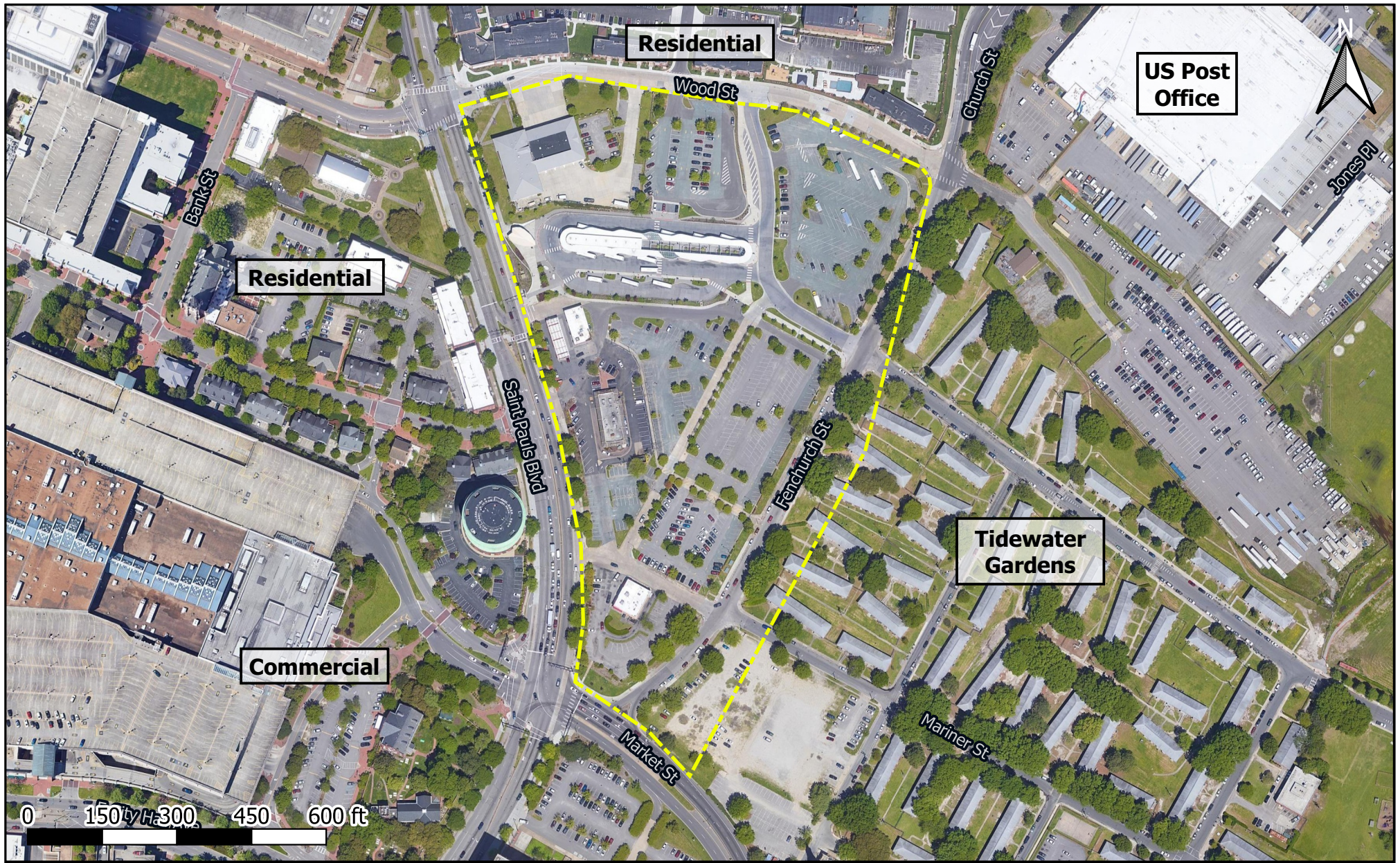
ASTM International. 2013. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-13)*. ASTM International, West Conshohocken, Pennsylvania.

ASTM International. 2011. *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (E1903-11)*. ASTM International, West Conshohocken, Pennsylvania.

ASTM E1527-13 Phase I Environmental Site Assessment St. Pauls Boulevard Transit Site, Norfolk, Virginia 23504, by SCS Engineers dated May 6, 2019.

USGS Topographic Map, Norfolk South, VA, 2013

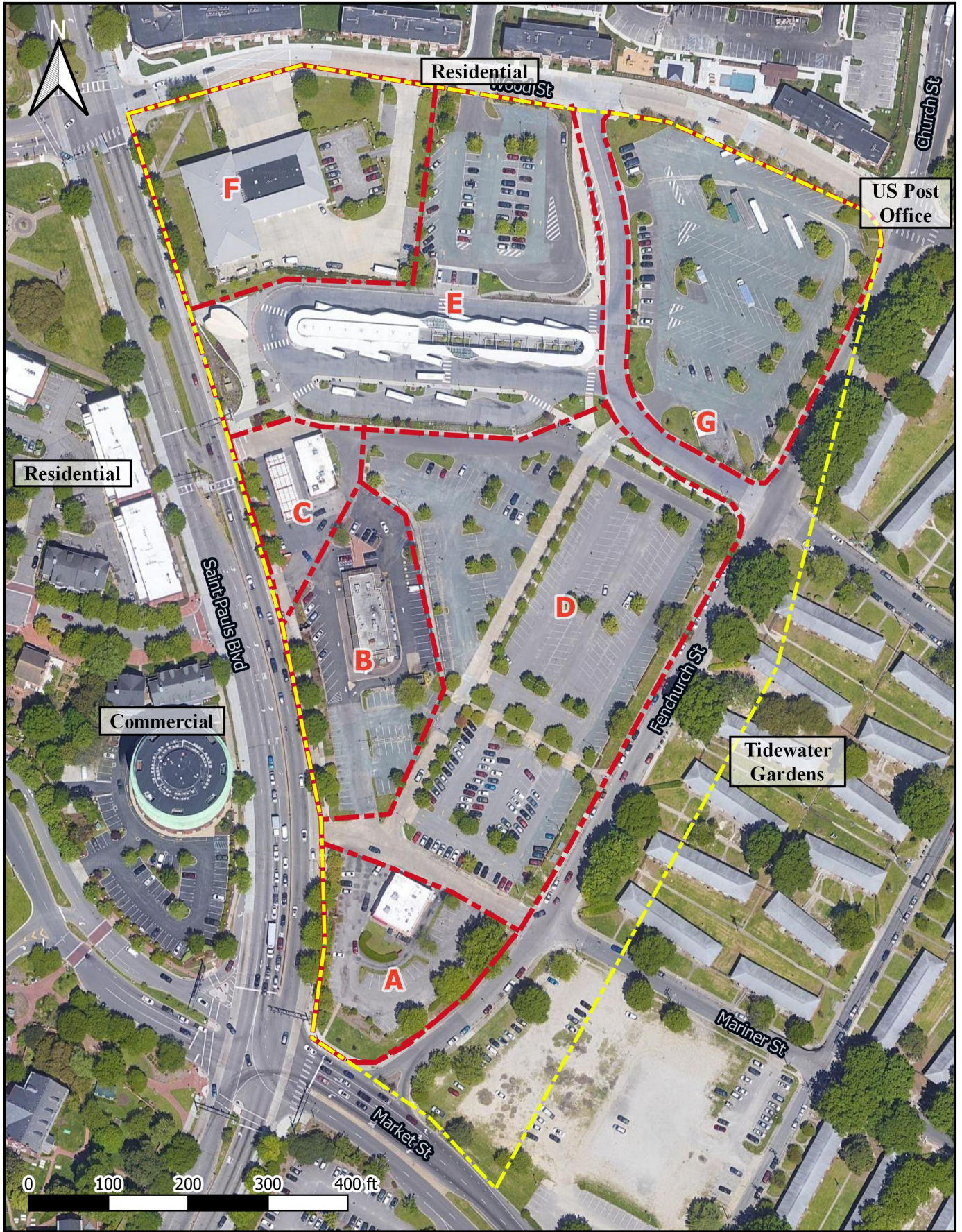
APPENDIX A - FIGURES



 Subject Site

Figure 1. Site Location Map
 St. Pauls Transit Site
 SCS File No. 02218113.09

Source: Google Satellite Imagery (2018)



 Subject Site

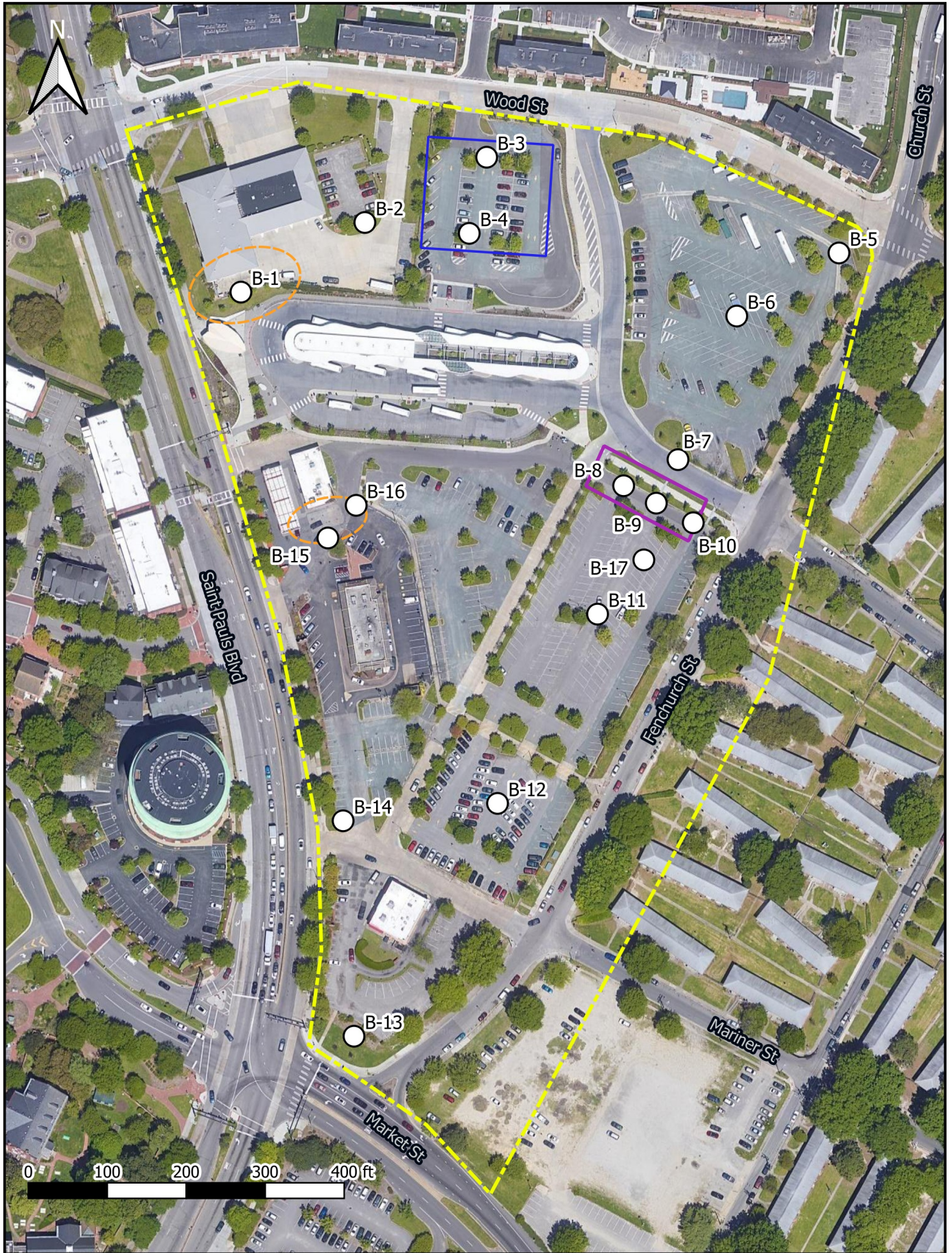
Section Boundaries

- | | |
|------------------------------|--|
| A. Popeye's | E. HRT Bus Terminal & Employee Parking |
| B. McDonalds | F. Norfolk Fire Station No. 1 |
| C. Shell Gas Station | G. Parking Lot for Buses |
| D. St. Pauls Parking Lot #42 | |

Source: Google Satellite Imagery (2018)

Figure 2. Site Features Map

St. Pauls Transit Site
SCS File No. 02218113.09



Subject Site

Former Auto Maintenance/Repair

Boring Location

Former Dry Cleaners

Current USTs

Figure 3. Soil Boring Location Map

St. Pauls Transit Site

SCS File No. 02218113.09

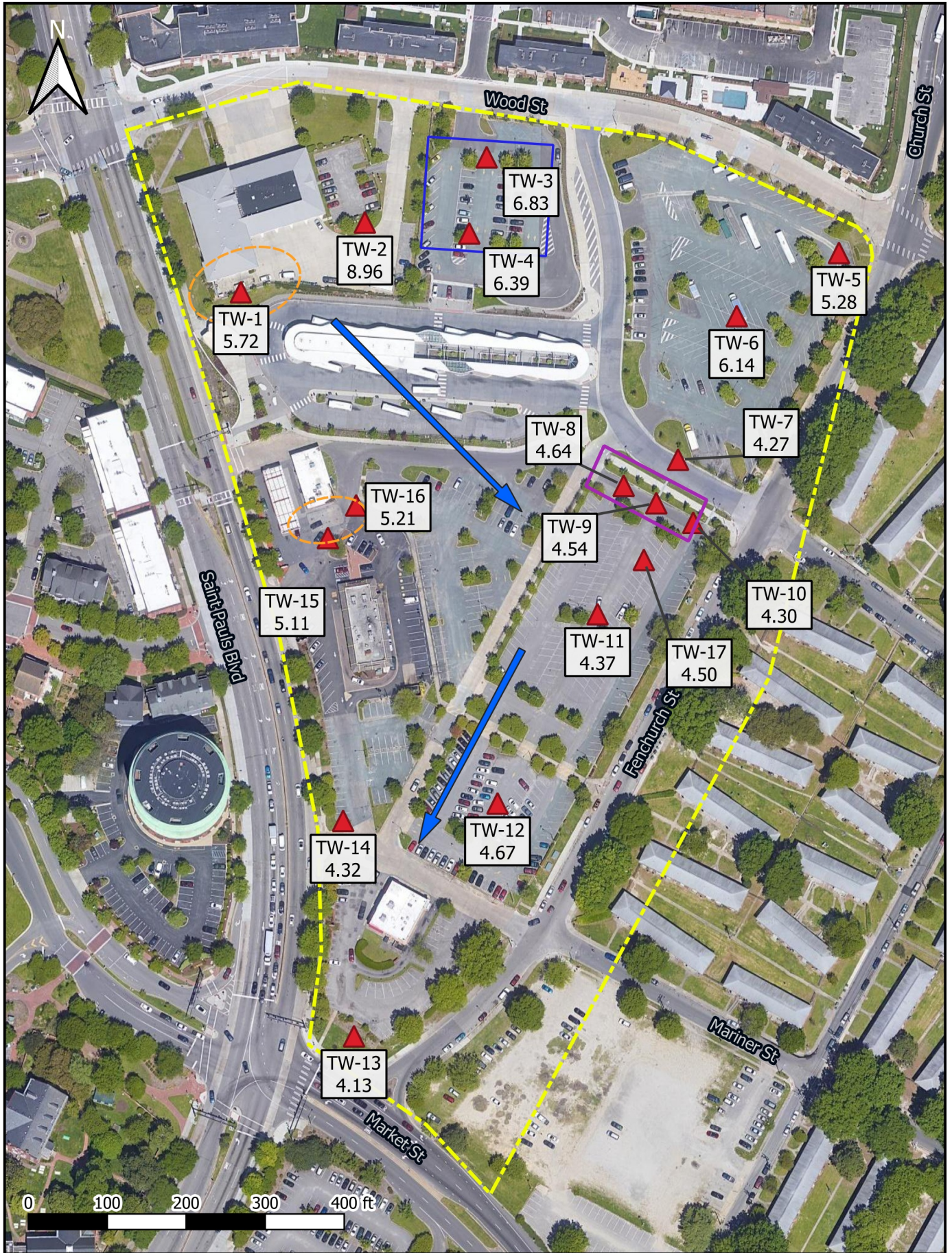


Figure 4. Temporary Groundwater Well Location Map

St. Pauls Transit Site
SCS File No. 02218113.09

- ▭ Subject Site
- ▲ Temporary Well Locations
- ➔ General Direction of Groundwater Flow
- 4.13 Relative Groundwater Elevation

Source: Google Satellite Imagery (2018)

APPENDIX B – SOIL BORING LOGS

Soil Boring: B-1		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sand, brown gray, medium grained, well sorted, trace clay, dry	Background PID = 0.1 ppm 0.1 ppm
1-2	Sandy clay with clay increasing with depth, tan with orange streaks, high plasticity, dry	0.1 ppm
2-3	As Above	
3-4	As Above	
4-5	As Above	
5-6	Sand, tan, medium grained, trace clay, dry	0.2 ppm
6-7	As Above	0.2 ppm
7-8	Clayey sand, brown/orange, well sorted, wet	Water Table at 7.2'
8-9	Sand, tan/orange with mottled orange, large grained, well sorted, trace clay, wet	
9-10	As Above	
10-11	As Above	
11-12	As Above	Bottom of boring at 11.5'
Notes: Collected samples B-1-1 (0-2') and B-1-2 (5-7')		

Soil Boring: B-2		
Project: St. Paul's Transit		Project No.: 02218113.09
Date: 1/22/2020		Location: Norfolk, VA
Driller: Fishburne		Elevation: N/A
DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	Sandy clay, brown, fill material, dry	Background PID = 0.0 ppm 0.2 ppm
1-2	Sandy clay, gray/brown, friable, dry	0.2 ppm
2-3	As Above	0.0 ppm
3-4	Clay, tan, high plasticity, little sand, dry	0.0 ppm
4-5	No Return	
5-6	Clay, gray/tan, trace sand increasing with depth, organics	Water Table at 5.9'
6-7	Sand, tan, medium to coarse grained, well sorted, trace clay, wet	
7-8	As Above	
8-9	Sand, brown, coarse grained, trace clay, wet	
9-10	As Above	
10-11	Sand, orange, coarse grained, trace clay, wet	
11-12	As Above	Bottom of boring at 12'
Notes: Collected samples B-2-1 (0-2') and B-2-2 (4-5')		

Soil Boring: B-3**Project:** St. Paul's Transit**Project No.:** 02218113.09**Date:** 1/21/2020**Location:** Norfolk, VA**Driller:** Fishburne**Elevation:** N/A

DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	Sand, dark gray and tan, medium grained, trace clay, dry	Background PID = 0.1 ppm 0.1 ppm
1-2	Clay, tan with mottled orange, high plasticity, some sand, dry	0.1 ppm
2-3	As Above	0.2 ppm
3-4	As Above	0.2 ppm
4-5	No Return	0.2 ppm
5-6	Clay, tan with mottled orange, high plasticity, some sand, dry	Water Table at 5.8'
6-7	Sand, gray with mottled orange, medium grained, well sorted, trace clay, wet	
7-8	As Above	
8-9	Sand, tan, coarse grained, trace clay, wet	
9-10	Sand, gray with mottled orange, coarse grained, well sorted, trace clay, wet	Bottom of boring at 10'
10-11		
11-12		

Notes: Collected samples B-3-1 (0-2') and B-3-2 (5-6')

Soil Boring: B-4		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sand, dark brown/tan, plant roots, trace clay, dry	Background PID = 0.0 ppm 0.0 ppm
1-2	As Above, 1" gravel lens at 1.8'	0.0 ppm
2-3	Sandy clay, gray/tan, high plasticity, dry	0.0 ppm
3-4	As Above	0.0 ppm
4-5	No Return	
5-6	Sand, brown/tan, medium to coarse grained, trace clay, dry	0.6 ppm
6-7	Sand, light brown/orange, coarse grained, well sorted, wet	Water Table at 6.8'
7-8	As Above	
8-9	No Return	
9-10	Sand, light brown, coarse grained, well sorted, trace clay, wet	
10-11	As Above	
11-12	Sand, orange, coarse grained, trace clay, wet	Bottom of boring at 11.5'
Notes: Collected samples B-4-1 (0-2') and B-4-2 (5-6')		

Soil Boring: B-5		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	Sand, dark gray, medium grained, organics (roots), trace clay, dry	Background PID = 0.3 ppm 21.6 ppm
1-2	As Above	21.6 ppm
2-3	Sandy clay, gray/tan, dry	21.6 ppm
3-4	Sand, tan, medium grained, well sorted, trace clay, dry	0.6 ppm
4-5	No Return	
5-6	Sand, tan/orange, medium grained, well sorted, trace clay, wet	Water Table at 5' 0.4 ppm
6-7	Sand, tan and orange, medium to coarse grained, trace heavy minerals, trace clay, wet	
7-8	As Above	
8-9	As Above	
9-10	As Above	
10-11	As Above	
11-12	Sand, orange, coarse grained, well sorted, trace clay, wet	Bottom of boring at 12'
Notes: Collected samples B-5-1 (0-3') and B-5-2 (3-4')		

Soil Boring: B-6		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	No Return	Background PID = 0.1 ppm
1-2	No Return	
2-3	Sand, dark brown, fine to medium grained, dry	0.5 ppm
3-4	Sandy clay, tan and orange, high plasticity, organics, trace shell, dry	0.2 ppm
4-5	No Return	
5-6	Clayey sand, gray/tan, medium grained, well sorted, wet	Water Table at 5'
6-7	Sand, tan and orange, coarse grained, trace clay increasing with depth, wet	
7-8	As Above	
8-9	As Above	
9-10	Sand, orange, medium to coarse grained, trace clay, trace heavy minerals, wet	Bottom of boring at 10'
10-11		
11-12		
Notes: Collected samples B-6-1 (0-3') and B-6-2 (3-5')		

Soil Boring: B-7		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sand, dark brown, organics, fine grained, dry	Background PID = 0.1 ppm 0.2 ppm
1-2	Sand, dark brown and gray, organics, fine grained, gravel lens (fill) with sand, dry	0.2ppm
2-3	Sand, gray and orange, medium grained, trace clay, dry	0.2 ppm
3-4	As Above	0.4 ppm
4-5	No Return (4-4.5') Sand, gray, medium grained, trace clay, wet	Water Table at 4'
5-6	Sand, tan and orange, medium grained, trace clay, wet	
6-7	As Above	
7-8	As Above	
8-9	Sand, gray, medium to coarse grained, coarser with depth, wet	
9-10	Sand, orange, coarse grained, trace clay, wet	
10-11	As Above	
11-12	As Above	Bottom of boring at 12'
Notes: Collected samples B-7-1 (0-2') and B-7-2 (3-4')		

Soil Boring: B-8		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sand, brown, gravel fill material, trace clay, dry	Background PID = 0.1 ppm 14.8 ppm
1-2	As Above	14.8 ppm
2-3	Sandy clay, gray and orange, high plasticity, sand increasing with depth, organics, dry	138 ppm
3-4	No Return	
4-5	No Return	
5-6	Sand, brown, medium grained, trace clay	Water Table at 5' 109.8 ppm
6-7	Sand, tan, medium to coarse grained, well sorted, wet	
7-8	Sand, orange, coarse grained, trace clay, trace heavy minerals, wet	
8-9	As Above	
9-10	As Above	
10-11	As Above	
11-12	As Above	Bottom of boring at 12'
Notes: Collected samples B-8-1 (2-3') and B-8-2 (5-6')		

Soil Boring: B-9		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sand, dark gray, fill material, organics, trace clay, dry	Background PID = 0.0 ppm 235 ppm
1-2	Clayey sand, tan/gray, medium grained, dry	128 ppm
2-3	As Above	128 ppm
3-4	No Return	
4-5	Clayey sand, tan/gray, medium grained, organics, dry	119 ppm
5-6	Sand, light gray going brown with depth, medium grained, wet	Water Table at 5.5'
6-7	As Above	
7-8	No Return	
8-9	Sand, tan, medium to coarse grained, trace clay, wet	
9-10	As Above	
10-11	As Above	
11-12	Sand, orange, coarse grained, trace clay, wet	Bottom of boring at 12'
Notes: Collected samples B-9-1 (0-3') and B-9-2 (4-5')		

Soil Boring: B-10		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/21/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	Clayey sand, dark brown/gray, medium grained, dry	Background PID = 0.0 ppm 0.1 ppm
1-2	As Above	0.1 ppm
2-3	As Above, abundant fill material 3-3.2'	0.1 ppm
3-4	Sand, brown, medium grained, trace organics, trace clay, dry	0.2 ppm
4-5	As Above	0.2 ppm
5-6	No Return 4.5-6.5	Water Table at 5' 10"
6-7	No Return 4.5-6.5	
7-8	Sand, brown and gray, medium grained, trace clay, trace heavy minerals, wet	
8-9	Sand, brown, medium to coarse grained, trace clay, wet	
9-10	As Above	
10-11	Sand, light orange, coarse grained, trace clay, wet	
11-12	As Above	Bottom of boring at 12'
Notes: Collected samples B-10-1 (0-3') and B-10-2 (4-4.5')		

Soil Boring: B-11		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/22/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	No Return	Background PID = 0.0 ppm 0.0 ppm
1-2	Sandy clay, dark brown, organics, dry	
2-3	Sandy clay, tan, iron staining, dry	
3-4	Sand, tan, medium grained, trace clay, dry	
4-5	No Return	
5-6	No Return	Water Table at 5' 4"
6-7	Sand, tan, medium to coarse grained, trace clay, trace organics, wet	
7-8	Sand, tan, medium to coarse grained, trace clay increasing with depth, wet	
8-9	Sand, brown/orange, coarse grained, trace clay, wet	
9-10	As Above	Bottom of boring at 10'
10-11		
11-12		
Notes: No PID detections. Collected samples B-11-1 (0-2') and B-11-2 (4-5')		

Soil Boring: B-12		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/22/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	Asphalt (0-0.3) Clayey sand, gray, fill material, coarse grained, dry (0.3-0.5)	Background PID = 0.0 ppm 0.0 ppm
1-2	Sandy clay, tan/orange, high plasticity, dry	
2-3	As Above	
3-4	Sand, light gray, medium grained, well sorted, dry	
4-5	No Return	
5-6	Sand, brown, medium grained, well sorted, trace clay, dry	
6-7	Sandy clay, tan, high plasticity, dry	Water Table at 6' 11"
7-8	Sand, light brown to brown, medium grained, coarser with depth, trace heavy minerals, wet towards bottom	
8-9	Sand, light brown/orange, coarse grained, well sorted, trace clay, wet	
9-10	As Above	
10-11	As Above	Bottom of boring at 11'
11-12		
Notes: No PID detections. Collected samples B-12-1 (0-2') and B-12-2 (5-6')		

Soil Boring: B-13		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/22/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sand, dark gray brown, fill material, medium grained, some clay, dry	Background PID = 0.0 ppm 0.0 ppm
1-2	As Above	
2-3	Sandy clay, tan, high plasticity, trace organics, dry	
3-4	Sand, tan, medium grained, trace clay, dry	
4-5	No Return	
5-6	Sand, tan, medium grained, organic lens at 5.5', trace clay, dry	
6-7	As Above	
7-8	As Above	Water Table at 7' 10"
8-9	No Return	
9-10	Sand, orange/brown, medium grained, trace clay, wet	
10-11	As Above	
11-12	Clayey sand, light brown orange, coarse grained, wet	Bottom of boring at 12'
Notes: No PID detections. Collected samples B-13-1 (0-2') and B-13-2 (5-7')		

Soil Boring: B-14		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/22/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Sandy clay, dark brown, medium grained, organics and fill material, dry	Background PID = 0.0 ppm 0.0 ppm
1-2	As Above	
2-3	Gravel, gray/tan, fill material, dry	
3-4	Clay, tan/brown, high plasticity, little sand, fill material at 3-3.2, dry	
4-5	No Return (4-4.5) Sandy clay, tan, high plasticity, dry	
5-6	Clayey sand, dark brown, high organics, fine to medium grained (5-5.5) Sandy clay, tan, dry (5.5-6)	
6-7	Sandy, light gray and tan, medium grained, well sorted, trace clay increasing with depth	
7-8	No Return	
8-9	Sand, light brown, medium to coarse grained, trace clay, trace heavy minerals, wet	Water Table at 8'
9-10	As Above	
10-11	Sand, banded tan and orange, coarse grained, light clay, wet	
11-12	As Above	Bottom of boring at 12'
Notes: No PID detections. Collected samples B-14-1 (0-2') and B-14-2 (6-8')		

Soil Boring: B-15		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/22/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Asphalt	Background PID = 0.0 ppm 415 ppm
1-2	Clayey sand, dark gray, medium grained, strong petroleum odor	415 ppm
2-3	As Above	5 ppm
3-4	Clayey sand, gray green, medium grained, strong petroleum odor	38 ppm
4-5	No Return	
5-6	As Above	60 ppm
6-7	Sand, dark gray, medium to coarse grained, trace clay, strong odor	220 ppm
7-8	As Above	Water Table at 7' 3,520 ppm
8-9	Sand, dark gray, coarse grained, trace clay, strong petroleum odor	
9-10	As Above	
10-11	Sand, gray, medium to coarse grained, trace clay	
11-12	As Above	Bottom of boring at 12'
Notes: Collected samples B-15-1 (0-2') and B-15-2 (6-7')		

Soil Boring: B-16		
Project: St. Paul's Transit	Project No.: 02218113.09	
Date: 1/22/2020	Location: Norfolk, VA	
Driller: Fishburne	Elevation: N/A	
DEPTHS	SOIL DESCRIPTION	NOTES
Depth (feet)		
0-1	Asphalt (0-0.3) No Return	Background PID = 0.0 ppm 0.1 ppm
1-2	Sandy clay, tan, high plasticity, dry	0.1 ppm
2-3	Same as Above	0.0 ppm
3-4	Sand, tan, medium grained, trace clay, dry	0.0 ppm
4-5	No Return	
5-6	Sand, tan with some orange, medium to coarse grained, trace clay	Water Table at 5' 4" 0.0 ppm
6-7	Sand, gray, medium to coarse grained, trace clay, wet	
7-8	Sand, orange/brown, medium to coarse grained, trace clay, wet	
8-9	Same as Above	
9-10	Sand, orange, medium to coarse grained, trace clay, wet	Bottom of boring at 10'
10-11		
11-12		
Notes: Collected samples B-16-1 (0-2') and B-16-2 (3-5')		

Soil Boring: B-17		
Project: St. Paul's Transit		Project No.: 02218113.09
Date: 3/9/2020		Location: Norfolk, VA
Driller: Fishburne		Elevation: N/A
DEPTHS		
Depth (feet)	SOIL DESCRIPTION	NOTES
0-1	Asphalt (0-0.25') Sand, coarse, gray (0.25-0.5') Sand, fine, tan (0.5-4')	
1-2	As Above	
2-3	As Above	
3-4	As Above	0.0 ppm (0-4')
4-5	Sand, fine, tan	
5-6	As Above	
6-7	As Above	
7-8	As Above	Water Table at 7.5' 0.0 ppm (4-8')
8-9	Sand, fine, tan	
9-10	As Above	
10-11	As Above	
11-12	As Above	Bottom of boring at 12'
Notes: No PID detections. Collected sample B-17 (4-8')		

APPENDIX C - LABORATORY REPORTS

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-182916-1
Client Project/Site: St Paul Phase II

For:
SCS Engineers
2877 Guardian Lane
Suite 1-F
Virginia Beach, Virginia 23452

Attn: Alexis Holcomb



Authorized for release by:
2/6/2020 10:38:18 AM

Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

LINKS

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

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

Case Narrative

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Job ID: 400-182916-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative 400-182916-1

Comments

No additional comments.

Receipt

The samples were received on 1/23/2020 9:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 3.1° C.

GC/MS VOA

Method 8260B: The matrix spike duplicate (MSD) recoveries for preparation batch 400-475647 and analytical batch 400-475624 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-476105 recovered outside acceptance criteria, low biased, for Pyrene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method 8015C: The following samples were diluted due to color and odor: B-6 (400-182916-3) and B-7 (400-182916-4). Elevated reporting limits (RL) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-1

Lab Sample ID: 400-182916-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	6.1		1.0		mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: B-5

Lab Sample ID: 400-182916-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	23		5.7		mg/Kg	1	☒	8015C	Total/NA
Lead	12		1.1		mg/Kg	1	☒	6010C	Total/NA
Mercury	0.041		0.018		mg/Kg	1	☒	7471B	Total/NA

Client Sample ID: B-6

Lab Sample ID: 400-182916-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oil Range Organics (C28-C35)	320		100		mg/Kg	20	☒	8015C	Total/NA
Lead	19		1.0		mg/Kg	1	☒	6010C	Total/NA
Mercury	0.047		0.015		mg/Kg	1	☒	7471B	Total/NA

Client Sample ID: B-7

Lab Sample ID: 400-182916-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Oil Range Organics (C28-C35)	32		11		mg/Kg	2	☒	8015C	Total/NA
Lead	10		1.0		mg/Kg	1	☒	6010C	Total/NA
Mercury	0.034		0.017		mg/Kg	1	☒	7471B	Total/NA

Client Sample ID: B-8

Lab Sample ID: 400-182916-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C10	0.13		0.11		mg/Kg	1	☒	8015C	Total/NA
Diesel Range Organics [C10-C28]	7.7		5.5		mg/Kg	1	☒	8015C	Total/NA
Oil Range Organics (C28-C35)	7.1		5.5		mg/Kg	1	☒	8015C	Total/NA
Lead	6.7		1.1		mg/Kg	1	☒	6010C	Total/NA
Mercury	0.038		0.017		mg/Kg	1	☒	7471B	Total/NA

Client Sample ID: B-9

Lab Sample ID: 400-182916-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.013		0.0052		mg/Kg	1	☒	8260B	Total/NA
Diesel Range Organics [C10-C28]	15		5.6		mg/Kg	1	☒	8015C	Total/NA
Oil Range Organics (C28-C35)	19		5.6		mg/Kg	1	☒	8015C	Total/NA
Lead	5.7		1.1		mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: B-10

Lab Sample ID: 400-182916-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0081		0.0050		mg/Kg	1	☒	8260B	Total/NA
Diesel Range Organics [C10-C28]	24		5.3		mg/Kg	1	☒	8015C	Total/NA
Oil Range Organics (C28-C35)	22		5.3		mg/Kg	1	☒	8015C	Total/NA
Lead	3.2		0.98		mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: B-11

Lab Sample ID: 400-182916-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	9.9		5.5		mg/Kg	1	☒	8015C	Total/NA
Oil Range Organics (C28-C35)	22		5.5		mg/Kg	1	☒	8015C	Total/NA
Lead	9.2		1.1		mg/Kg	1	☒	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Detection Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-11 (Continued)

Lab Sample ID: 400-182916-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.026		0.018		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: B-12

Lab Sample ID: 400-182916-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	7.9		5.4		mg/Kg	1	☼	8015C	Total/NA
Oil Range Organics (C28-C35)	18		5.4		mg/Kg	1	☼	8015C	Total/NA
Lead	4.1		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.062		0.015		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: B-13

Lab Sample ID: 400-182916-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.4		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.022		0.017		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: B-14

Lab Sample ID: 400-182916-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	50		6.0		mg/Kg	1	☼	8015C	Total/NA
Oil Range Organics (C28-C35)	77		6.0		mg/Kg	1	☼	8015C	Total/NA
Lead	290		1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.35		0.018		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: B-15

Lab Sample ID: 400-182916-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	0.091		0.030		mg/Kg	1	☼	8260B	Total/NA
Diesel Range Organics [C10-C28]	6.0		5.6		mg/Kg	1	☼	8015C	Total/NA
Lead	2.8		1.1		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: B-16

Lab Sample ID: 400-182916-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	26		5.2		mg/Kg	1	☼	8015C	Total/NA
Oil Range Organics (C28-C35)	50		5.2		mg/Kg	1	☼	8015C	Total/NA
Lead	8.3		0.95		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: B-2

Lab Sample ID: 400-182916-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Gasoline Range Organics (GRO) -C6-C10	0.48		0.12		mg/Kg	1	☼	8015C	Total/NA
Lead	93		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.26		0.018		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: B-3

Lab Sample ID: 400-182916-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	17		5.4		mg/Kg	1	☼	8015C	Total/NA
Oil Range Organics (C28-C35)	42		5.4		mg/Kg	1	☼	8015C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Detection Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-4

Lab Sample ID: 400-182916-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	18		5.4		mg/Kg	1	☼	8015C	Total/NA
Oil Range Organics (C28-C35)	40		5.4		mg/Kg	1	☼	8015C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

- 1
- 2
- 3
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- 10
- 11
- 12
- 13
- 14

Sample Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-182916-1	B-1	Solid	01/21/20 09:00	01/23/20 09:21	
400-182916-2	B-5	Solid	01/21/20 12:20	01/23/20 09:21	
400-182916-3	B-6	Solid	01/21/20 13:30	01/23/20 09:21	
400-182916-4	B-7	Solid	01/21/20 14:40	01/23/20 09:21	
400-182916-5	B-8	Solid	01/21/20 15:20	01/23/20 09:21	
400-182916-6	B-9	Solid	01/21/20 15:30	01/23/20 09:21	
400-182916-7	B-10	Solid	01/21/20 14:43	01/23/20 09:21	
400-182916-8	B-11	Solid	01/22/20 11:45	01/23/20 09:21	
400-182916-9	B-12	Solid	01/22/20 11:00	01/23/20 09:21	
400-182916-10	B-13	Solid	01/22/20 09:05	01/23/20 09:21	
400-182916-11	B-14	Solid	01/22/20 10:00	01/23/20 09:21	
400-182916-12	B-15	Solid	01/22/20 13:30	01/23/20 09:21	
400-182916-13	B-16	Solid	01/22/20 12:30	01/23/20 09:21	
400-182916-14	B-2	Solid	01/22/20 15:20	01/23/20 09:21	
400-182916-15	B-3	Solid	01/21/20 10:00	01/23/20 09:21	
400-182916-16	B-4	Solid	01/21/20 11:00	01/23/20 09:21	

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-1

Lab Sample ID: 400-182916-1

Date Collected: 01/21/20 09:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,1,2-Trichloroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,1-Dichloroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,1-Dichloroethene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,2,3-Trichlorobenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,2,4-Trichlorobenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,2-Dibromo-3-Chloropropane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,2-Dichlorobenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,2-Dichloroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,2-Dichloropropane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,3-Dichlorobenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
1,4-Dichlorobenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
2-Hexanone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Acetone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Benzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Bromodichloromethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Bromoform	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Bromomethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Carbon disulfide	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Carbon tetrachloride	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Chlorobenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Chlorobromomethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Chloroethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Chloroform	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Chloromethane	<0.0051	F1	0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
cis-1,2-Dichloroethene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
cis-1,3-Dichloropropene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Dibromochloromethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Dichlorodifluoromethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Ethylbenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Ethylene Dibromide	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Isopropylbenzene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Methyl acetate	<0.0051	F1	0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Methyl Ethyl Ketone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
methyl isobutyl ketone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Methyl tert-butyl ether	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Methylene Chloride	<0.015		0.015		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Styrene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Tetrachloroethene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Toluene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
trans-1,2-Dichloroethene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
trans-1,3-Dichloropropene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Trichloroethene	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Trichlorofluoromethane	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Vinyl chloride	<0.0051		0.0051		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1
Xylenes, Total	<0.010		0.010		mg/Kg	☼	01/28/20 06:49	01/28/20 09:13	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-1

Lab Sample ID: 400-182916-1

Date Collected: 01/21/20 09:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		67 - 130	01/28/20 06:49	01/28/20 09:13	1
Dibromofluoromethane	91		77 - 127	01/28/20 06:49	01/28/20 09:13	1
Toluene-d8 (Surr)	93		76 - 127	01/28/20 06:49	01/28/20 09:13	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.10		0.10		mg/Kg	☼	01/29/20 11:16	01/29/20 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 12:49	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<5.6		5.6		mg/Kg	☼	02/03/20 10:40	02/05/20 20:49	1
Oil Range Organics (C28-C35)	<5.6		5.6		mg/Kg	☼	02/03/20 10:40	02/05/20 20:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		27 - 151	02/03/20 10:40	02/05/20 20:49	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.1		1.0		mg/Kg	☼	01/28/20 13:59	01/30/20 12:45	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017		mg/Kg	☼	01/30/20 08:30	01/30/20 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.3		0.01		%			01/25/20 12:21	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-5

Lab Sample ID: 400-182916-2

Date Collected: 01/21/20 12:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,1,2,2-Tetrachloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,1,2-Trichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,1-Dichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,1-Dichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,2,3-Trichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,2,4-Trichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,2-Dibromo-3-Chloropropane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,2-Dichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,2-Dichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,2-Dichloropropane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,3-Dichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
1,4-Dichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
2-Hexanone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Acetone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Benzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Bromodichloromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Bromoform	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Bromomethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Carbon disulfide	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Carbon tetrachloride	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Chlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Chlorobromomethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Chloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Chloroform	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Chloromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
cis-1,2-Dichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
cis-1,3-Dichloropropene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Dibromochloromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Dichlorodifluoromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Ethylbenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Ethylene Dibromide	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Isopropylbenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Methyl acetate	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Methyl Ethyl Ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
methyl isobutyl ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Methyl tert-butyl ether	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Methylene Chloride	<0.016		0.016		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Styrene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Tetrachloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Toluene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
trans-1,2-Dichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
trans-1,3-Dichloropropene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Trichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Trichlorofluoromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Vinyl chloride	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 11:03	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-5

Lab Sample ID: 400-182916-2

Date Collected: 01/21/20 12:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 87.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130	01/28/20 06:49	01/28/20 11:03	1
Dibromofluoromethane	92		77 - 127	01/28/20 06:49	01/28/20 11:03	1
Toluene-d8 (Surr)	91		76 - 127	01/28/20 06:49	01/28/20 11:03	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125	01/29/20 11:16	01/29/20 14:23	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	23		5.7		mg/Kg	☼	02/03/20 10:40	02/05/20 21:01	1
Oil Range Organics (C28-C35)	<5.7		5.7		mg/Kg	☼	02/03/20 10:40	02/05/20 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	76		27 - 151	02/03/20 10:40	02/05/20 21:01	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	12		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 12:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.018		mg/Kg	☼	01/30/20 08:30	01/30/20 12:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.8		0.01		%			01/25/20 12:21	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-6

Lab Sample ID: 400-182916-3

Date Collected: 01/21/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 94.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,1,2,2-Tetrachloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,1,2-Trichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,1-Dichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,1-Dichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,2,3-Trichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,2,4-Trichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,2-Dibromo-3-Chloropropane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,2-Dichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,2-Dichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,2-Dichloropropane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,3-Dichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
1,4-Dichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
2-Hexanone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Acetone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Benzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Bromodichloromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Bromoform	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Bromomethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Carbon disulfide	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Carbon tetrachloride	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Chlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Chlorobromomethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Chloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Chloroform	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Chloromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
cis-1,2-Dichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
cis-1,3-Dichloropropene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Dibromochloromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Dichlorodifluoromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Ethylbenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Ethylene Dibromide	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Isopropylbenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Methyl acetate	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Methyl Ethyl Ketone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
methyl isobutyl ketone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Methyl tert-butyl ether	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Methylene Chloride	<0.017		0.017		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Styrene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Tetrachloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Toluene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
trans-1,2-Dichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
trans-1,3-Dichloropropene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Trichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Trichlorofluoromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Vinyl chloride	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 11:25	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-6

Lab Sample ID: 400-182916-3

Date Collected: 01/21/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 94.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130	01/28/20 06:49	01/28/20 11:25	1
Dibromofluoromethane	95		77 - 127	01/28/20 06:49	01/28/20 11:25	1
Toluene-d8 (Surr)	96		76 - 127	01/28/20 06:49	01/28/20 11:25	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.098		0.098		mg/Kg	☼	01/29/20 11:16	01/29/20 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	108		65 - 125	01/29/20 11:16	01/29/20 14:55	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<100		100		mg/Kg	☼	02/03/20 10:40	02/05/20 21:13	20
Oil Range Organics (C28-C35)	320		100		mg/Kg	☼	02/03/20 10:40	02/05/20 21:13	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	64		27 - 151	02/03/20 10:40	02/05/20 21:13	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19		1.0		mg/Kg	☼	01/28/20 13:59	01/30/20 12:56	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.015		mg/Kg	☼	01/30/20 08:30	01/30/20 12:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.2		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-7

Lab Sample ID: 400-182916-4

Date Collected: 01/21/20 14:40

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 91.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,1,2,2-Tetrachloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,1,2-Trichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,1-Dichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,1-Dichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,2,3-Trichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,2,4-Trichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,2-Dibromo-3-Chloropropane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,2-Dichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,2-Dichloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,2-Dichloropropane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,3-Dichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
1,4-Dichlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
2-Hexanone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Acetone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Benzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Bromodichloromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Bromoform	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Bromomethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Carbon disulfide	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Carbon tetrachloride	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Chlorobenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Chlorobromomethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Chloroethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Chloroform	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Chloromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
cis-1,2-Dichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
cis-1,3-Dichloropropene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Dibromochloromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Dichlorodifluoromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Ethylbenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Ethylene Dibromide	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Isopropylbenzene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Methyl acetate	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Methyl Ethyl Ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
methyl isobutyl ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Methyl tert-butyl ether	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Methylene Chloride	<0.016		0.016		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Styrene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Tetrachloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Toluene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
trans-1,2-Dichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
trans-1,3-Dichloropropene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Trichloroethene	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Trichlorofluoromethane	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Vinyl chloride	<0.0053		0.0053		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 11:47	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-7

Lab Sample ID: 400-182916-4

Date Collected: 01/21/20 14:40

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 91.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130	01/28/20 06:49	01/28/20 11:47	1
Dibromofluoromethane	96		77 - 127	01/28/20 06:49	01/28/20 11:47	1
Toluene-d8 (Surr)	96		76 - 127	01/28/20 06:49	01/28/20 11:47	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 15:26	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<11		11		mg/Kg	☼	02/03/20 10:40	02/05/20 21:25	2
Oil Range Organics (C28-C35)	32		11		mg/Kg	☼	02/03/20 10:40	02/05/20 21:25	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	65		27 - 151	02/03/20 10:40	02/05/20 21:25	2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10		1.0		mg/Kg	☼	01/28/20 13:59	01/30/20 13:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.017		mg/Kg	☼	01/30/20 08:30	01/30/20 12:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	8.6		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-8

Lab Sample ID: 400-182916-5

Date Collected: 01/21/20 15:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,1,2,2-Tetrachloroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,1,2-Trichloroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,1-Dichloroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,1-Dichloroethene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,2,3-Trichlorobenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,2,4-Trichlorobenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,2-Dibromo-3-Chloropropane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,2-Dichlorobenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,2-Dichloroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,2-Dichloropropane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,3-Dichlorobenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
1,4-Dichlorobenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
2-Hexanone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Acetone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Benzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Bromodichloromethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Bromoform	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Bromomethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Carbon disulfide	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Carbon tetrachloride	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Chlorobenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Chlorobromomethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Chloroethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Chloroform	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Chloromethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
cis-1,2-Dichloroethene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
cis-1,3-Dichloropropene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Dibromochloromethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Dichlorodifluoromethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Ethylbenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Ethylene Dibromide	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Isopropylbenzene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Methyl acetate	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Methyl Ethyl Ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
methyl isobutyl ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Methyl tert-butyl ether	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Methylene Chloride	<0.016		0.016		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Styrene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Tetrachloroethene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Toluene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
trans-1,2-Dichloroethene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
trans-1,3-Dichloropropene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Trichloroethene	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Trichlorofluoromethane	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Vinyl chloride	<0.0055		0.0055		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 12:09	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-8

Lab Sample ID: 400-182916-5

Date Collected: 01/21/20 15:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130	01/28/20 06:49	01/28/20 12:09	1
Dibromofluoromethane	95		77 - 127	01/28/20 06:49	01/28/20 12:09	1
Toluene-d8 (Surr)	95		76 - 127	01/28/20 06:49	01/28/20 12:09	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.13		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 15:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 15:57	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.7		5.5		mg/Kg	☼	02/03/20 10:40	02/05/20 21:36	1
Oil Range Organics (C28-C35)	7.1		5.5		mg/Kg	☼	02/03/20 10:40	02/05/20 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		27 - 151	02/03/20 10:40	02/05/20 21:36	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6.7		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 13:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.017		mg/Kg	☼	01/30/20 08:30	01/30/20 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.3		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-9

Lab Sample ID: 400-182916-6

Date Collected: 01/21/20 15:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,1,2-Trichloroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,1-Dichloroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,1-Dichloroethene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,2,3-Trichlorobenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,2,4-Trichlorobenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,2-Dibromo-3-Chloropropane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,2-Dichlorobenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,2-Dichloroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,2-Dichloropropane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,3-Dichlorobenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
1,4-Dichlorobenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
2-Hexanone	<0.026		0.026		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Acetone	<0.026		0.026		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Benzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Bromodichloromethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Bromoform	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Bromomethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Carbon disulfide	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Carbon tetrachloride	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Chlorobenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Chlorobromomethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Chloroethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Chloroform	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Chloromethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
cis-1,2-Dichloroethene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
cis-1,3-Dichloropropene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Dibromochloromethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Dichlorodifluoromethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Ethylbenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Ethylene Dibromide	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Isopropylbenzene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Methyl acetate	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Methyl Ethyl Ketone	<0.026		0.026		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
methyl isobutyl ketone	<0.026		0.026		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Methyl tert-butyl ether	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Methylene Chloride	<0.016		0.016		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Styrene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Tetrachloroethene	0.013		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Toluene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
trans-1,2-Dichloroethene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
trans-1,3-Dichloropropene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Trichloroethene	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Trichlorofluoromethane	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Vinyl chloride	<0.0052		0.0052		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1
Xylenes, Total	<0.010		0.010		mg/Kg	☼	01/28/20 06:49	01/28/20 12:31	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-9

Lab Sample ID: 400-182916-6

Date Collected: 01/21/20 15:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130	01/28/20 06:49	01/28/20 12:31	1
Dibromofluoromethane	92		77 - 127	01/28/20 06:49	01/28/20 12:31	1
Toluene-d8 (Surr)	98		76 - 127	01/28/20 06:49	01/28/20 12:31	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 16:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	94		65 - 125	01/29/20 11:16	01/29/20 16:29	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	15		5.6		mg/Kg	☼	02/03/20 10:40	02/05/20 21:48	1
Oil Range Organics (C28-C35)	19		5.6		mg/Kg	☼	02/03/20 10:40	02/05/20 21:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	71		27 - 151	02/03/20 10:40	02/05/20 21:48	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.7		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 13:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017		mg/Kg	☼	01/30/20 08:30	01/30/20 12:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.7		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-10

Lab Sample ID: 400-182916-7

Date Collected: 01/21/20 14:43

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 94.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,1,2-Trichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,1-Dichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,1-Dichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,2,3-Trichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,2,4-Trichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,2-Dichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,2-Dichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,2-Dichloropropane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,3-Dichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
1,4-Dichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
2-Hexanone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Acetone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Benzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Bromodichloromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Bromoform	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Bromomethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Carbon disulfide	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Carbon tetrachloride	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Chlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Chlorobromomethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Chloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Chloroform	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Chloromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
cis-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
cis-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Dibromochloromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Dichlorodifluoromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Ethylbenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Ethylene Dibromide	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Isopropylbenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Methyl acetate	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Methyl Ethyl Ketone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
methyl isobutyl ketone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Methyl tert-butyl ether	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Methylene Chloride	<0.015		0.015		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Styrene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Tetrachloroethene	0.0081		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Toluene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
trans-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
trans-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Trichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Trichlorofluoromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Vinyl chloride	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1
Xylenes, Total	<0.010		0.010		mg/Kg	☼	01/28/20 06:49	01/28/20 12:53	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-10

Lab Sample ID: 400-182916-7

Date Collected: 01/21/20 14:43

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 94.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	109		67 - 130	01/28/20 06:49	01/28/20 12:53	1
Dibromofluoromethane	94		77 - 127	01/28/20 06:49	01/28/20 12:53	1
Toluene-d8 (Surr)	95		76 - 127	01/28/20 06:49	01/28/20 12:53	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	97		65 - 125	01/29/20 11:16	01/29/20 17:31	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	24		5.3		mg/Kg	☼	02/03/20 10:40	02/05/20 22:12	1
Oil Range Organics (C28-C35)	22		5.3		mg/Kg	☼	02/03/20 10:40	02/05/20 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		27 - 151	02/03/20 10:40	02/05/20 22:12	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3.2		0.98		mg/Kg	☼	01/28/20 13:59	01/30/20 13:32	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016		mg/Kg	☼	01/30/20 08:30	01/30/20 12:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	5.3		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-11

Lab Sample ID: 400-182916-8

Date Collected: 01/22/20 11:45

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 88.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,1,2,2-Tetrachloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,1,2-Trichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,1-Dichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,1-Dichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,2,3-Trichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,2,4-Trichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,2-Dibromo-3-Chloropropane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,2-Dichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,2-Dichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,2-Dichloropropane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,3-Dichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
1,4-Dichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
2-Hexanone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Acetone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Benzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Bromodichloromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Bromoform	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Bromomethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Carbon disulfide	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Carbon tetrachloride	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Chlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Chlorobromomethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Chloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Chloroform	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Chloromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
cis-1,2-Dichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
cis-1,3-Dichloropropene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Dibromochloromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Dichlorodifluoromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Ethylbenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Ethylene Dibromide	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Isopropylbenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Methyl acetate	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Methyl Ethyl Ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
methyl isobutyl ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Methyl tert-butyl ether	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Methylene Chloride	<0.018		0.018		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Styrene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Tetrachloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Toluene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
trans-1,2-Dichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
trans-1,3-Dichloropropene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Trichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Trichlorofluoromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Vinyl chloride	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1
Xylenes, Total	<0.012		0.012		mg/Kg	☼	01/28/20 06:49	01/28/20 13:15	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-11

Lab Sample ID: 400-182916-8

Date Collected: 01/22/20 11:45

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 88.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	98		67 - 130	01/28/20 06:49	01/28/20 13:15	1
Dibromofluoromethane	89		77 - 127	01/28/20 06:49	01/28/20 13:15	1
Toluene-d8 (Surr)	96		76 - 127	01/28/20 06:49	01/28/20 13:15	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 18:03	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	9.9		5.5		mg/Kg	☼	02/03/20 10:40	02/05/20 22:24	1
Oil Range Organics (C28-C35)	22		5.5		mg/Kg	☼	02/03/20 10:40	02/05/20 22:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	71		27 - 151	02/03/20 10:40	02/05/20 22:24	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.2		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 13:53	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.018		mg/Kg	☼	01/30/20 08:30	01/30/20 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	11.3		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-12

Lab Sample ID: 400-182916-9

Date Collected: 01/22/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,1,2,2-Tetrachloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,1,2-Trichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,1-Dichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,1-Dichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,2,3-Trichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,2,4-Trichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,2-Dibromo-3-Chloropropane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,2-Dichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,2-Dichloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,2-Dichloropropane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,3-Dichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
1,4-Dichlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
2-Hexanone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Acetone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Benzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Bromodichloromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Bromoform	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Bromomethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Carbon disulfide	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Carbon tetrachloride	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Chlorobenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Chlorobromomethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Chloroethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Chloroform	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Chloromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
cis-1,2-Dichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
cis-1,3-Dichloropropene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Dibromochloromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Dichlorodifluoromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Ethylbenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Ethylene Dibromide	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Isopropylbenzene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Methyl acetate	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Methyl Ethyl Ketone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
methyl isobutyl ketone	<0.028		0.028		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Methyl tert-butyl ether	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Methylene Chloride	<0.017		0.017		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Styrene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Tetrachloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Toluene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
trans-1,2-Dichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
trans-1,3-Dichloropropene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Trichloroethene	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Trichlorofluoromethane	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Vinyl chloride	<0.0056		0.0056		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 13:37	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-12

Lab Sample ID: 400-182916-9

Date Collected: 01/22/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		67 - 130	01/28/20 06:49	01/28/20 13:37	1
Dibromofluoromethane	90		77 - 127	01/28/20 06:49	01/28/20 13:37	1
Toluene-d8 (Surr)	89		76 - 127	01/28/20 06:49	01/28/20 13:37	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 18:34	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.9		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 22:35	1
Oil Range Organics (C28-C35)	18		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 22:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	72		27 - 151	02/03/20 10:40	02/05/20 22:35	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.1		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 13:58	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062		0.015		mg/Kg	☼	01/30/20 08:30	01/30/20 12:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.9		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-13

Lab Sample ID: 400-182916-10

Date Collected: 01/22/20 09:05

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,1,2,2-Tetrachloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,1,2-Trichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,1-Dichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,1-Dichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,2,3-Trichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,2,4-Trichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,2-Dibromo-3-Chloropropane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,2-Dichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,2-Dichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,2-Dichloropropane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,3-Dichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
1,4-Dichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
2-Hexanone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Acetone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Benzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Bromodichloromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Bromoform	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Bromomethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Carbon disulfide	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Carbon tetrachloride	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Chlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Chlorobromomethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Chloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Chloroform	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Chloromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
cis-1,2-Dichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
cis-1,3-Dichloropropene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Dibromochloromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Dichlorodifluoromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Ethylbenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Ethylene Dibromide	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Isopropylbenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Methyl acetate	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Methyl Ethyl Ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
methyl isobutyl ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Methyl tert-butyl ether	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Methylene Chloride	<0.018		0.018		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Styrene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Tetrachloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Toluene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
trans-1,2-Dichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
trans-1,3-Dichloropropene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Trichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Trichlorofluoromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Vinyl chloride	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1
Xylenes, Total	<0.012		0.012		mg/Kg	☼	01/28/20 06:49	01/28/20 13:59	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-13

Lab Sample ID: 400-182916-10

Date Collected: 01/22/20 09:05

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		67 - 130	01/28/20 06:49	01/28/20 13:59	1
Dibromofluoromethane	92		77 - 127	01/28/20 06:49	01/28/20 13:59	1
Toluene-d8 (Surr)	95		76 - 127	01/28/20 06:49	01/28/20 13:59	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125	01/29/20 11:16	01/29/20 19:05	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<5.4		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 22:47	1
Oil Range Organics (C28-C35)	<5.4		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 22:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		27 - 151	02/03/20 10:40	02/05/20 22:47	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.4		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 14:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.017		mg/Kg	☼	01/30/20 08:30	01/30/20 12:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.4		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-14

Lab Sample ID: 400-182916-11

Date Collected: 01/22/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,1,2,2-Tetrachloroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,1,2-Trichloroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,1-Dichloroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,1-Dichloroethene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,2,3-Trichlorobenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,2,4-Trichlorobenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,2-Dibromo-3-Chloropropane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,2-Dichlorobenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,2-Dichloroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,2-Dichloropropane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,3-Dichlorobenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
1,4-Dichlorobenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
2-Hexanone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Acetone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Benzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Bromodichloromethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Bromoform	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Bromomethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Carbon disulfide	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Carbon tetrachloride	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Chlorobenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Chlorobromomethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Chloroethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Chloroform	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Chloromethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
cis-1,2-Dichloroethene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
cis-1,3-Dichloropropene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Dibromochloromethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Dichlorodifluoromethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Ethylbenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Ethylene Dibromide	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Isopropylbenzene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Methyl acetate	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Methyl Ethyl Ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
methyl isobutyl ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Methyl tert-butyl ether	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Methylene Chloride	<0.018		0.018		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Styrene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Tetrachloroethene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Toluene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
trans-1,2-Dichloroethene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
trans-1,3-Dichloropropene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Trichloroethene	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Trichlorofluoromethane	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Vinyl chloride	<0.0059		0.0059		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1
Xylenes, Total	<0.012		0.012		mg/Kg	☼	01/28/20 06:49	01/28/20 14:21	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-14

Lab Sample ID: 400-182916-11

Date Collected: 01/22/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 82.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		67 - 130	01/28/20 06:49	01/28/20 14:21	1
Dibromofluoromethane	89		77 - 127	01/28/20 06:49	01/28/20 14:21	1
Toluene-d8 (Surr)	93		76 - 127	01/28/20 06:49	01/28/20 14:21	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.12		0.12		mg/Kg	☼	01/29/20 11:16	01/29/20 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125	01/29/20 11:16	01/29/20 19:37	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	50		6.0		mg/Kg	☼	02/03/20 10:40	02/05/20 22:59	1
Oil Range Organics (C28-C35)	77		6.0		mg/Kg	☼	02/03/20 10:40	02/05/20 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	83		27 - 151	02/03/20 10:40	02/05/20 22:59	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	290		1.2		mg/Kg	☼	01/28/20 13:59	01/30/20 14:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.35		0.018		mg/Kg	☼	01/30/20 08:30	01/30/20 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17.2		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-15

Lab Sample ID: 400-182916-12

Date Collected: 01/22/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,1,2,2-Tetrachloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,1,2-Trichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,1-Dichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,1-Dichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,2,3-Trichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,2,4-Trichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,2-Dibromo-3-Chloropropane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,2-Dichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,2-Dichloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,2-Dichloropropane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,3-Dichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
1,4-Dichlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
2-Hexanone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Acetone	0.091		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Benzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Bromodichloromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Bromoform	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Bromomethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Carbon disulfide	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Carbon tetrachloride	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Chlorobenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Chlorobromomethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Chloroethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Chloroform	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Chloromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
cis-1,2-Dichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
cis-1,3-Dichloropropene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Dibromochloromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Dichlorodifluoromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Ethylbenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Ethylene Dibromide	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Isopropylbenzene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Methyl acetate	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Methyl Ethyl Ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
methyl isobutyl ketone	<0.030		0.030		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Methyl tert-butyl ether	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Methylene Chloride	<0.018		0.018		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Styrene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Tetrachloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Toluene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
trans-1,2-Dichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
trans-1,3-Dichloropropene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Trichloroethene	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Trichlorofluoromethane	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Vinyl chloride	<0.0060		0.0060		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1
Xylenes, Total	<0.012		0.012		mg/Kg	☼	01/28/20 06:49	01/28/20 14:43	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-15

Lab Sample ID: 400-182916-12

Date Collected: 01/22/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 87.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130	01/28/20 06:49	01/28/20 14:43	1
Dibromofluoromethane	93		77 - 127	01/28/20 06:49	01/28/20 14:43	1
Toluene-d8 (Surr)	93		76 - 127	01/28/20 06:49	01/28/20 14:43	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 20:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125	01/29/20 11:16	01/29/20 20:08	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	6.0		5.6		mg/Kg	☼	02/03/20 10:40	02/05/20 23:11	1
Oil Range Organics (C28-C35)	<5.6		5.6		mg/Kg	☼	02/03/20 10:40	02/05/20 23:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		27 - 151	02/03/20 10:40	02/05/20 23:11	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.8		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 14:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017		mg/Kg	☼	01/30/20 08:30	01/30/20 12:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12.2		0.01		%			01/25/20 13:12	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-16

Lab Sample ID: 400-182916-13

Date Collected: 01/22/20 12:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 95.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,1,2-Trichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,1-Dichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,1-Dichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,2,3-Trichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,2,4-Trichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,2-Dichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,2-Dichloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,2-Dichloropropane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,3-Dichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
1,4-Dichlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
2-Hexanone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Acetone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Benzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Bromodichloromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Bromoform	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Bromomethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Carbon disulfide	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Carbon tetrachloride	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Chlorobenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Chlorobromomethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Chloroethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Chloroform	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Chloromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
cis-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
cis-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Dibromochloromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Dichlorodifluoromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Ethylbenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Ethylene Dibromide	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Isopropylbenzene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Methyl acetate	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Methyl Ethyl Ketone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
methyl isobutyl ketone	<0.025		0.025		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Methyl tert-butyl ether	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Methylene Chloride	<0.015		0.015		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Styrene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Tetrachloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Toluene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
trans-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
trans-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Trichloroethene	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Trichlorofluoromethane	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Vinyl chloride	<0.0050		0.0050		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1
Xylenes, Total	<0.010		0.010		mg/Kg	☼	01/28/20 06:49	01/28/20 15:05	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-16

Lab Sample ID: 400-182916-13

Date Collected: 01/22/20 12:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 95.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130	01/28/20 06:49	01/28/20 15:05	1
Dibromofluoromethane	90		77 - 127	01/28/20 06:49	01/28/20 15:05	1
Toluene-d8 (Surr)	95		76 - 127	01/28/20 06:49	01/28/20 15:05	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.10		0.10		mg/Kg	☼	01/29/20 11:16	01/29/20 20:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	100		65 - 125	01/29/20 11:16	01/29/20 20:39	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	26		5.2		mg/Kg	☼	02/03/20 10:40	02/05/20 23:22	1
Oil Range Organics (C28-C35)	50		5.2		mg/Kg	☼	02/03/20 10:40	02/05/20 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		27 - 151	02/03/20 10:40	02/05/20 23:22	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8.3		0.95		mg/Kg	☼	01/28/20 13:59	01/30/20 14:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.016		0.016		mg/Kg	☼	01/30/20 08:30	01/30/20 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	4.6		0.01		%			01/27/20 10:30	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-2

Lab Sample ID: 400-182916-14

Date Collected: 01/22/20 15:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,1,2,2-Tetrachloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,1,2-Trichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,1-Dichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,1-Dichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,2,3-Trichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,2,4-Trichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,2-Dibromo-3-Chloropropane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,2-Dichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,2-Dichloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,2-Dichloropropane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,3-Dichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
1,4-Dichlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
2-Hexanone	<0.031		0.031		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Acetone	<0.031		0.031		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Benzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Bromodichloromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Bromoform	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Bromomethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Carbon disulfide	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Carbon tetrachloride	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Chlorobenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Chlorobromomethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Chloroethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Chloroform	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Chloromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
cis-1,2-Dichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
cis-1,3-Dichloropropene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Dibromochloromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Dichlorodifluoromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Ethylbenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Ethylene Dibromide	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Isopropylbenzene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Methyl acetate	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Methyl Ethyl Ketone	<0.031		0.031		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
methyl isobutyl ketone	<0.031		0.031		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Methyl tert-butyl ether	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Methylene Chloride	<0.018		0.018		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Styrene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Tetrachloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Toluene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
trans-1,2-Dichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
trans-1,3-Dichloropropene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Trichloroethene	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Trichlorofluoromethane	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Vinyl chloride	<0.0061		0.0061		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1
Xylenes, Total	<0.012		0.012		mg/Kg	☼	01/28/20 06:49	01/28/20 15:27	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-2

Lab Sample ID: 400-182916-14

Date Collected: 01/22/20 15:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 83.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		67 - 130	01/28/20 06:49	01/28/20 15:27	1
Dibromofluoromethane	93		77 - 127	01/28/20 06:49	01/28/20 15:27	1
Toluene-d8 (Surr)	92		76 - 127	01/28/20 06:49	01/28/20 15:27	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	0.48		0.12		mg/Kg	☼	01/29/20 11:16	01/29/20 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	94		65 - 125	01/29/20 11:16	01/29/20 21:11	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<5.9		5.9		mg/Kg	☼	02/03/20 10:40	02/05/20 23:34	1
Oil Range Organics (C28-C35)	<5.9		5.9		mg/Kg	☼	02/03/20 10:40	02/05/20 23:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	76		27 - 151	02/03/20 10:40	02/05/20 23:34	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5
PCB-1221	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5
PCB-1232	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5
PCB-1242	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5
PCB-1248	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5
PCB-1254	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5
PCB-1260	<0.097		0.097		mg/Kg	☼	01/27/20 13:19	01/29/20 22:16	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	47		26 - 129	01/27/20 13:19	01/29/20 22:16	5
Tetrachloro-m-xylene	34		31 - 122	01/27/20 13:19	01/29/20 22:16	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	93		1.1		mg/Kg	☼	01/28/20 13:59	01/30/20 14:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26		0.018		mg/Kg	☼	01/30/20 08:30	01/30/20 13:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16.1		0.01		%	-		01/27/20 10:30	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-3

Lab Sample ID: 400-182916-15

Date Collected: 01/21/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,1,2,2-Tetrachloroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,1,2-Trichloroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,1-Dichloroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,1-Dichloroethene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,2,3-Trichlorobenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,2,4-Trichlorobenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,2-Dibromo-3-Chloropropane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,2-Dichlorobenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,2-Dichloroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,2-Dichloropropane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,3-Dichlorobenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
1,4-Dichlorobenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
2-Hexanone	<0.029		0.029		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Acetone	<0.029		0.029		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Benzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Bromodichloromethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Bromoform	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Bromomethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Carbon disulfide	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Carbon tetrachloride	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Chlorobenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Chlorobromomethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Chloroethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Chloroform	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Chloromethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
cis-1,2-Dichloroethene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
cis-1,3-Dichloropropene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Dibromochloromethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Dichlorodifluoromethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Ethylbenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Ethylene Dibromide	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Isopropylbenzene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Methyl acetate	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Methyl Ethyl Ketone	<0.029		0.029		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
methyl isobutyl ketone	<0.029		0.029		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Methyl tert-butyl ether	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Methylene Chloride	<0.017		0.017		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Styrene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Tetrachloroethene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Toluene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
trans-1,2-Dichloroethene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
trans-1,3-Dichloropropene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Trichloroethene	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Trichlorofluoromethane	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Vinyl chloride	<0.0057		0.0057		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 15:49	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-3

Lab Sample ID: 400-182916-15

Date Collected: 01/21/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		67 - 130	01/28/20 06:49	01/28/20 15:49	1
Dibromofluoromethane	94		77 - 127	01/28/20 06:49	01/28/20 15:49	1
Toluene-d8 (Surr)	92		76 - 127	01/28/20 06:49	01/28/20 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
2-Methylnaphthalene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Acenaphthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Acenaphthylene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Anthracene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Benzo[a]anthracene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Benzo[a]pyrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Benzo[b]fluoranthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Benzo[g,h,i]perylene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Benzo[k]fluoranthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Chrysene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Dibenz(a,h)anthracene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Fluoranthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Fluorene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Indeno[1,2,3-cd]pyrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Naphthalene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Phenanthrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1
Pyrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	60		27 - 127	01/28/20 14:46	01/31/20 01:51	1
Nitrobenzene-d5 (Surr)	51		15 - 136	01/28/20 14:46	01/31/20 01:51	1
Terphenyl-d14 (Surr)	76		24 - 146	01/28/20 14:46	01/31/20 01:51	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.11		0.11		mg/Kg	☼	01/29/20 11:16	01/29/20 21:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 21:42	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	17		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 23:46	1
Oil Range Organics (C28-C35)	42		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 23:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	82		27 - 151	02/03/20 10:40	02/05/20 23:46	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1
PCB-1221	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1
PCB-1232	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1
PCB-1242	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1

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Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-3

Lab Sample ID: 400-182916-15

Date Collected: 01/21/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.3

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1
PCB-1254	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1
PCB-1260	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 22:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>DCB Decachlorobiphenyl</i>	90		26 - 129				01/27/20 13:19	01/29/20 22:41	1
<i>Tetrachloro-m-xylene</i>	57		31 - 122				01/27/20 13:19	01/29/20 22:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.7		0.01		%			01/27/20 10:30	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-4

Lab Sample ID: 400-182916-16

Date Collected: 01/21/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,1,2,2-Tetrachloroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,1,2-Trichloroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,1-Dichloroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,1-Dichloroethene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,2,3-Trichlorobenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,2,4-Trichlorobenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,2-Dibromo-3-Chloropropane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,2-Dichlorobenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,2-Dichloroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,2-Dichloropropane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,3-Dichlorobenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
1,4-Dichlorobenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
2-Hexanone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Acetone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Benzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Bromodichloromethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Bromoform	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Bromomethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Carbon disulfide	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Carbon tetrachloride	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Chlorobenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Chlorobromomethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Chloroethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Chloroform	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Chloromethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
cis-1,2-Dichloroethene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
cis-1,3-Dichloropropene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Dibromochloromethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Dichlorodifluoromethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Ethylbenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Ethylene Dibromide	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Isopropylbenzene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Methyl acetate	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Methyl Ethyl Ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
methyl isobutyl ketone	<0.027		0.027		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Methyl tert-butyl ether	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Methylene Chloride	<0.016		0.016		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Styrene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Tetrachloroethene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Toluene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
trans-1,2-Dichloroethene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
trans-1,3-Dichloropropene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Trichloroethene	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Trichlorofluoromethane	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Vinyl chloride	<0.0054		0.0054		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	01/28/20 06:49	01/28/20 16:11	1

Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-4

Lab Sample ID: 400-182916-16

Date Collected: 01/21/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		67 - 130	01/28/20 06:49	01/28/20 16:11	1
Dibromofluoromethane	91		77 - 127	01/28/20 06:49	01/28/20 16:11	1
Toluene-d8 (Surr)	95		76 - 127	01/28/20 06:49	01/28/20 16:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
2-Methylnaphthalene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Acenaphthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Acenaphthylene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Anthracene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Benzo[a]anthracene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Benzo[a]pyrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Benzo[b]fluoranthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Benzo[g,h,i]perylene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Benzo[k]fluoranthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Chrysene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Dibenz(a,h)anthracene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Fluoranthene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Fluorene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Indeno[1,2,3-cd]pyrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Naphthalene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Phenanthrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1
Pyrene	<0.36		0.36		mg/Kg	☼	01/28/20 14:46	01/31/20 02:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	58		27 - 127	01/28/20 14:46	01/31/20 02:15	1
Nitrobenzene-d5 (Surr)	49		15 - 136	01/28/20 14:46	01/31/20 02:15	1
Terphenyl-d14 (Surr)	80		24 - 146	01/28/20 14:46	01/31/20 02:15	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.10		0.10		mg/Kg	☼	01/29/20 11:16	01/29/20 22:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	99		65 - 125	01/29/20 11:16	01/29/20 22:13	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	18		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 23:57	1
Oil Range Organics (C28-C35)	40		5.4		mg/Kg	☼	02/03/20 10:40	02/05/20 23:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	83		27 - 151	02/03/20 10:40	02/05/20 23:57	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1
PCB-1221	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1
PCB-1232	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1
PCB-1242	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1

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Client Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-4

Lab Sample ID: 400-182916-16

Date Collected: 01/21/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 89.5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1248	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1
PCB-1254	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1
PCB-1260	<0.019		0.019		mg/Kg	☼	01/27/20 13:19	01/29/20 23:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	78		26 - 129	01/27/20 13:19	01/29/20 23:06	1
Tetrachloro-m-xylene	48		31 - 122	01/27/20 13:19	01/29/20 23:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10.5		0.01		%			01/27/20 10:30	1

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: MB 400-475647/1-A

Matrix: Solid

Analysis Batch: 475624

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 475647

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,1,2-Trichloroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,1-Dichloroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,1-Dichloroethene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,2,3-Trichlorobenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,2,4-Trichlorobenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,2-Dichlorobenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,2-Dichloroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,2-Dichloropropane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,3-Dichlorobenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
1,4-Dichlorobenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
2-Hexanone	<0.025		0.025		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Acetone	<0.025		0.025		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Benzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Bromodichloromethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Bromoform	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Bromomethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Carbon disulfide	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Carbon tetrachloride	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Chlorobenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Chlorobromomethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Chloroethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Chloroform	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Chloromethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
cis-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
cis-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Dibromochloromethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Dichlorodifluoromethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Ethylbenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Ethylene Dibromide	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Isopropylbenzene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Methyl acetate	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Methyl Ethyl Ketone	<0.025		0.025		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
methyl isobutyl ketone	<0.025		0.025		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Methyl tert-butyl ether	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Methylene Chloride	<0.015		0.015		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Styrene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Tetrachloroethene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Toluene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
trans-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
trans-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Trichloroethene	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Trichlorofluoromethane	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Vinyl chloride	<0.0050		0.0050		mg/Kg		01/28/20 06:49	01/28/20 08:51	1
Xylenes, Total	<0.010		0.010		mg/Kg		01/28/20 06:49	01/28/20 08:51	1

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: MB 400-475647/1-A
Matrix: Solid
Analysis Batch: 475624

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475647

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	96		67 - 130	01/28/20 06:49	01/28/20 08:51	1
Dibromofluoromethane	87		77 - 127	01/28/20 06:49	01/28/20 08:51	1
Toluene-d8 (Surr)	95		76 - 127	01/28/20 06:49	01/28/20 08:51	1

Lab Sample ID: LCS 400-475647/2-A
Matrix: Solid
Analysis Batch: 475624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475647

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	0.0500	0.0380		mg/Kg		76	63 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.0475		mg/Kg		95	60 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0395		mg/Kg		79	47 - 143
1,1,2-Trichloroethane	0.0500	0.0415		mg/Kg		83	65 - 130
1,1-Dichloroethane	0.0500	0.0442		mg/Kg		88	59 - 130
1,1-Dichloroethene	0.0500	0.0427		mg/Kg		85	55 - 137
1,2,3-Trichlorobenzene	0.0500	0.0528		mg/Kg		106	58 - 135
1,2,4-Trichlorobenzene	0.0500	0.0516		mg/Kg		103	56 - 138
1,2-Dibromo-3-Chloropropane	0.0500	0.0480		mg/Kg		96	49 - 130
1,2-Dichlorobenzene	0.0500	0.0486		mg/Kg		97	64 - 130
1,2-Dichloroethane	0.0500	0.0459		mg/Kg		92	62 - 130
1,2-Dichloropropane	0.0500	0.0444		mg/Kg		89	64 - 130
1,3-Dichlorobenzene	0.0500	0.0485		mg/Kg		97	66 - 130
1,4-Dichlorobenzene	0.0500	0.0473		mg/Kg		95	65 - 130
2-Hexanone	0.200	0.209		mg/Kg		105	57 - 131
Acetone	0.200	0.202		mg/Kg		101	48 - 160
Benzene	0.0500	0.0419		mg/Kg		84	65 - 130
Bromodichloromethane	0.0500	0.0387		mg/Kg		77	61 - 130
Bromoform	0.0500	0.0384		mg/Kg		77	52 - 136
Bromomethane	0.0500	0.0503		mg/Kg		101	12 - 160
Carbon disulfide	0.0500	0.0342		mg/Kg		68	46 - 141
Carbon tetrachloride	0.0500	0.0357		mg/Kg		71	60 - 130
Chlorobenzene	0.0500	0.0461		mg/Kg		92	70 - 130
Chlorobromomethane	0.0500	0.0389		mg/Kg		78	65 - 130
Chloroethane	0.0500	0.0567		mg/Kg		113	55 - 134
Chloroform	0.0500	0.0423		mg/Kg		85	62 - 130
Chloromethane	0.0500	0.0616		mg/Kg		123	49 - 136
cis-1,2-Dichloroethene	0.0500	0.0452		mg/Kg		90	53 - 135
cis-1,3-Dichloropropene	0.0500	0.0393		mg/Kg		79	61 - 130
Dibromochloromethane	0.0500	0.0352		mg/Kg		70	58 - 132
Dichlorodifluoromethane	0.0500	0.0628		mg/Kg		126	34 - 143
Ethylbenzene	0.0500	0.0449		mg/Kg		90	70 - 130
Ethylene Dibromide	0.0500	0.0439		mg/Kg		88	67 - 130
Isopropylbenzene	0.0500	0.0486		mg/Kg		97	70 - 130
Methyl acetate	0.100	0.0971		mg/Kg		97	49 - 139
Methyl Ethyl Ketone	0.200	0.187		mg/Kg		93	55 - 130
methyl isobutyl ketone	0.200	0.202		mg/Kg		101	58 - 130
Methyl tert-butyl ether	0.0500	0.0408		mg/Kg		82	63 - 130
Methylene Chloride	0.0500	0.0424		mg/Kg		85	57 - 132

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: LCS 400-475647/2-A
Matrix: Solid
Analysis Batch: 475624

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475647

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Styrene	0.0500	0.0451		mg/Kg		90	68 - 130
Tetrachloroethene	0.0500	0.0436		mg/Kg		87	67 - 130
Toluene	0.0500	0.0422		mg/Kg		84	70 - 130
trans-1,2-Dichloroethene	0.0500	0.0407		mg/Kg		81	58 - 134
trans-1,3-Dichloropropene	0.0500	0.0383		mg/Kg		77	60 - 130
Trichloroethene	0.0500	0.0434		mg/Kg		87	65 - 130
Trichlorofluoromethane	0.0500	0.0494		mg/Kg		99	61 - 136
Vinyl chloride	0.0500	0.0576		mg/Kg		115	52 - 132
Xylenes, Total	0.100	0.0900		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	92		67 - 130
Dibromofluoromethane	92		77 - 127
Toluene-d8 (Surr)	93		76 - 127

Lab Sample ID: 400-182916-1 MS
Matrix: Solid
Analysis Batch: 475624

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 475647

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	<0.0051		0.0547	0.0354		mg/Kg	☼	65	41 - 130
1,1,2,2-Tetrachloroethane	<0.0051		0.0547	0.0421		mg/Kg	☼	77	10 - 149
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0051		0.0547	0.0364		mg/Kg	☼	66	32 - 146
1,1,2-Trichloroethane	<0.0051		0.0547	0.0364		mg/Kg	☼	67	37 - 130
1,1-Dichloroethane	<0.0051		0.0547	0.0425		mg/Kg	☼	78	41 - 130
1,1-Dichloroethene	<0.0051		0.0547	0.0390		mg/Kg	☼	71	39 - 138
1,2,3-Trichlorobenzene	<0.0051		0.0547	0.0226		mg/Kg	☼	41	10 - 146
1,2,4-Trichlorobenzene	<0.0051		0.0547	0.0228		mg/Kg	☼	42	10 - 141
1,2-Dibromo-3-Chloropropane	<0.0051		0.0547	0.0333		mg/Kg	☼	61	14 - 132
1,2-Dichlorobenzene	<0.0051		0.0547	0.0316		mg/Kg	☼	58	20 - 130
1,2-Dichloroethane	<0.0051		0.0547	0.0432		mg/Kg	☼	79	37 - 130
1,2-Dichloropropane	<0.0051		0.0547	0.0424		mg/Kg	☼	77	39 - 130
1,3-Dichlorobenzene	<0.0051		0.0547	0.0310		mg/Kg	☼	57	22 - 130
1,4-Dichlorobenzene	<0.0051		0.0547	0.0306		mg/Kg	☼	56	21 - 130
2-Hexanone	<0.025		0.219	0.169		mg/Kg	☼	77	20 - 142
Acetone	<0.025		0.219	0.218		mg/Kg	☼	99	10 - 150
Benzene	<0.0051		0.0547	0.0392		mg/Kg	☼	72	38 - 131
Bromodichloromethane	<0.0051		0.0547	0.0356		mg/Kg	☼	65	37 - 130
Bromoform	<0.0051		0.0547	0.0331		mg/Kg	☼	60	24 - 136
Bromomethane	<0.0051		0.0547	0.0533		mg/Kg	☼	97	10 - 150
Carbon disulfide	<0.0051		0.0547	0.0299		mg/Kg	☼	55	29 - 141
Carbon tetrachloride	<0.0051		0.0547	0.0324		mg/Kg	☼	59	36 - 134
Chlorobenzene	<0.0051		0.0547	0.0369		mg/Kg	☼	67	37 - 130
Chlorobromomethane	<0.0051		0.0547	0.0362		mg/Kg	☼	66	37 - 134
Chloroethane	<0.0051		0.0547	0.0593		mg/Kg	☼	108	36 - 139
Chloroform	<0.0051		0.0547	0.0397		mg/Kg	☼	73	39 - 130
Chloromethane	<0.0051	F1	0.0547	0.0628		mg/Kg	☼	115	35 - 136
cis-1,2-Dichloroethene	<0.0051		0.0547	0.0413		mg/Kg	☼	75	32 - 135

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: 400-182916-1 MS

Matrix: Solid

Analysis Batch: 475624

Client Sample ID: B-1

Prep Type: Total/NA

Prep Batch: 475647

Analyte	Sample	Sample Qualifier	Spike Added	MS	MS	Unit	D	%Rec	%Rec.	
	Result			Result	Qualifier				Limits	Limits
cis-1,3-Dichloropropene	<0.0051		0.0547	0.0339		mg/Kg	☼	62	34 - 130	
Dibromochloromethane	<0.0051		0.0547	0.0298		mg/Kg	☼	54	32 - 132	
Dichlorodifluoromethane	<0.0051		0.0547	0.0620		mg/Kg	☼	113	21 - 146	
Ethylbenzene	<0.0051		0.0547	0.0365		mg/Kg	☼	67	35 - 130	
Ethylene Dibromide	<0.0051		0.0547	0.0369		mg/Kg	☼	67	35 - 130	
Isopropylbenzene	<0.0051		0.0547	0.0347		mg/Kg	☼	63	31 - 132	
Methyl acetate	<0.0051	F1	0.109	0.142		mg/Kg	☼	129	10 - 150	
Methyl Ethyl Ketone	<0.025		0.219	0.160		mg/Kg	☼	73	19 - 139	
methyl isobutyl ketone	<0.025		0.219	0.180		mg/Kg	☼	82	21 - 144	
Methyl tert-butyl ether	<0.0051		0.0547	0.0381		mg/Kg	☼	70	34 - 132	
Methylene Chloride	<0.015		0.0547	0.0410		mg/Kg	☼	75	36 - 132	
Styrene	<0.0051		0.0547	0.0343		mg/Kg	☼	63	31 - 130	
Tetrachloroethene	<0.0051		0.0547	0.0353		mg/Kg	☼	64	27 - 147	
Toluene	<0.0051		0.0547	0.0369		mg/Kg	☼	67	42 - 130	
trans-1,2-Dichloroethene	<0.0051		0.0547	0.0376		mg/Kg	☼	69	40 - 134	
trans-1,3-Dichloropropene	<0.0051		0.0547	0.0311		mg/Kg	☼	57	31 - 130	
Trichloroethene	<0.0051		0.0547	0.0434		mg/Kg	☼	73	34 - 144	
Trichlorofluoromethane	<0.0051		0.0547	0.0511		mg/Kg	☼	93	41 - 143	
Vinyl chloride	<0.0051		0.0547	0.0586		mg/Kg	☼	107	35 - 136	
Xylenes, Total	<0.010		0.109	0.0714		mg/Kg	☼	65	35 - 130	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	92		67 - 130
Dibromofluoromethane	94		77 - 127
Toluene-d8 (Surr)	92		76 - 127

Lab Sample ID: 400-182916-1 MSD

Matrix: Solid

Analysis Batch: 475624

Client Sample ID: B-1

Prep Type: Total/NA

Prep Batch: 475647

Analyte	Sample	Sample Qualifier	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	Limit
	Result			Result	Qualifier				Limits	Limits		
1,1,1-Trichloroethane	<0.0051		0.0562	0.0429		mg/Kg	☼	76	41 - 130	19	40	
1,1,2,2-Tetrachloroethane	<0.0051		0.0562	0.0548		mg/Kg	☼	98	10 - 149	26	44	
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0051		0.0562	0.0437		mg/Kg	☼	78	32 - 146	18	58	
1,1,2-Trichloroethane	<0.0051		0.0562	0.0467		mg/Kg	☼	83	37 - 130	25	33	
1,1-Dichloroethane	<0.0051		0.0562	0.0520		mg/Kg	☼	93	41 - 130	20	35	
1,1-Dichloroethene	<0.0051		0.0562	0.0475		mg/Kg	☼	85	39 - 138	20	37	
1,2,3-Trichlorobenzene	<0.0051		0.0562	0.0308		mg/Kg	☼	55	10 - 146	31	47	
1,2,4-Trichlorobenzene	<0.0051		0.0562	0.0316		mg/Kg	☼	56	10 - 141	32	53	
1,2-Dibromo-3-Chloropropane	<0.0051		0.0562	0.0439		mg/Kg	☼	78	14 - 132	27	38	
1,2-Dichlorobenzene	<0.0051		0.0562	0.0427		mg/Kg	☼	76	20 - 130	30	40	
1,2-Dichloroethane	<0.0051		0.0562	0.0526		mg/Kg	☼	94	37 - 130	20	32	
1,2-Dichloropropane	<0.0051		0.0562	0.0528		mg/Kg	☼	94	39 - 130	22	35	
1,3-Dichlorobenzene	<0.0051		0.0562	0.0423		mg/Kg	☼	75	22 - 130	31	41	
1,4-Dichlorobenzene	<0.0051		0.0562	0.0412		mg/Kg	☼	73	21 - 130	29	40	
2-Hexanone	<0.025		0.225	0.215		mg/Kg	☼	96	20 - 142	24	37	
Acetone	<0.025		0.225	0.284		mg/Kg	☼	126	10 - 150	26	38	
Benzene	<0.0051		0.0562	0.0476		mg/Kg	☼	85	38 - 131	20	36	

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QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: 400-182916-1 MSD
Matrix: Solid
Analysis Batch: 475624

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 475647

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Bromodichloromethane	<0.0051		0.0562	0.0435		mg/Kg	☼	77	37 - 130	20	34
Bromoform	<0.0051		0.0562	0.0427		mg/Kg	☼	76	24 - 136	25	34
Bromomethane	<0.0051		0.0562	0.0640		mg/Kg	☼	114	10 - 150	18	47
Carbon disulfide	<0.0051		0.0562	0.0366		mg/Kg	☼	65	29 - 141	20	39
Carbon tetrachloride	<0.0051		0.0562	0.0393		mg/Kg	☼	70	36 - 134	19	44
Chlorobenzene	<0.0051		0.0562	0.0476		mg/Kg	☼	85	37 - 130	25	37
Chlorobromomethane	<0.0051		0.0562	0.0443		mg/Kg	☼	79	37 - 134	20	38
Chloroethane	<0.0051		0.0562	0.0709		mg/Kg	☼	126	36 - 139	18	42
Chloroform	<0.0051		0.0562	0.0483		mg/Kg	☼	86	39 - 130	20	35
Chloromethane	<0.0051	F1	0.0562	0.0770	F1	mg/Kg	☼	137	35 - 136	20	41
cis-1,2-Dichloroethene	<0.0051		0.0562	0.0498		mg/Kg	☼	89	32 - 135	19	35
cis-1,3-Dichloropropene	<0.0051		0.0562	0.0430		mg/Kg	☼	77	34 - 130	24	35
Dibromochloromethane	<0.0051		0.0562	0.0375		mg/Kg	☼	67	32 - 132	23	34
Dichlorodifluoromethane	<0.0051		0.0562	0.0774		mg/Kg	☼	138	21 - 146	22	46
Ethylbenzene	<0.0051		0.0562	0.0469		mg/Kg	☼	83	35 - 130	25	46
Ethylene Dibromide	<0.0051		0.0562	0.0476		mg/Kg	☼	85	35 - 130	25	31
Isopropylbenzene	<0.0051		0.0562	0.0452		mg/Kg	☼	80	31 - 132	26	51
Methyl acetate	<0.0051	F1	0.112	0.179	F1	mg/Kg	☼	160	10 - 150	24	34
Methyl Ethyl Ketone	<0.025		0.225	0.194		mg/Kg	☼	86	19 - 139	19	41
methyl isobutyl ketone	<0.025		0.225	0.224		mg/Kg	☼	100	21 - 144	22	39
Methyl tert-butyl ether	<0.0051		0.0562	0.0467		mg/Kg	☼	83	34 - 132	20	31
Methylene Chloride	<0.015		0.0562	0.0493		mg/Kg	☼	88	36 - 132	18	38
Styrene	<0.0051		0.0562	0.0449		mg/Kg	☼	80	31 - 130	27	39
Tetrachloroethene	<0.0051		0.0562	0.0440		mg/Kg	☼	78	27 - 147	22	44
Toluene	<0.0051		0.0562	0.0479		mg/Kg	☼	85	42 - 130	26	37
trans-1,2-Dichloroethene	<0.0051		0.0562	0.0466		mg/Kg	☼	83	40 - 134	21	38
trans-1,3-Dichloropropene	<0.0051		0.0562	0.0401		mg/Kg	☼	71	31 - 130	25	34
Trichloroethene	<0.0051		0.0562	0.0531		mg/Kg	☼	88	34 - 144	20	42
Trichlorofluoromethane	<0.0051		0.0562	0.0603		mg/Kg	☼	107	41 - 143	16	42
Vinyl chloride	<0.0051		0.0562	0.0721		mg/Kg	☼	128	35 - 136	21	43
Xylenes, Total	<0.010		0.112	0.0936		mg/Kg	☼	83	35 - 130	27	39

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	92		67 - 130
Dibromofluoromethane	90		77 - 127
Toluene-d8 (Surr)	93		76 - 127

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

Lab Sample ID: MB 400-475744/1-A
Matrix: Solid
Analysis Batch: 476105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475744

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1-Methylnaphthalene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
2-Methylnaphthalene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Acenaphthene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Acenaphthylene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Anthracene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1

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QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: MB 400-475744/1-A
Matrix: Solid
Analysis Batch: 476105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475744

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Benzo[a]pyrene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Benzo[b]fluoranthene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Benzo[g,h,i]perylene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Benzo[k]fluoranthene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Chrysene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Dibenz(a,h)anthracene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Fluoranthene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Fluorene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Indeno[1,2,3-cd]pyrene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Naphthalene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Phenanthrene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1
Pyrene	<0.33		0.33		mg/Kg		01/28/20 14:46	01/30/20 17:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		27 - 127	01/28/20 14:46	01/30/20 17:18	1
Nitrobenzene-d5 (Surr)	55		15 - 136	01/28/20 14:46	01/30/20 17:18	1
Terphenyl-d14 (Surr)	74		24 - 146	01/28/20 14:46	01/30/20 17:18	1

Lab Sample ID: LCS 400-475744/2-A
Matrix: Solid
Analysis Batch: 476105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475744

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1-Methylnaphthalene	2.00	1.22		mg/Kg		61	46 - 120
2-Methylnaphthalene	2.00	1.20		mg/Kg		60	46 - 120
Acenaphthene	2.00	1.22		mg/Kg		61	57 - 120
Acenaphthylene	2.00	1.28		mg/Kg		64	59 - 120
Anthracene	2.00	1.33		mg/Kg		66	61 - 120
Benzo[a]anthracene	2.00	1.30		mg/Kg		65	61 - 120
Benzo[a]pyrene	2.00	1.33		mg/Kg		66	54 - 127
Benzo[b]fluoranthene	2.00	1.20		mg/Kg		60	35 - 146
Benzo[g,h,i]perylene	2.00	1.48		mg/Kg		74	36 - 150
Benzo[k]fluoranthene	2.00	1.38		mg/Kg		69	53 - 139
Chrysene	2.00	1.33		mg/Kg		66	60 - 120
Dibenz(a,h)anthracene	2.00	1.47		mg/Kg		74	39 - 150
Fluoranthene	2.00	1.40		mg/Kg		70	61 - 121
Fluorene	2.00	1.23		mg/Kg		61	60 - 120
Indeno[1,2,3-cd]pyrene	2.00	1.44		mg/Kg		72	40 - 150
Naphthalene	2.00	1.13		mg/Kg		56	51 - 120
Phenanthrene	2.00	1.28		mg/Kg		64	59 - 120
Pyrene	2.00	1.17		mg/Kg		58	53 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	60		27 - 127
Nitrobenzene-d5 (Surr)	62		15 - 136
Terphenyl-d14 (Surr)	70		24 - 146

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: 400-182956-E-1-F MS

Matrix: Solid

Analysis Batch: 476105

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 475744

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
1-Methylnaphthalene	<0.37		2.35	1.46		mg/Kg	☼	62	40 - 140
2-Methylnaphthalene	<0.37		2.35	1.49		mg/Kg	☼	63	40 - 140
Acenaphthene	<0.37		2.35	1.48		mg/Kg	☼	63	40 - 140
Acenaphthylene	<0.37		2.35	1.54		mg/Kg	☼	66	40 - 140
Anthracene	<0.37		2.35	1.64		mg/Kg	☼	70	40 - 140
Benzo[a]anthracene	<0.37		2.35	1.71		mg/Kg	☼	67	40 - 140
Benzo[a]pyrene	<0.37		2.35	1.77		mg/Kg	☼	69	40 - 140
Benzo[b]fluoranthene	<0.37		2.35	1.80		mg/Kg	☼	67	40 - 140
Benzo[g,h,i]perylene	<0.37		2.35	1.69		mg/Kg	☼	67	40 - 140
Benzo[k]fluoranthene	<0.37		2.35	1.69		mg/Kg	☼	67	40 - 140
Chrysene	<0.37		2.35	1.81		mg/Kg	☼	69	40 - 140
Dibenz(a,h)anthracene	<0.37		2.35	1.75		mg/Kg	☼	72	40 - 140
Fluoranthene	<0.37		2.35	1.89		mg/Kg	☼	68	40 - 140
Fluorene	<0.37		2.35	1.53		mg/Kg	☼	65	40 - 140
Indeno[1,2,3-cd]pyrene	<0.37		2.35	1.74		mg/Kg	☼	70	40 - 140
Naphthalene	<0.37		2.35	1.36		mg/Kg	☼	58	40 - 140
Phenanthrene	<0.37		2.35	1.64		mg/Kg	☼	66	40 - 140
Pyrene	<0.37		2.35	1.65		mg/Kg	☼	62	40 - 140

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	62		27 - 127
Nitrobenzene-d5 (Surr)	66		15 - 136
Terphenyl-d14 (Surr)	77		24 - 146

Lab Sample ID: 400-182956-E-1-G MSD

Matrix: Solid

Analysis Batch: 476105

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 475744

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1-Methylnaphthalene	<0.37		2.27	1.45		mg/Kg	☼	64	40 - 140	1	30
2-Methylnaphthalene	<0.37		2.27	1.40		mg/Kg	☼	62	40 - 140	6	30
Acenaphthene	<0.37		2.27	1.41		mg/Kg	☼	62	40 - 140	4	30
Acenaphthylene	<0.37		2.27	1.48		mg/Kg	☼	65	40 - 140	4	30
Anthracene	<0.37		2.27	1.58		mg/Kg	☼	69	40 - 140	4	30
Benzo[a]anthracene	<0.37		2.27	1.59		mg/Kg	☼	63	40 - 140	8	30
Benzo[a]pyrene	<0.37		2.27	1.67		mg/Kg	☼	67	40 - 140	6	30
Benzo[b]fluoranthene	<0.37		2.27	1.64		mg/Kg	☼	62	40 - 140	9	30
Benzo[g,h,i]perylene	<0.37		2.27	1.45		mg/Kg	☼	58	40 - 140	16	30
Benzo[k]fluoranthene	<0.37		2.27	1.70		mg/Kg	☼	70	40 - 140	0	30
Chrysene	<0.37		2.27	1.67		mg/Kg	☼	65	40 - 140	8	30
Dibenz(a,h)anthracene	<0.37		2.27	1.59		mg/Kg	☼	67	40 - 140	10	30
Fluoranthene	<0.37		2.27	1.77		mg/Kg	☼	66	40 - 140	7	30
Fluorene	<0.37		2.27	1.43		mg/Kg	☼	63	40 - 140	7	30
Indeno[1,2,3-cd]pyrene	<0.37		2.27	1.53		mg/Kg	☼	63	40 - 140	13	30
Naphthalene	<0.37		2.27	1.32		mg/Kg	☼	58	40 - 140	3	30
Phenanthrene	<0.37		2.27	1.56		mg/Kg	☼	64	40 - 140	5	30
Pyrene	<0.37		2.27	1.53		mg/Kg	☼	59	40 - 140	7	30

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QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

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

Lab Sample ID: 400-182956-E-1-G MSD
Matrix: Solid
Analysis Batch: 476105

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 475744

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	62		27 - 127
Nitrobenzene-d5 (Surr)	61		15 - 136
Terphenyl-d14 (Surr)	72		24 - 146

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 400-475902/2-A
Matrix: Solid
Analysis Batch: 475878

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475902

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.10		0.10		mg/Kg		01/29/20 11:16	01/29/20 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125	01/29/20 11:16	01/29/20 12:18	1

Lab Sample ID: LCS 400-475902/1-A
Matrix: Solid
Analysis Batch: 475878

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475902

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.970		mg/Kg		97	62 - 141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	101		65 - 125

Lab Sample ID: 400-182916-1 MS
Matrix: Solid
Analysis Batch: 475878

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 475902

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	<0.10		1.05	0.818		mg/Kg	☼	78	10 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	100		65 - 125

Lab Sample ID: 400-182916-1 MSD
Matrix: Solid
Analysis Batch: 475878

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 475902

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	<0.10		1.07	0.866		mg/Kg	☼	81	10 - 150	6	32

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 400-182916-1 MSD
Matrix: Solid
Analysis Batch: 475878

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 475902

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	99		65 - 125

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 400-476417/1-A
Matrix: Solid
Analysis Batch: 476788

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476417

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<5.0		5.0		mg/Kg		02/03/20 10:40	02/05/20 19:49	1
Oil Range Organics (C28-C35)	<5.0		5.0		mg/Kg		02/03/20 10:40	02/05/20 19:49	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	78		27 - 151				02/03/20 10:40	02/05/20 19:49	1

Lab Sample ID: LCS 400-476417/2-A
Matrix: Solid
Analysis Batch: 476788

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10-C28]	284	210		mg/Kg		74	63 - 153
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
o-Terphenyl (Surr)	86		27 - 151				

Lab Sample ID: 400-182916-1 MS
Matrix: Solid
Analysis Batch: 476788

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 476417

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Diesel Range Organics [C10-C28]	<5.6		312	252		mg/Kg	☼	81	62 - 204
Surrogate	MS %Recovery	MS Qualifier	Limits						
o-Terphenyl (Surr)	91		27 - 151						

Lab Sample ID: 400-182916-1 MSD
Matrix: Solid
Analysis Batch: 476788

Client Sample ID: B-1
Prep Type: Total/NA
Prep Batch: 476417

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	<5.6		312	226		mg/Kg	☼	72	62 - 204	11	30
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
o-Terphenyl (Surr)	80		27 - 151								

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 400-475548/1-A
Matrix: Solid
Analysis Batch: 475921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475548

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1
PCB-1221	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1
PCB-1232	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1
PCB-1242	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1
PCB-1248	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1
PCB-1254	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1
PCB-1260	<0.017		0.017		mg/Kg		01/27/20 13:19	01/29/20 18:06	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl	99		26 - 129	01/27/20 13:19	01/29/20 18:06	1
Tetrachloro-m-xylene	95		31 - 122	01/27/20 13:19	01/29/20 18:06	1

Lab Sample ID: LCS 400-475548/14-A
Matrix: Solid
Analysis Batch: 475921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475548

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
PCB-1016	0.336	0.158		mg/Kg		47	17 - 156
PCB-1260	0.335	0.215		mg/Kg		64	27 - 133

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	91		26 - 129
Tetrachloro-m-xylene	54		31 - 122

Lab Sample ID: LCSD 400-475548/15-A
Matrix: Solid
Analysis Batch: 475921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 475548

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Result	Qualifier						
PCB-1016	0.336	0.163		mg/Kg		48	17 - 156	3	30
PCB-1260	0.335	0.218		mg/Kg		65	27 - 133	2	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	103		26 - 129
Tetrachloro-m-xylene	57		31 - 122

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 400-475731/1-A
Matrix: Solid
Analysis Batch: 476178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475731

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Lead	<1.0		1.0		mg/Kg		01/28/20 13:59	01/30/20 12:19	1

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 400-475731/2-A
Matrix: Solid
Analysis Batch: 476178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475731
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Lead	99.3	99.0		mg/Kg		100	80 - 120

Lab Sample ID: 400-182916-3 MS
Matrix: Solid
Analysis Batch: 476178

Client Sample ID: B-6
Prep Type: Total/NA
Prep Batch: 475731
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Lead	19		96.8	112		mg/Kg	☼	96	75 - 125

Lab Sample ID: 400-182916-3 MSD
Matrix: Solid
Analysis Batch: 476178

Client Sample ID: B-6
Prep Type: Total/NA
Prep Batch: 475731
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Lead	19		96.6	110		mg/Kg	☼	94	75 - 125	2	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 400-475506/14-A
Matrix: Solid
Analysis Batch: 476106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475506

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.012		0.012		mg/Kg		01/30/20 08:30	01/30/20 12:04	1

Lab Sample ID: LCS 400-475506/15-A
Matrix: Solid
Analysis Batch: 476106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475506
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.0629	0.0638		mg/Kg		101	80 - 120

Lab Sample ID: 400-183050-E-1-B MS
Matrix: Solid
Analysis Batch: 476106

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 475506
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.014		0.148	0.156		mg/Kg	☼	106	80 - 120

Lab Sample ID: 400-183050-E-1-C MSD
Matrix: Solid
Analysis Batch: 476106

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 475506
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.014		0.148	0.147		mg/Kg	☼	99	80 - 120	6	20

QC Sample Results

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Method: Moisture - Percent Moisture

Lab Sample ID: 400-182916-12 DU
Matrix: Solid
Analysis Batch: 475425

Client Sample ID: B-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	12.2		7.0	F3	%		54	10

Lab Sample ID: 400-182945-A-3 DU
Matrix: Solid
Analysis Batch: 475504

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	40.8		34.8	F3	%		16	10

QC Association Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

GC/MS VOA

Analysis Batch: 475624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	8260B	475647
400-182916-2	B-5	Total/NA	Solid	8260B	475647
400-182916-3	B-6	Total/NA	Solid	8260B	475647
400-182916-4	B-7	Total/NA	Solid	8260B	475647
400-182916-5	B-8	Total/NA	Solid	8260B	475647
400-182916-6	B-9	Total/NA	Solid	8260B	475647
400-182916-7	B-10	Total/NA	Solid	8260B	475647
400-182916-8	B-11	Total/NA	Solid	8260B	475647
400-182916-9	B-12	Total/NA	Solid	8260B	475647
400-182916-10	B-13	Total/NA	Solid	8260B	475647
400-182916-11	B-14	Total/NA	Solid	8260B	475647
400-182916-12	B-15	Total/NA	Solid	8260B	475647
400-182916-13	B-16	Total/NA	Solid	8260B	475647
400-182916-14	B-2	Total/NA	Solid	8260B	475647
400-182916-15	B-3	Total/NA	Solid	8260B	475647
400-182916-16	B-4	Total/NA	Solid	8260B	475647
MB 400-475647/1-A	Method Blank	Total/NA	Solid	8260B	475647
LCS 400-475647/2-A	Lab Control Sample	Total/NA	Solid	8260B	475647
400-182916-1 MS	B-1	Total/NA	Solid	8260B	475647
400-182916-1 MSD	B-1	Total/NA	Solid	8260B	475647

Prep Batch: 475647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	5035	
400-182916-2	B-5	Total/NA	Solid	5035	
400-182916-3	B-6	Total/NA	Solid	5035	
400-182916-4	B-7	Total/NA	Solid	5035	
400-182916-5	B-8	Total/NA	Solid	5035	
400-182916-6	B-9	Total/NA	Solid	5035	
400-182916-7	B-10	Total/NA	Solid	5035	
400-182916-8	B-11	Total/NA	Solid	5035	
400-182916-9	B-12	Total/NA	Solid	5035	
400-182916-10	B-13	Total/NA	Solid	5035	
400-182916-11	B-14	Total/NA	Solid	5035	
400-182916-12	B-15	Total/NA	Solid	5035	
400-182916-13	B-16	Total/NA	Solid	5035	
400-182916-14	B-2	Total/NA	Solid	5035	
400-182916-15	B-3	Total/NA	Solid	5035	
400-182916-16	B-4	Total/NA	Solid	5035	
MB 400-475647/1-A	Method Blank	Total/NA	Solid	5035	
LCS 400-475647/2-A	Lab Control Sample	Total/NA	Solid	5035	
400-182916-1 MS	B-1	Total/NA	Solid	5035	
400-182916-1 MSD	B-1	Total/NA	Solid	5035	

GC/MS Semi VOA

Prep Batch: 475744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-15	B-3	Total/NA	Solid	3546	
400-182916-16	B-4	Total/NA	Solid	3546	
MB 400-475744/1-A	Method Blank	Total/NA	Solid	3546	

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QC Association Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

GC/MS Semi VOA (Continued)

Prep Batch: 475744 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-475744/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-182956-E-1-F MS	Matrix Spike	Total/NA	Solid	3546	
400-182956-E-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Analysis Batch: 476105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-15	B-3	Total/NA	Solid	8270D	475744
400-182916-16	B-4	Total/NA	Solid	8270D	475744
MB 400-475744/1-A	Method Blank	Total/NA	Solid	8270D	475744
LCS 400-475744/2-A	Lab Control Sample	Total/NA	Solid	8270D	475744
400-182956-E-1-F MS	Matrix Spike	Total/NA	Solid	8270D	475744
400-182956-E-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8270D	475744

GC VOA

Analysis Batch: 475878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	8015C	475902
400-182916-2	B-5	Total/NA	Solid	8015C	475902
400-182916-3	B-6	Total/NA	Solid	8015C	475902
400-182916-4	B-7	Total/NA	Solid	8015C	475902
400-182916-5	B-8	Total/NA	Solid	8015C	475902
400-182916-6	B-9	Total/NA	Solid	8015C	475902
400-182916-7	B-10	Total/NA	Solid	8015C	475902
400-182916-8	B-11	Total/NA	Solid	8015C	475902
400-182916-9	B-12	Total/NA	Solid	8015C	475902
400-182916-10	B-13	Total/NA	Solid	8015C	475902
400-182916-11	B-14	Total/NA	Solid	8015C	475902
400-182916-12	B-15	Total/NA	Solid	8015C	475902
400-182916-13	B-16	Total/NA	Solid	8015C	475902
400-182916-14	B-2	Total/NA	Solid	8015C	475902
400-182916-15	B-3	Total/NA	Solid	8015C	475902
400-182916-16	B-4	Total/NA	Solid	8015C	475902
MB 400-475902/2-A	Method Blank	Total/NA	Solid	8015C	475902
LCS 400-475902/1-A	Lab Control Sample	Total/NA	Solid	8015C	475902
400-182916-1 MS	B-1	Total/NA	Solid	8015C	475902
400-182916-1 MSD	B-1	Total/NA	Solid	8015C	475902

Prep Batch: 475902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	5035	
400-182916-2	B-5	Total/NA	Solid	5035	
400-182916-3	B-6	Total/NA	Solid	5035	
400-182916-4	B-7	Total/NA	Solid	5035	
400-182916-5	B-8	Total/NA	Solid	5035	
400-182916-6	B-9	Total/NA	Solid	5035	
400-182916-7	B-10	Total/NA	Solid	5035	
400-182916-8	B-11	Total/NA	Solid	5035	
400-182916-9	B-12	Total/NA	Solid	5035	
400-182916-10	B-13	Total/NA	Solid	5035	
400-182916-11	B-14	Total/NA	Solid	5035	

Eurofins TestAmerica, Pensacola

QC Association Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

GC VOA (Continued)

Prep Batch: 475902 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-12	B-15	Total/NA	Solid	5035	
400-182916-13	B-16	Total/NA	Solid	5035	
400-182916-14	B-2	Total/NA	Solid	5035	
400-182916-15	B-3	Total/NA	Solid	5035	
400-182916-16	B-4	Total/NA	Solid	5035	
MB 400-475902/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-475902/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-182916-1 MS	B-1	Total/NA	Solid	5035	
400-182916-1 MSD	B-1	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 475548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-14	B-2	Total/NA	Solid	3546	
400-182916-15	B-3	Total/NA	Solid	3546	
400-182916-16	B-4	Total/NA	Solid	3546	
MB 400-475548/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-475548/14-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 400-475548/15-A	Lab Control Sample Dup	Total/NA	Solid	3546	

Analysis Batch: 475921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-14	B-2	Total/NA	Solid	8082A	475548
400-182916-15	B-3	Total/NA	Solid	8082A	475548
400-182916-16	B-4	Total/NA	Solid	8082A	475548
MB 400-475548/1-A	Method Blank	Total/NA	Solid	8082A	475548
LCS 400-475548/14-A	Lab Control Sample	Total/NA	Solid	8082A	475548
LCSD 400-475548/15-A	Lab Control Sample Dup	Total/NA	Solid	8082A	475548

Prep Batch: 476417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	3546	
400-182916-2	B-5	Total/NA	Solid	3546	
400-182916-3	B-6	Total/NA	Solid	3546	
400-182916-4	B-7	Total/NA	Solid	3546	
400-182916-5	B-8	Total/NA	Solid	3546	
400-182916-6	B-9	Total/NA	Solid	3546	
400-182916-7	B-10	Total/NA	Solid	3546	
400-182916-8	B-11	Total/NA	Solid	3546	
400-182916-9	B-12	Total/NA	Solid	3546	
400-182916-10	B-13	Total/NA	Solid	3546	
400-182916-11	B-14	Total/NA	Solid	3546	
400-182916-12	B-15	Total/NA	Solid	3546	
400-182916-13	B-16	Total/NA	Solid	3546	
400-182916-14	B-2	Total/NA	Solid	3546	
400-182916-15	B-3	Total/NA	Solid	3546	
400-182916-16	B-4	Total/NA	Solid	3546	
MB 400-476417/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-476417/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-182916-1 MS	B-1	Total/NA	Solid	3546	

Eurofins TestAmerica, Pensacola

QC Association Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

GC Semi VOA (Continued)

Prep Batch: 476417 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1 MSD	B-1	Total/NA	Solid	3546	

Analysis Batch: 476788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	8015C	476417
400-182916-2	B-5	Total/NA	Solid	8015C	476417
400-182916-3	B-6	Total/NA	Solid	8015C	476417
400-182916-4	B-7	Total/NA	Solid	8015C	476417
400-182916-5	B-8	Total/NA	Solid	8015C	476417
400-182916-6	B-9	Total/NA	Solid	8015C	476417
400-182916-7	B-10	Total/NA	Solid	8015C	476417
400-182916-8	B-11	Total/NA	Solid	8015C	476417
400-182916-9	B-12	Total/NA	Solid	8015C	476417
400-182916-10	B-13	Total/NA	Solid	8015C	476417
400-182916-11	B-14	Total/NA	Solid	8015C	476417
400-182916-12	B-15	Total/NA	Solid	8015C	476417
400-182916-13	B-16	Total/NA	Solid	8015C	476417
400-182916-14	B-2	Total/NA	Solid	8015C	476417
400-182916-15	B-3	Total/NA	Solid	8015C	476417
400-182916-16	B-4	Total/NA	Solid	8015C	476417
MB 400-476417/1-A	Method Blank	Total/NA	Solid	8015C	476417
LCS 400-476417/2-A	Lab Control Sample	Total/NA	Solid	8015C	476417
400-182916-1 MS	B-1	Total/NA	Solid	8015C	476417
400-182916-1 MSD	B-1	Total/NA	Solid	8015C	476417

Metals

Prep Batch: 475506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	7471B	
400-182916-2	B-5	Total/NA	Solid	7471B	
400-182916-3	B-6	Total/NA	Solid	7471B	
400-182916-4	B-7	Total/NA	Solid	7471B	
400-182916-5	B-8	Total/NA	Solid	7471B	
400-182916-6	B-9	Total/NA	Solid	7471B	
400-182916-7	B-10	Total/NA	Solid	7471B	
400-182916-8	B-11	Total/NA	Solid	7471B	
400-182916-9	B-12	Total/NA	Solid	7471B	
400-182916-10	B-13	Total/NA	Solid	7471B	
400-182916-11	B-14	Total/NA	Solid	7471B	
400-182916-12	B-15	Total/NA	Solid	7471B	
400-182916-13	B-16	Total/NA	Solid	7471B	
400-182916-14	B-2	Total/NA	Solid	7471B	
MB 400-475506/14-A	Method Blank	Total/NA	Solid	7471B	
LCS 400-475506/15-A	Lab Control Sample	Total/NA	Solid	7471B	
400-183050-E-1-B MS	Matrix Spike	Total/NA	Solid	7471B	
400-183050-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	

Prep Batch: 475731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	3050B	

Eurofins TestAmerica, Pensacola

QC Association Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Metals (Continued)

Prep Batch: 475731 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-2	B-5	Total/NA	Solid	3050B	
400-182916-3	B-6	Total/NA	Solid	3050B	
400-182916-4	B-7	Total/NA	Solid	3050B	
400-182916-5	B-8	Total/NA	Solid	3050B	
400-182916-6	B-9	Total/NA	Solid	3050B	
400-182916-7	B-10	Total/NA	Solid	3050B	
400-182916-8	B-11	Total/NA	Solid	3050B	
400-182916-9	B-12	Total/NA	Solid	3050B	
400-182916-10	B-13	Total/NA	Solid	3050B	
400-182916-11	B-14	Total/NA	Solid	3050B	
400-182916-12	B-15	Total/NA	Solid	3050B	
400-182916-13	B-16	Total/NA	Solid	3050B	
400-182916-14	B-2	Total/NA	Solid	3050B	
MB 400-475731/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 400-475731/2-A	Lab Control Sample	Total/NA	Solid	3050B	
400-182916-3 MS	B-6	Total/NA	Solid	3050B	
400-182916-3 MSD	B-6	Total/NA	Solid	3050B	

Analysis Batch: 476106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	7471B	475506
400-182916-2	B-5	Total/NA	Solid	7471B	475506
400-182916-3	B-6	Total/NA	Solid	7471B	475506
400-182916-4	B-7	Total/NA	Solid	7471B	475506
400-182916-5	B-8	Total/NA	Solid	7471B	475506
400-182916-6	B-9	Total/NA	Solid	7471B	475506
400-182916-7	B-10	Total/NA	Solid	7471B	475506
400-182916-8	B-11	Total/NA	Solid	7471B	475506
400-182916-9	B-12	Total/NA	Solid	7471B	475506
400-182916-10	B-13	Total/NA	Solid	7471B	475506
400-182916-11	B-14	Total/NA	Solid	7471B	475506
400-182916-12	B-15	Total/NA	Solid	7471B	475506
400-182916-13	B-16	Total/NA	Solid	7471B	475506
400-182916-14	B-2	Total/NA	Solid	7471B	475506
MB 400-475506/14-A	Method Blank	Total/NA	Solid	7471B	475506
LCS 400-475506/15-A	Lab Control Sample	Total/NA	Solid	7471B	475506
400-183050-E-1-B MS	Matrix Spike	Total/NA	Solid	7471B	475506
400-183050-E-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	7471B	475506

Analysis Batch: 476178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	6010C	475731
400-182916-2	B-5	Total/NA	Solid	6010C	475731
400-182916-3	B-6	Total/NA	Solid	6010C	475731
400-182916-4	B-7	Total/NA	Solid	6010C	475731
400-182916-5	B-8	Total/NA	Solid	6010C	475731
400-182916-6	B-9	Total/NA	Solid	6010C	475731
400-182916-7	B-10	Total/NA	Solid	6010C	475731
400-182916-8	B-11	Total/NA	Solid	6010C	475731
400-182916-9	B-12	Total/NA	Solid	6010C	475731
400-182916-10	B-13	Total/NA	Solid	6010C	475731

Eurofins TestAmerica, Pensacola

QC Association Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Metals (Continued)

Analysis Batch: 476178 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-11	B-14	Total/NA	Solid	6010C	475731
400-182916-12	B-15	Total/NA	Solid	6010C	475731
400-182916-13	B-16	Total/NA	Solid	6010C	475731
400-182916-14	B-2	Total/NA	Solid	6010C	475731
MB 400-475731/1-A	Method Blank	Total/NA	Solid	6010C	475731
LCS 400-475731/2-A	Lab Control Sample	Total/NA	Solid	6010C	475731
400-182916-3 MS	B-6	Total/NA	Solid	6010C	475731
400-182916-3 MSD	B-6	Total/NA	Solid	6010C	475731

General Chemistry

Analysis Batch: 475425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-1	B-1	Total/NA	Solid	Moisture	
400-182916-2	B-5	Total/NA	Solid	Moisture	
400-182916-3	B-6	Total/NA	Solid	Moisture	
400-182916-4	B-7	Total/NA	Solid	Moisture	
400-182916-5	B-8	Total/NA	Solid	Moisture	
400-182916-6	B-9	Total/NA	Solid	Moisture	
400-182916-7	B-10	Total/NA	Solid	Moisture	
400-182916-8	B-11	Total/NA	Solid	Moisture	
400-182916-9	B-12	Total/NA	Solid	Moisture	
400-182916-10	B-13	Total/NA	Solid	Moisture	
400-182916-11	B-14	Total/NA	Solid	Moisture	
400-182916-12	B-15	Total/NA	Solid	Moisture	
400-182953-A-3 MS	Matrix Spike	Total/NA	Solid	Moisture	
400-182953-A-3 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	
400-182916-12 DU	B-15	Total/NA	Solid	Moisture	

Analysis Batch: 475504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-182916-13	B-16	Total/NA	Solid	Moisture	
400-182916-14	B-2	Total/NA	Solid	Moisture	
400-182916-15	B-3	Total/NA	Solid	Moisture	
400-182916-16	B-4	Total/NA	Solid	Moisture	
400-182945-A-5 MS	Matrix Spike	Total/NA	Solid	Moisture	
400-182945-A-5 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	
400-182945-A-3 DU	Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-1

Date Collected: 01/21/20 09:00

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 12:21	BKG	TAL PEN

Client Sample ID: B-1

Date Collected: 01/21/20 09:00

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-1

Matrix: Solid

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 09:13	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 12:49	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 20:49	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 12:45	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:26	JAP	TAL PEN

Client Sample ID: B-5

Date Collected: 01/21/20 12:20

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 12:21	BKG	TAL PEN

Client Sample ID: B-5

Date Collected: 01/21/20 12:20

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-2

Matrix: Solid

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 11:03	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 14:23	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 21:01	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 12:51	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:28	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-6

Lab Sample ID: 400-182916-3

Date Collected: 01/21/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-6

Lab Sample ID: 400-182916-3

Date Collected: 01/21/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 94.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 11:25	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 14:55	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		20	476788	02/05/20 21:13	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 12:56	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:30	JAP	TAL PEN

Client Sample ID: B-7

Lab Sample ID: 400-182916-4

Date Collected: 01/21/20 14:40

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-7

Lab Sample ID: 400-182916-4

Date Collected: 01/21/20 14:40

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 11:47	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 15:26	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		2	476788	02/05/20 21:25	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 13:16	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:32	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-8

Date Collected: 01/21/20 15:20

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-8

Date Collected: 01/21/20 15:20

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-5

Matrix: Solid

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 12:09	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 15:57	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 21:36	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 13:22	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:34	JAP	TAL PEN

Client Sample ID: B-9

Date Collected: 01/21/20 15:30

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-9

Date Collected: 01/21/20 15:30

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-6

Matrix: Solid

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 12:31	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 16:29	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 21:48	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 13:27	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:36	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-10

Date Collected: 01/21/20 14:43

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-10

Date Collected: 01/21/20 14:43

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-7

Matrix: Solid

Percent Solids: 94.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 12:53	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 17:31	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 22:12	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 13:32	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:38	JAP	TAL PEN

Client Sample ID: B-11

Date Collected: 01/22/20 11:45

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-11

Date Collected: 01/22/20 11:45

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-8

Matrix: Solid

Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 13:15	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 18:03	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 22:24	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 13:53	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:39	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-12

Lab Sample ID: 400-182916-9

Date Collected: 01/22/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-12

Lab Sample ID: 400-182916-9

Date Collected: 01/22/20 11:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 13:37	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 18:34	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 22:35	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 13:58	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:41	JAP	TAL PEN

Client Sample ID: B-13

Lab Sample ID: 400-182916-10

Date Collected: 01/22/20 09:05

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-13

Lab Sample ID: 400-182916-10

Date Collected: 01/22/20 09:05

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 13:59	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 19:05	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 22:47	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 14:03	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:43	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-14

Lab Sample ID: 400-182916-11

Date Collected: 01/22/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-14

Lab Sample ID: 400-182916-11

Date Collected: 01/22/20 10:00

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 14:21	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 19:37	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 22:59	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 14:09	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:57	JAP	TAL PEN

Client Sample ID: B-15

Lab Sample ID: 400-182916-12

Date Collected: 01/22/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475425	01/25/20 13:12	BKG	TAL PEN

Client Sample ID: B-15

Lab Sample ID: 400-182916-12

Date Collected: 01/22/20 13:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 14:43	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 20:08	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 23:11	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 14:19	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 12:59	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-16

Lab Sample ID: 400-182916-13

Date Collected: 01/22/20 12:30

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475504	01/27/20 10:30	BKG	TAL PEN

Client Sample ID: B-16

Lab Sample ID: 400-182916-13

Date Collected: 01/22/20 12:30

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 15:05	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 20:39	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 23:22	JAW	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 14:24	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 13:01	JAP	TAL PEN

Client Sample ID: B-2

Lab Sample ID: 400-182916-14

Date Collected: 01/22/20 15:20

Matrix: Solid

Date Received: 01/23/20 09:21

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475504	01/27/20 10:30	BKG	TAL PEN

Client Sample ID: B-2

Lab Sample ID: 400-182916-14

Date Collected: 01/22/20 15:20

Matrix: Solid

Date Received: 01/23/20 09:21

Percent Solids: 83.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 15:27	RS	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 21:11	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 23:34	JAW	TAL PEN
Total/NA	Prep	3546			475548	01/27/20 13:19	SHB	TAL PEN
Total/NA	Analysis	8082A		5	475921	01/29/20 22:16	DS	TAL PEN
Total/NA	Prep	3050B			475731	01/28/20 13:59	KWN	TAL PEN
Total/NA	Analysis	6010C		1	476178	01/30/20 14:30	GESP	TAL PEN
Total/NA	Prep	7471B			475506	01/30/20 08:30	JAP	TAL PEN
Total/NA	Analysis	7471B		1	476106	01/30/20 13:03	JAP	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Client Sample ID: B-3

Date Collected: 01/21/20 10:00

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475504	01/27/20 10:30	BKG	TAL PEN

Client Sample ID: B-3

Date Collected: 01/21/20 10:00

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-15

Matrix: Solid

Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 15:49	RS	TAL PEN
Total/NA	Prep	3546			475744	01/28/20 14:46	SHB	TAL PEN
Total/NA	Analysis	8270D		1	476105	01/31/20 01:51	VC1	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 21:42	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 23:46	JAW	TAL PEN
Total/NA	Prep	3546			475548	01/27/20 13:19	SHB	TAL PEN
Total/NA	Analysis	8082A		1	475921	01/29/20 22:41	DS	TAL PEN

Client Sample ID: B-4

Date Collected: 01/21/20 11:00

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	475504	01/27/20 10:30	BKG	TAL PEN

Client Sample ID: B-4

Date Collected: 01/21/20 11:00

Date Received: 01/23/20 09:21

Lab Sample ID: 400-182916-16

Matrix: Solid

Percent Solids: 89.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			475647	01/28/20 06:49	RS	TAL PEN
Total/NA	Analysis	8260B		1	475624	01/28/20 16:11	RS	TAL PEN
Total/NA	Prep	3546			475744	01/28/20 14:46	SHB	TAL PEN
Total/NA	Analysis	8270D		1	476105	01/31/20 02:15	VC1	TAL PEN
Total/NA	Prep	5035			475902	01/29/20 11:16	AMG	TAL PEN
Total/NA	Analysis	8015C		1	475878	01/29/20 22:13	GRK	TAL PEN
Total/NA	Prep	3546			476417	02/03/20 10:40	KLR	TAL PEN
Total/NA	Analysis	8015C		1	476788	02/05/20 23:57	JAW	TAL PEN
Total/NA	Prep	3546			475548	01/27/20 13:19	SHB	TAL PEN
Total/NA	Analysis	8082A		1	475921	01/29/20 23:06	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Laboratory: Eurofins TestAmerica, Pensacola

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460166	06-14-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
6010C	3050B	Solid	Lead
7471B	7471B	Solid	Mercury
8015C	3546	Solid	Diesel Range Organics [C10-C28]
8015C	3546	Solid	Oil Range Organics (C28-C35)
8015C	5035	Solid	Gasoline Range Organics (GRO)-C6-C10
8082A	3546	Solid	PCB-1016
8082A	3546	Solid	PCB-1221
8082A	3546	Solid	PCB-1232
8082A	3546	Solid	PCB-1242
8082A	3546	Solid	PCB-1248
8082A	3546	Solid	PCB-1254
8082A	3546	Solid	PCB-1260
8260B	5035	Solid	1,1,1-Trichloroethane
8260B	5035	Solid	1,1,2,2-Tetrachloroethane
8260B	5035	Solid	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B	5035	Solid	1,1,2-Trichloroethane
8260B	5035	Solid	1,1-Dichloroethane
8260B	5035	Solid	1,1-Dichloroethene
8260B	5035	Solid	1,2,3-Trichlorobenzene
8260B	5035	Solid	1,2,4-Trichlorobenzene
8260B	5035	Solid	1,2-Dibromo-3-Chloropropane
8260B	5035	Solid	1,2-Dichlorobenzene
8260B	5035	Solid	1,2-Dichloroethane
8260B	5035	Solid	1,2-Dichloropropane
8260B	5035	Solid	1,3-Dichlorobenzene
8260B	5035	Solid	1,4-Dichlorobenzene
8260B	5035	Solid	2-Hexanone
8260B	5035	Solid	Acetone
8260B	5035	Solid	Benzene
8260B	5035	Solid	Bromodichloromethane
8260B	5035	Solid	Bromoform
8260B	5035	Solid	Bromomethane
8260B	5035	Solid	Carbon disulfide
8260B	5035	Solid	Carbon tetrachloride
8260B	5035	Solid	Chlorobenzene
8260B	5035	Solid	Chlorobromomethane
8260B	5035	Solid	Chloroethane
8260B	5035	Solid	Chloroform
8260B	5035	Solid	Chloromethane
8260B	5035	Solid	cis-1,2-Dichloroethene
8260B	5035	Solid	cis-1,3-Dichloropropene
8260B	5035	Solid	Dibromochloromethane
8260B	5035	Solid	Dibromofluoromethane
8260B	5035	Solid	Dichlorodifluoromethane
8260B	5035	Solid	Ethylbenzene

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460166	06-14-20
8260B	5035	Solid	Ethylene Dibromide
8260B	5035	Solid	Isopropylbenzene
8260B	5035	Solid	Methyl acetate
8260B	5035	Solid	Methyl Ethyl Ketone
8260B	5035	Solid	methyl isobutyl ketone
8260B	5035	Solid	Methyl tert-butyl ether
8260B	5035	Solid	Methylene Chloride
8260B	5035	Solid	Styrene
8260B	5035	Solid	Tetrachloroethene
8260B	5035	Solid	Toluene
8260B	5035	Solid	trans-1,2-Dichloroethene
8260B	5035	Solid	trans-1,3-Dichloropropene
8260B	5035	Solid	Trichloroethene
8260B	5035	Solid	Trichlorofluoromethane
8260B	5035	Solid	Vinyl chloride
8260B	5035	Solid	Xylenes, Total
8270D	3546	Solid	1-Methylnaphthalene
8270D	3546	Solid	2-Methylnaphthalene
8270D	3546	Solid	Acenaphthene
8270D	3546	Solid	Acenaphthylene
8270D	3546	Solid	Anthracene
8270D	3546	Solid	Benzo[a]anthracene
8270D	3546	Solid	Benzo[a]pyrene
8270D	3546	Solid	Benzo[b]fluoranthene
8270D	3546	Solid	Benzo[g,h,i]perylene
8270D	3546	Solid	Benzo[k]fluoranthene
8270D	3546	Solid	Chrysene
8270D	3546	Solid	Dibenz(a,h)anthracene
8270D	3546	Solid	Fluoranthene
8270D	3546	Solid	Fluorene
8270D	3546	Solid	Indeno[1,2,3-cd]pyrene
8270D	3546	Solid	Naphthalene
8270D	3546	Solid	Phenanthrene
8270D	3546	Solid	Pyrene
Moisture		Solid	Percent Moisture

Method Summary

Client: SCS Engineers
Project/Site: St Paul Phase II

Job ID: 400-182916-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL PEN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PEN
6010C	Metals (ICP)	SW846	TAL PEN
7471B	Mercury (CVAA)	SW846	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN
3050B	Preparation, Metals	SW846	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5035	Closed System Purge and Trap	SW846	TAL PEN
7471B	Preparation, Mercury	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Chain of Custody Record



400-182916 COC

Client Information		Sampler: <u>BRIANNE APOLINAR</u>		Lab PM: Swafford, Mark H		Carrier Tracking No(s):		COC No: 400-90969-33435.1					
Client Contact: Alexis Holcomb		Phone: <u>561-267-1407</u>		E-Mail: mark.swafford@testamericainc.com				Page: Page 1 of 2					
Company: SCS Engineers		Due Date Requested:		Analysis Requested				Job #: #202					
Address: 2877 Guardian Lane Suite 1-F		TAT Requested (days):		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Preservation Codes:					
City: Virginia Beach		PO #:		8016C_DRO - DRO C10-C28		8010C, 7471B		A - HCL					
State, Zip: VA, 23452		Purchase Order Requested		8260B - TCL 8260 volatiles and GRO		8016C_GRO - GRO (C6-C10)		B - NaOH					
Phone:		WO #:		8016C_DRO, 8082A		8016C_DRO, 8082A, 8270D		C - Zn Acetate					
Email: AHolcomb@scsengineers.com		Project #:						D - Nitric Acid					
Project Name: St. Paul's Sampling		SSOW#:						E - NaHSO4					
Site:								F - MeOH					
								G - Amchlor					
								H - Ascorbic Acid					
								I - Ice					
								J - DI Water					
								K - EDTA					
								L - EDA					
								M - Hexane					
								N - None					
								O - AsNaO2					
								P - Na2O4S					
								Q - Na2SO3					
								R - Na2S2O3					
								S - H2SO4					
								T - TSP Dodecahydrate					
								U - Acetone					
								V - MCAA					
								W - pH 4-5					
								Z - other (specify)					
								Other:					
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air)		Total Number of containers		Special Instructions/Note:	
B-1		1/21		1220		G		Solid		3			
B-5		1/21		1330		G		Solid		3			
B-6		1/21		1440		G		Solid		3			
B-7		1/21		1520		G		Solid		3			
B-8		1/21		1536		G		Solid		3			
B-9		1/21		1443		G		Solid		3			
B-10						G		Solid					
B-11						G		Solid					
B-12						G		Solid					
B-13								Solid					
B-14								Solid					
Possible Hazard Identification					Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Deliverable Requested: I, II, III, IV, Other (specify)					Special Instructions/QC Requirements:								
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:							
Relinquished by: <u>[Signature]</u>		Date/Time: 1/22 15:53		Company: SCS		Received by: <u>[Signature]</u>		Date/Time: 1/22/20 1555					
Relinquished by: <u>[Signature]</u>		Date/Time: 1/22/20 1600		Company: ETA		Received by: <u>[Signature]</u>		Date/Time: 1/23/2020 921					
Relinquished by: <u>[Signature]</u>		Date/Time:		Company:		Received by:		Date/Time:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:									

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Virginia Beach

#202



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 400-182916-1

Login Number: 182916

List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Conrady, Hank W

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1°C 0.1°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	Refer to Job Narrative for details.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-183283-1
Client Project/Site: St.Paul's

For:
SCS Engineers
2877 Guardian Lane
Suite 1-F
Virginia Beach, Virginia 23452

Attn: Alexis Holcomb



Authorized for release by:
2/12/2020 10:38:33 AM

Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Glossary

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

Case Narrative

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Job ID: 400-183283-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

**Job Narrative
400-183283-1**

Comments

No additional comments.

Receipt

The samples were received on 1/30/2020 9:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 0.2° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-477222 recovered outside acceptance criteria, low biased, for Dibenz(a,h)anthracene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-477422 recovered outside acceptance criteria, low biased, for Benzo[g,h,i]perylene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

Method 8082A: Two surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (LCS 400-476390/2-A). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 400-476480.

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 400-476390.

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 400-476444.

Method 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 400-476746.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.



Detection Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-1

Lab Sample ID: 400-183283-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	140		110		ug/L	1		8015C	Total/NA

Client Sample ID: TW-2

Lab Sample ID: 400-183283-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	780		110		ug/L	1		8015C	Total/NA

Client Sample ID: TW-5

Lab Sample ID: 400-183283-3

No Detections.

Client Sample ID: TW-6

Lab Sample ID: 400-183283-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	310		110		ug/L	1		8015C	Total/NA

Client Sample ID: TW-7

Lab Sample ID: 400-183283-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	7.2		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: TW-3

Lab Sample ID: 400-183283-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.5		0.18		ug/L	1		8270D LL	Total/NA
Diesel Range Organics [C10-C28]	200		120		ug/L	1		8015C	Total/NA

Client Sample ID: TW-4

Lab Sample ID: 400-183283-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	560		120		ug/L	1		8015C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Sample Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-183283-1	TW-1	Water	01/27/20 12:15	01/30/20 09:22	
400-183283-2	TW-2	Water	01/27/20 11:07	01/30/20 09:22	
400-183283-3	TW-5	Water	01/29/20 10:20	01/30/20 09:22	
400-183283-4	TW-6	Water	01/29/20 11:40	01/30/20 09:22	
400-183283-5	TW-7	Water	01/29/20 12:40	01/30/20 09:22	
400-183283-6	TW-3	Water	01/27/20 13:50	01/30/20 09:22	
400-183283-7	TW-4	Water	01/29/20 08:45	01/30/20 09:22	

- 1
- 2
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- 12
- 13
- 14

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-1

Lab Sample ID: 400-183283-1

Date Collected: 01/27/20 12:15

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 19:26	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 19:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 19:26	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 19:26	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 19:26	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 19:26	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 19:26	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 19:26	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 19:26	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
2-Hexanone	<25		25		ug/L			02/03/20 19:26	1
Acetone	<25		25		ug/L			02/03/20 19:26	1
Benzene	<1.0		1.0		ug/L			02/03/20 19:26	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Bromoform	<5.0		5.0		ug/L			02/03/20 19:26	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 19:26	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 19:26	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Chloroform	<1.0		1.0		ug/L			02/03/20 19:26	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 19:26	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 19:26	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 19:26	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 19:26	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 19:26	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 19:26	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 19:26	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 19:26	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 19:26	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 19:26	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 19:26	1
Styrene	<1.0		1.0		ug/L			02/03/20 19:26	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 19:26	1
Toluene	<1.0		1.0		ug/L			02/03/20 19:26	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 19:26	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 19:26	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 19:26	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 19:26	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 19:26	1
Xylenes, Total	<10		10		ug/L			02/03/20 19:26	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-1

Lab Sample ID: 400-183283-1

Date Collected: 01/27/20 12:15

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		78 - 118					02/03/20 19:26	1
Dibromofluoromethane	96		81 - 121					02/03/20 19:26	1
Toluene-d8 (Surr)	93		80 - 120					02/03/20 19:26	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 18:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119					02/04/20 18:44	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	140		110		ug/L		02/03/20 13:51	02/05/20 02:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		40 - 140				02/03/20 13:51	02/05/20 02:43	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-2

Lab Sample ID: 400-183283-2

Date Collected: 01/27/20 11:07

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 19:56	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 19:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 19:56	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 19:56	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 19:56	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 19:56	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 19:56	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 19:56	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 19:56	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
2-Hexanone	<25		25		ug/L			02/03/20 19:56	1
Acetone	<25		25		ug/L			02/03/20 19:56	1
Benzene	<1.0		1.0		ug/L			02/03/20 19:56	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Bromoform	<5.0		5.0		ug/L			02/03/20 19:56	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 19:56	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 19:56	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Chloroform	<1.0		1.0		ug/L			02/03/20 19:56	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 19:56	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 19:56	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 19:56	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 19:56	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 19:56	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 19:56	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 19:56	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 19:56	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 19:56	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 19:56	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 19:56	1
Styrene	<1.0		1.0		ug/L			02/03/20 19:56	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 19:56	1
Toluene	<1.0		1.0		ug/L			02/03/20 19:56	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 19:56	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 19:56	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 19:56	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 19:56	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 19:56	1
Xylenes, Total	<10		10		ug/L			02/03/20 19:56	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-2

Lab Sample ID: 400-183283-2

Date Collected: 01/27/20 11:07

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		78 - 118					02/03/20 19:56	1
Dibromofluoromethane	94		81 - 121					02/03/20 19:56	1
Toluene-d8 (Surr)	91		80 - 120					02/03/20 19:56	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 20:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119					02/04/20 20:09	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	780		110		ug/L		02/03/20 13:51	02/05/20 02:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	73		40 - 140				02/03/20 13:51	02/05/20 02:54	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-5

Lab Sample ID: 400-183283-3

Date Collected: 01/29/20 10:20

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 20:25	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 20:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 20:25	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 20:25	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 20:25	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 20:25	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 20:25	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 20:25	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 20:25	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
2-Hexanone	<25		25		ug/L			02/03/20 20:25	1
Acetone	<25		25		ug/L			02/03/20 20:25	1
Benzene	<1.0		1.0		ug/L			02/03/20 20:25	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Bromoform	<5.0		5.0		ug/L			02/03/20 20:25	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 20:25	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 20:25	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Chloroform	<1.0		1.0		ug/L			02/03/20 20:25	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 20:25	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 20:25	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 20:25	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 20:25	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 20:25	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 20:25	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 20:25	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 20:25	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 20:25	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 20:25	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 20:25	1
Styrene	<1.0		1.0		ug/L			02/03/20 20:25	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 20:25	1
Toluene	<1.0		1.0		ug/L			02/03/20 20:25	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 20:25	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 20:25	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 20:25	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 20:25	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 20:25	1
Xylenes, Total	<10		10		ug/L			02/03/20 20:25	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-5

Lab Sample ID: 400-183283-3

Date Collected: 01/29/20 10:20

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 20:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		78 - 118					02/03/20 20:25	1
Dibromofluoromethane	96		81 - 121					02/03/20 20:25	1
Toluene-d8 (Surr)	91		80 - 120					02/03/20 20:25	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 20:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		78 - 119					02/04/20 20:37	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/03/20 13:51	02/05/20 03:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	67		40 - 140				02/03/20 13:51	02/05/20 03:18	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-6

Lab Sample ID: 400-183283-4

Date Collected: 01/29/20 11:40

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 20:55	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 20:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 20:55	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 20:55	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 20:55	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 20:55	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 20:55	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 20:55	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 20:55	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
2-Hexanone	<25		25		ug/L			02/03/20 20:55	1
Acetone	<25		25		ug/L			02/03/20 20:55	1
Benzene	<1.0		1.0		ug/L			02/03/20 20:55	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Bromoform	<5.0		5.0		ug/L			02/03/20 20:55	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 20:55	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 20:55	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Chloroform	<1.0		1.0		ug/L			02/03/20 20:55	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 20:55	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 20:55	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 20:55	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 20:55	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 20:55	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 20:55	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 20:55	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 20:55	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 20:55	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 20:55	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 20:55	1
Styrene	<1.0		1.0		ug/L			02/03/20 20:55	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 20:55	1
Toluene	<1.0		1.0		ug/L			02/03/20 20:55	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 20:55	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 20:55	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 20:55	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 20:55	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 20:55	1
Xylenes, Total	<10		10		ug/L			02/03/20 20:55	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-6

Lab Sample ID: 400-183283-4

Date Collected: 01/29/20 11:40

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 20:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		78 - 118					02/03/20 20:55	1
Dibromofluoromethane	94		81 - 121					02/03/20 20:55	1
Toluene-d8 (Surr)	90		80 - 120					02/03/20 20:55	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 21:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	106		78 - 119					02/04/20 21:06	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	310		110		ug/L		02/03/20 13:51	02/05/20 03:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	80		40 - 140				02/03/20 13:51	02/05/20 03:30	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-7

Lab Sample ID: 400-183283-5

Date Collected: 01/29/20 12:40

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 21:24	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 21:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 21:24	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 21:24	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 21:24	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 21:24	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 21:24	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 21:24	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 21:24	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
2-Hexanone	<25		25		ug/L			02/03/20 21:24	1
Acetone	<25		25		ug/L			02/03/20 21:24	1
Benzene	<1.0		1.0		ug/L			02/03/20 21:24	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Bromoform	<5.0		5.0		ug/L			02/03/20 21:24	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 21:24	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 21:24	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Chloroform	<1.0		1.0		ug/L			02/03/20 21:24	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 21:24	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 21:24	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 21:24	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 21:24	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 21:24	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 21:24	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 21:24	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 21:24	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 21:24	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 21:24	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 21:24	1
Styrene	<1.0		1.0		ug/L			02/03/20 21:24	1
Tetrachloroethene	7.2		1.0		ug/L			02/03/20 21:24	1
Toluene	<1.0		1.0		ug/L			02/03/20 21:24	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 21:24	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 21:24	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 21:24	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 21:24	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 21:24	1
Xylenes, Total	<10		10		ug/L			02/03/20 21:24	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-7

Lab Sample ID: 400-183283-5

Date Collected: 01/29/20 12:40

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 21:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		78 - 118					02/03/20 21:24	1
Dibromofluoromethane	96		81 - 121					02/03/20 21:24	1
Toluene-d8 (Surr)	92		80 - 120					02/03/20 21:24	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 21:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	96		78 - 119					02/04/20 21:34	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/03/20 13:51	02/05/20 03:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		40 - 140				02/03/20 13:51	02/05/20 03:42	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-3

Lab Sample ID: 400-183283-6

Date Collected: 01/27/20 13:50

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 21:54	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 21:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 21:54	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 21:54	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 21:54	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 21:54	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 21:54	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 21:54	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 21:54	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
2-Hexanone	<25		25		ug/L			02/03/20 21:54	1
Acetone	<25		25		ug/L			02/03/20 21:54	1
Benzene	<1.0		1.0		ug/L			02/03/20 21:54	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Bromoform	<5.0		5.0		ug/L			02/03/20 21:54	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 21:54	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 21:54	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Chloroform	<1.0		1.0		ug/L			02/03/20 21:54	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 21:54	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 21:54	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 21:54	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 21:54	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 21:54	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 21:54	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 21:54	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 21:54	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 21:54	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 21:54	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 21:54	1
Styrene	<1.0		1.0		ug/L			02/03/20 21:54	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 21:54	1
Toluene	<1.0		1.0		ug/L			02/03/20 21:54	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 21:54	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 21:54	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 21:54	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 21:54	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 21:54	1
Xylenes, Total	<10		10		ug/L			02/03/20 21:54	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-3

Lab Sample ID: 400-183283-6

Date Collected: 01/27/20 13:50

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 21:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		78 - 118					02/03/20 21:54	1
Dibromofluoromethane	96		81 - 121					02/03/20 21:54	1
Toluene-d8 (Surr)	92		80 - 120					02/03/20 21:54	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Acenaphthylene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Anthracene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Benzo[a]pyrene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Benzo[b]fluoranthene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Benzo[g,h,i]perylene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Benzo[k]fluoranthene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Chrysene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Dibenz(a,h)anthracene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Fluoranthene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Fluorene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Indeno[1,2,3-cd]pyrene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
1-Methylnaphthalene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
2-Methylnaphthalene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Naphthalene	2.5		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Phenanthrene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Pyrene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Benzo[a]anthracene	<0.18		0.18		ug/L		02/03/20 11:34	02/06/20 15:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	77		15 - 122				02/03/20 11:34	02/06/20 15:03	1
Nitrobenzene-d5 (Surr)	76		19 - 130				02/03/20 11:34	02/06/20 15:03	1
Terphenyl-d14 (Surr)	85		33 - 138				02/03/20 11:34	02/06/20 15:03	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 22:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119					02/04/20 22:02	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	200		120		ug/L		02/03/20 13:51	02/05/20 03:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	81		40 - 140				02/03/20 13:51	02/05/20 03:53	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1
PCB-1221	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1

Eurofins TestAmerica, Pensacola

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-3

Lab Sample ID: 400-183283-6

Date Collected: 01/27/20 13:50

Matrix: Water

Date Received: 01/30/20 09:22

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1
PCB-1242	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1
PCB-1248	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1
PCB-1254	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1
PCB-1260	<0.50		0.50		ug/L		02/03/20 09:21	02/07/20 00:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	57		10 - 125	02/03/20 09:21	02/07/20 00:32	1
Tetrachloro-m-xylene	46		46 - 150	02/03/20 09:21	02/07/20 00:32	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-4

Lab Sample ID: 400-183283-7

Date Collected: 01/29/20 08:45

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 22:23	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 22:23	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 22:23	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 22:23	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 22:23	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 22:23	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 22:23	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 22:23	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
2-Hexanone	<25		25		ug/L			02/03/20 22:23	1
Acetone	<25		25		ug/L			02/03/20 22:23	1
Benzene	<1.0		1.0		ug/L			02/03/20 22:23	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Bromoform	<5.0		5.0		ug/L			02/03/20 22:23	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 22:23	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 22:23	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Chloroform	<1.0		1.0		ug/L			02/03/20 22:23	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 22:23	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 22:23	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 22:23	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 22:23	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 22:23	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 22:23	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 22:23	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 22:23	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 22:23	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 22:23	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 22:23	1
Styrene	<1.0		1.0		ug/L			02/03/20 22:23	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 22:23	1
Toluene	<1.0		1.0		ug/L			02/03/20 22:23	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 22:23	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 22:23	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 22:23	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 22:23	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 22:23	1
Xylenes, Total	<10		10		ug/L			02/03/20 22:23	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-4

Lab Sample ID: 400-183283-7

Date Collected: 01/29/20 08:45

Matrix: Water

Date Received: 01/30/20 09:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 22:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		78 - 118					02/03/20 22:23	1
Dibromofluoromethane	96		81 - 121					02/03/20 22:23	1
Toluene-d8 (Surr)	90		80 - 120					02/03/20 22:23	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Acenaphthylene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Anthracene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Benzo[a]pyrene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Benzo[b]fluoranthene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Benzo[g,h,i]perylene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Benzo[k]fluoranthene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Chrysene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Dibenz(a,h)anthracene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Fluoranthene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Fluorene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
1-Methylnaphthalene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
2-Methylnaphthalene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Naphthalene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Phenanthrene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Pyrene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Benzo[a]anthracene	<0.20		0.20		ug/L		02/05/20 12:13	02/11/20 08:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	78		15 - 122				02/05/20 12:13	02/11/20 08:57	1
Nitrobenzene-d5 (Surr)	79		19 - 130				02/05/20 12:13	02/11/20 08:57	1
Terphenyl-d14 (Surr)	79		33 - 138				02/05/20 12:13	02/11/20 08:57	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 22:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119					02/04/20 22:31	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	560		120		ug/L		02/03/20 13:51	02/05/20 04:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	61		40 - 140				02/03/20 13:51	02/05/20 04:05	1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1
PCB-1221	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1

Eurofins TestAmerica, Pensacola

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-4

Lab Sample ID: 400-183283-7

Date Collected: 01/29/20 08:45

Matrix: Water

Date Received: 01/30/20 09:22

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1232	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1
PCB-1242	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1
PCB-1248	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1
PCB-1254	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1
PCB-1260	<0.54		0.54		ug/L		02/03/20 09:21	02/07/20 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	53		10 - 125	02/03/20 09:21	02/07/20 01:02	1
Tetrachloro-m-xylene	48		46 - 150	02/03/20 09:21	02/07/20 01:02	1

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

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

Lab Sample ID: MB 400-476419/4

Matrix: Water

Analysis Batch: 476419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 13:33	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 13:33	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
2-Hexanone	<25		25		ug/L			02/03/20 13:33	1
Acetone	<25		25		ug/L			02/03/20 13:33	1
Benzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Bromoform	<5.0		5.0		ug/L			02/03/20 13:33	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 13:33	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 13:33	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Chloroform	<1.0		1.0		ug/L			02/03/20 13:33	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 13:33	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 13:33	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 13:33	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 13:33	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 13:33	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 13:33	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 13:33	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 13:33	1
Styrene	<1.0		1.0		ug/L			02/03/20 13:33	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
Toluene	<1.0		1.0		ug/L			02/03/20 13:33	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 13:33	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 13:33	1

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

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

Lab Sample ID: MB 400-476419/4

Matrix: Water

Analysis Batch: 476419

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<10		10		ug/L			02/03/20 13:33	1
Naphthalene	<1.0		1.0		ug/L			02/03/20 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		78 - 118		02/03/20 13:33	1
Dibromofluoromethane	97		81 - 121		02/03/20 13:33	1
Toluene-d8 (Surr)	92		80 - 120		02/03/20 13:33	1

Lab Sample ID: LCS 400-476419/1002

Matrix: Water

Analysis Batch: 476419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	68 - 130
1,1,2,2-Tetrachloroethane	50.0	45.4		ug/L		91	70 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.6		ug/L		99	60 - 139
1,1,2-Trichloroethane	50.0	46.9		ug/L		94	70 - 130
1,1-Dichloroethane	50.0	51.3		ug/L		103	70 - 130
1,1-Dichloroethene	50.0	50.6		ug/L		101	63 - 134
1,2,3-Trichlorobenzene	50.0	46.2		ug/L		92	60 - 138
1,2,4-Trichlorobenzene	50.0	45.8		ug/L		92	60 - 140
1,2-Dibromo-3-Chloropropane	50.0	44.5		ug/L		89	54 - 135
1,2-Dichlorobenzene	50.0	44.8		ug/L		90	67 - 130
1,2-Dichloroethane	50.0	48.8		ug/L		98	69 - 130
1,2-Dichloropropane	50.0	50.4		ug/L		101	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/L		88	70 - 130
1,4-Dichlorobenzene	50.0	44.2		ug/L		88	70 - 130
2-Hexanone	200	175		ug/L		88	65 - 137
Acetone	200	185		ug/L		93	43 - 160
Benzene	50.0	49.6		ug/L		99	70 - 130
Bromodichloromethane	50.0	50.1		ug/L		100	67 - 133
Bromoform	50.0	47.3		ug/L		95	57 - 140
Bromomethane	50.0	52.2		ug/L		104	10 - 160
Carbon disulfide	50.0	52.2		ug/L		104	61 - 137
Carbon tetrachloride	50.0	48.4		ug/L		97	61 - 137
Chlorobenzene	50.0	47.0		ug/L		94	70 - 130
Chlorobromomethane	50.0	51.3		ug/L		103	70 - 130
Chloroethane	50.0	56.8		ug/L		114	55 - 141
Chloroform	50.0	50.2		ug/L		100	69 - 130
Chloromethane	50.0	50.5		ug/L		101	58 - 137
cis-1,2-Dichloroethene	50.0	49.8		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	49.7		ug/L		99	69 - 132
Cyclohexane	50.0	47.2		ug/L		94	70 - 130
Dibromochloromethane	50.0	47.9		ug/L		96	67 - 135
Dichlorodifluoromethane	50.0	50.8		ug/L		102	41 - 146
Ethylbenzene	50.0	46.2		ug/L		92	70 - 130
Ethylene Dibromide	50.0	45.1		ug/L		90	70 - 130
Isopropylbenzene	50.0	45.8		ug/L		92	70 - 130

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

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

Lab Sample ID: LCS 400-476419/1002

Matrix: Water

Analysis Batch: 476419

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	100	93.0		ug/L		93	45 - 159
Methyl Ethyl Ketone	200	198		ug/L		99	61 - 145
methyl isobutyl ketone	200	190		ug/L		95	69 - 138
Methyl tert-butyl ether	50.0	49.9		ug/L		100	66 - 130
Methylene Chloride	50.0	56.1		ug/L		112	66 - 135
Styrene	50.0	46.1		ug/L		92	70 - 130
Tetrachloroethene	50.0	44.0		ug/L		88	65 - 130
Toluene	50.0	45.5		ug/L		91	70 - 130
trans-1,2-Dichloroethene	50.0	49.5		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	47.0		ug/L		94	63 - 130
Trichloroethene	50.0	51.6		ug/L		103	70 - 130
Trichlorofluoromethane	50.0	49.6		ug/L		99	65 - 138
Vinyl chloride	50.0	52.0		ug/L		104	59 - 136
Xylenes, Total	100	92.0		ug/L		92	70 - 130
Naphthalene	50.0	45.7		ug/L		91	47 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		78 - 118
Dibromofluoromethane	98		81 - 121
Toluene-d8 (Surr)	93		80 - 120

Lab Sample ID: 400-183301-A-4 MS

Matrix: Water

Analysis Batch: 476419

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<1.0		50.0	50.8		ug/L		102	57 - 142
1,1,1,2-Tetrachloroethane	<1.0		50.0	46.3		ug/L		93	66 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	51.9		ug/L		104	55 - 150
1,1,2-Trichloroethane	<5.0		50.0	47.5		ug/L		95	66 - 131
1,1-Dichloroethane	<1.0		50.0	53.0		ug/L		106	61 - 144
1,1-Dichloroethene	<1.0		50.0	56.2		ug/L		112	54 - 147
1,2,3-Trichlorobenzene	<1.0		50.0	48.3		ug/L		97	43 - 145
1,2,4-Trichlorobenzene	<1.0		50.0	46.2		ug/L		92	39 - 148
1,2-Dibromo-3-Chloropropane	<5.0		50.0	47.1		ug/L		94	45 - 135
1,2-Dichlorobenzene	<1.0		50.0	44.3		ug/L		89	52 - 137
1,2-Dichloroethane	<1.0		50.0	50.0		ug/L		100	60 - 141
1,2-Dichloropropane	<1.0		50.0	51.5		ug/L		103	66 - 137
1,3-Dichlorobenzene	<1.0		50.0	44.2		ug/L		88	54 - 135
1,4-Dichlorobenzene	<1.0		50.0	44.1		ug/L		88	53 - 135
2-Hexanone	<25		200	173		ug/L		87	65 - 140
Acetone	<25		200	174		ug/L		87	43 - 150
Benzene	<1.0		50.0	51.0		ug/L		102	56 - 142
Bromodichloromethane	<1.0		50.0	50.9		ug/L		102	59 - 143
Bromoform	<5.0		50.0	47.5		ug/L		95	50 - 140
Bromomethane	<1.0		50.0	53.5		ug/L		107	10 - 150
Carbon disulfide	<1.0		50.0	53.5		ug/L		107	48 - 150
Carbon tetrachloride	<1.0		50.0	51.6		ug/L		103	55 - 145

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

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

Lab Sample ID: 400-183301-A-4 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476419

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chlorobenzene	<1.0		50.0	46.7		ug/L		93	64 - 130	
Chlorobromomethane	<1.0		50.0	49.9		ug/L		100	64 - 140	
Chloroethane	<1.0		50.0	57.6		ug/L		115	50 - 150	
Chloroform	<1.0		50.0	51.7		ug/L		103	60 - 141	
Chloromethane	<1.0		50.0	51.0		ug/L		102	49 - 148	
cis-1,2-Dichloroethene	<1.0		50.0	50.6		ug/L		101	59 - 143	
cis-1,3-Dichloropropene	<5.0		50.0	49.9		ug/L		100	57 - 140	
Cyclohexane	<1.0		50.0	51.6		ug/L		103	58 - 141	
Dibromochloromethane	<1.0		50.0	48.4		ug/L		97	56 - 143	
Dichlorodifluoromethane	<1.0		50.0	57.3		ug/L		115	16 - 150	
Ethylbenzene	<1.0		50.0	45.5		ug/L		91	58 - 131	
Ethylene Dibromide	<1.0		50.0	47.2		ug/L		94	64 - 132	
Isopropylbenzene	<1.0		50.0	44.8		ug/L		90	56 - 133	
Methyl acetate	<5.0		100	93.1		ug/L		93	21 - 150	
Methyl Ethyl Ketone	<25		200	191		ug/L		95	55 - 150	
methyl isobutyl ketone	<25		200	194		ug/L		97	63 - 146	
Methyl tert-butyl ether	<1.0		50.0	51.2		ug/L		102	59 - 137	
Methylene Chloride	<5.0		50.0	52.8		ug/L		106	60 - 146	
Styrene	<1.0		50.0	45.3		ug/L		91	58 - 131	
Tetrachloroethene	<1.0		50.0	42.5		ug/L		85	52 - 133	
Toluene	<1.0		50.0	46.5		ug/L		93	65 - 130	
trans-1,2-Dichloroethene	<1.0		50.0	50.9		ug/L		102	61 - 143	
trans-1,3-Dichloropropene	<5.0		50.0	46.1		ug/L		92	53 - 133	
Trichloroethene	<1.0		50.0	52.8		ug/L		106	64 - 136	
Trichlorofluoromethane	<1.0		50.0	54.7		ug/L		109	54 - 150	
Vinyl chloride	<1.0		50.0	57.0		ug/L		114	46 - 150	
Xylenes, Total	<10		100	91.3		ug/L		91	59 - 130	
Naphthalene	<1.0		50.0	49.2		ug/L		98	25 - 150	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	100		78 - 118
Dibromofluoromethane	97		81 - 121
Toluene-d8 (Surr)	94		80 - 120

Lab Sample ID: 400-183301-A-4 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476419

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
1,1,1-Trichloroethane	<1.0		50.0	49.4		ug/L		99	57 - 142	3	30		
1,1,1,2,2-Tetrachloroethane	<1.0		50.0	44.9		ug/L		90	66 - 135	3	30		
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	49.7		ug/L		99	55 - 150	4	30		
1,1,2-Trichloroethane	<5.0		50.0	44.5		ug/L		89	66 - 131	7	30		
1,1-Dichloroethane	<1.0		50.0	52.5		ug/L		105	61 - 144	1	30		
1,1-Dichloroethene	<1.0		50.0	57.2		ug/L		114	54 - 147	2	30		
1,2,3-Trichlorobenzene	<1.0		50.0	45.2		ug/L		90	43 - 145	7	30		
1,2,4-Trichlorobenzene	<1.0		50.0	42.7		ug/L		85	39 - 148	8	30		
1,2-Dibromo-3-Chloropropane	<5.0		50.0	46.8		ug/L		94	45 - 135	1	30		

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

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

Lab Sample ID: 400-183301-A-4 MSD

Matrix: Water

Analysis Batch: 476419

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,2-Dichlorobenzene	<1.0		50.0	41.3		ug/L		83	52 - 137	7	30
1,2-Dichloroethane	<1.0		50.0	48.6		ug/L		97	60 - 141	3	30
1,2-Dichloropropane	<1.0		50.0	50.3		ug/L		101	66 - 137	2	30
1,3-Dichlorobenzene	<1.0		50.0	40.5		ug/L		81	54 - 135	9	30
1,4-Dichlorobenzene	<1.0		50.0	39.4		ug/L		79	53 - 135	11	30
2-Hexanone	<25		200	171		ug/L		85	65 - 140	2	30
Acetone	<25		200	180		ug/L		90	43 - 150	4	30
Benzene	<1.0		50.0	49.7		ug/L		99	56 - 142	2	30
Bromodichloromethane	<1.0		50.0	49.8		ug/L		100	59 - 143	2	30
Bromoform	<5.0		50.0	45.3		ug/L		91	50 - 140	5	30
Bromomethane	<1.0		50.0	52.8		ug/L		106	10 - 150	1	50
Carbon disulfide	<1.0		50.0	53.3		ug/L		107	48 - 150	0	30
Carbon tetrachloride	<1.0		50.0	51.3		ug/L		103	55 - 145	1	30
Chlorobenzene	<1.0		50.0	44.0		ug/L		88	64 - 130	6	30
Chlorobromomethane	<1.0		50.0	42.8		ug/L		86	64 - 140	15	30
Chloroethane	<1.0		50.0	58.7		ug/L		117	50 - 150	2	30
Chloroform	<1.0		50.0	49.9		ug/L		100	60 - 141	3	30
Chloromethane	<1.0		50.0	51.3		ug/L		103	49 - 148	0	31
cis-1,2-Dichloroethene	<1.0		50.0	49.7		ug/L		99	59 - 143	2	30
cis-1,3-Dichloropropene	<5.0		50.0	48.8		ug/L		98	57 - 140	2	30
Cyclohexane	<1.0		50.0	50.0		ug/L		100	58 - 141	3	30
Dibromochloromethane	<1.0		50.0	45.6		ug/L		91	56 - 143	6	30
Dichlorodifluoromethane	<1.0		50.0	48.0		ug/L		96	16 - 150	18	31
Ethylbenzene	<1.0		50.0	42.3		ug/L		85	58 - 131	7	30
Ethylene Dibromide	<1.0		50.0	45.2		ug/L		90	64 - 132	4	30
Isopropylbenzene	<1.0		50.0	41.0		ug/L		82	56 - 133	9	30
Methyl acetate	<5.0		100	94.6		ug/L		95	21 - 150	2	30
Methyl Ethyl Ketone	<25		200	193		ug/L		96	55 - 150	1	30
methyl isobutyl ketone	<25		200	193		ug/L		96	63 - 146	1	30
Methyl tert-butyl ether	<1.0		50.0	50.1		ug/L		100	59 - 137	2	30
Methylene Chloride	<5.0		50.0	50.9		ug/L		102	60 - 146	4	32
Styrene	<1.0		50.0	42.4		ug/L		85	58 - 131	7	30
Tetrachloroethene	<1.0		50.0	39.5		ug/L		79	52 - 133	7	30
Toluene	<1.0		50.0	43.9		ug/L		88	65 - 130	6	30
trans-1,2-Dichloroethene	<1.0		50.0	49.8		ug/L		100	61 - 143	2	30
trans-1,3-Dichloropropene	<5.0		50.0	45.0		ug/L		90	53 - 133	2	30
Trichloroethene	<1.0		50.0	51.1		ug/L		102	64 - 136	3	30
Trichlorofluoromethane	<1.0		50.0	49.9		ug/L		100	54 - 150	9	30
Vinyl chloride	<1.0		50.0	52.8		ug/L		106	46 - 150	8	30
Xylenes, Total	<10		100	85.0		ug/L		85	59 - 130	7	30
Naphthalene	<1.0		50.0	48.2		ug/L		96	25 - 150	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	99		78 - 118
Dibromofluoromethane	98		81 - 121
Toluene-d8 (Surr)	92		80 - 120

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-476444/1-A
Matrix: Water
Analysis Batch: 476870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476444

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Acenaphthylene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Anthracene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Benzo[a]pyrene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Benzo[b]fluoranthene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Benzo[g,h,i]perylene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Benzo[k]fluoranthene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Chrysene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Dibenz(a,h)anthracene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Fluoranthene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Fluorene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Indeno[1,2,3-cd]pyrene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
1-Methylnaphthalene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
2-Methylnaphthalene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Naphthalene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Phenanthrene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Pyrene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1
Benzo[a]anthracene	<0.050		0.050		ug/L		02/03/20 11:34	02/06/20 16:43	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	78		15 - 122	02/03/20 11:34	02/06/20 16:43	1
Nitrobenzene-d5 (Surr)	75		19 - 130	02/03/20 11:34	02/06/20 16:43	1
Terphenyl-d14 (Surr)	99		33 - 138	02/03/20 11:34	02/06/20 16:43	1

Lab Sample ID: LCS 400-476444/2-A
Matrix: Water
Analysis Batch: 476870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476444

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Acenaphthene	30.0	25.8		ug/L		86	41 - 120
Acenaphthylene	30.0	27.1		ug/L		90	44 - 120
Anthracene	30.0	26.8		ug/L		89	49 - 120
Benzo[a]pyrene	30.0	24.2		ug/L		81	52 - 120
Benzo[b]fluoranthene	30.0	23.5		ug/L		78	53 - 134
Benzo[g,h,i]perylene	30.0	20.9		ug/L		70	47 - 133
Benzo[k]fluoranthene	30.0	25.8		ug/L		86	57 - 134
Chrysene	30.0	24.1		ug/L		80	55 - 122
Dibenz(a,h)anthracene	30.0	21.9		ug/L		73	48 - 146
Fluoranthene	30.0	25.9		ug/L		86	54 - 128
Fluorene	30.0	28.8		ug/L		96	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	21.9		ug/L		73	43 - 142
1-Methylnaphthalene	30.0	25.6		ug/L		85	41 - 120
2-Methylnaphthalene	30.0	25.1		ug/L		84	32 - 124
Naphthalene	30.0	24.4		ug/L		81	39 - 125
Phenanthrene	30.0	26.3		ug/L		88	48 - 120
Pyrene	30.0	26.7		ug/L		89	48 - 132
Benzo[a]anthracene	30.0	26.0		ug/L		87	61 - 135

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-476444/2-A
Matrix: Water
Analysis Batch: 476870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476444

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	85		15 - 122
Nitrobenzene-d5 (Surr)	87		19 - 130
Terphenyl-d14 (Surr)	99		33 - 138

Lab Sample ID: LCSD 400-476444/3-A
Matrix: Water
Analysis Batch: 476870

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476444

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	
							Limits	RPD	Limit	
Acenaphthene	30.0	24.0		ug/L		80	41 - 120	7	56	
Acenaphthylene	30.0	24.4		ug/L		81	44 - 120	11	56	
Anthracene	30.0	24.5		ug/L		82	49 - 120	9	51	
Benzo[a]pyrene	30.0	21.7		ug/L		72	52 - 120	11	50	
Benzo[b]fluoranthene	30.0	22.3		ug/L		74	53 - 134	5	54	
Benzo[g,h,i]perylene	30.0	18.7		ug/L		62	47 - 133	11	50	
Benzo[k]fluoranthene	30.0	23.3		ug/L		78	57 - 134	10	52	
Chrysene	30.0	23.7		ug/L		79	55 - 122	2	50	
Dibenz(a,h)anthracene	30.0	18.9		ug/L		63	48 - 146	15	50	
Fluoranthene	30.0	22.3		ug/L		74	54 - 128	15	52	
Fluorene	30.0	26.5		ug/L		88	45 - 125	8	56	
Indeno[1,2,3-cd]pyrene	30.0	19.1		ug/L		64	43 - 142	14	51	
1-Methylnaphthalene	30.0	23.6		ug/L		79	41 - 120	8	55	
2-Methylnaphthalene	30.0	23.3		ug/L		78	32 - 124	7	57	
Naphthalene	30.0	22.4		ug/L		75	39 - 125	8	56	
Phenanthrene	30.0	24.4		ug/L		81	48 - 120	7	56	
Pyrene	30.0	26.0		ug/L		87	48 - 132	3	52	
Benzo[a]anthracene	30.0	24.2		ug/L		81	61 - 135	7	49	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	80		15 - 122
Nitrobenzene-d5 (Surr)	84		19 - 130
Terphenyl-d14 (Surr)	100		33 - 138

Lab Sample ID: MB 400-476746/1-A
Matrix: Water
Analysis Batch: 477222

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476746

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Acenaphthylene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Anthracene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Benzo[a]pyrene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Benzo[b]fluoranthene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Benzo[g,h,i]perylene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Benzo[k]fluoranthene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Chrysene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Dibenz(a,h)anthracene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Fluoranthene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1

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QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-476746/1-A

Matrix: Water

Analysis Batch: 477222

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 476746

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Fluorene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Indeno[1,2,3-cd]pyrene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
1-Methylnaphthalene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
2-Methylnaphthalene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Naphthalene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Phenanthrene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Pyrene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1
Benzo[a]anthracene	<0.20		0.20		ug/L		02/05/20 12:13	02/10/20 10:14	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	45		15 - 122	02/05/20 12:13	02/10/20 10:14	1
Nitrobenzene-d5 (Surr)	44		19 - 130	02/05/20 12:13	02/10/20 10:14	1
Terphenyl-d14 (Surr)	56		33 - 138	02/05/20 12:13	02/10/20 10:14	1

Lab Sample ID: LCS 400-476746/2-A

Matrix: Water

Analysis Batch: 477222

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 476746

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Acenaphthene	120	97.6		ug/L		81	41 - 120
Acenaphthylene	120	102		ug/L		85	44 - 120
Anthracene	120	97.1		ug/L		81	49 - 120
Benzo[a]pyrene	120	99.2		ug/L		83	52 - 120
Benzo[b]fluoranthene	120	92.6		ug/L		77	53 - 134
Benzo[g,h,i]perylene	120	81.5		ug/L		68	47 - 133
Benzo[k]fluoranthene	120	105		ug/L		87	57 - 134
Chrysene	120	90.5		ug/L		75	55 - 122
Dibenz(a,h)anthracene	120	82.1		ug/L		68	48 - 146
Fluoranthene	120	94.5		ug/L		79	54 - 128
Fluorene	120	107		ug/L		89	45 - 125
Indeno[1,2,3-cd]pyrene	120	84.6		ug/L		71	43 - 142
1-Methylnaphthalene	120	88.7		ug/L		74	41 - 120
2-Methylnaphthalene	120	89.6		ug/L		75	32 - 124
Naphthalene	120	89.7		ug/L		75	39 - 125
Phenanthrene	120	97.8		ug/L		81	48 - 120
Pyrene	120	99.7		ug/L		83	48 - 132
Benzo[a]anthracene	120	93.2		ug/L		78	61 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	80		15 - 122
Nitrobenzene-d5 (Surr)	78		19 - 130
Terphenyl-d14 (Surr)	78		33 - 138

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 400-476746/3-A
Matrix: Water
Analysis Batch: 477222

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476746

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							RPD	Limit		
Acenaphthene	120	101		ug/L		84	41 - 120	3	56	
Acenaphthylene	120	104		ug/L		87	44 - 120	2	56	
Anthracene	120	100		ug/L		84	49 - 120	3	51	
Benzo[a]pyrene	120	109		ug/L		91	52 - 120	10	50	
Benzo[b]fluoranthene	120	103		ug/L		85	53 - 134	10	54	
Benzo[g,h,i]perylene	120	89.5		ug/L		75	47 - 133	9	50	
Benzo[k]fluoranthene	120	106		ug/L		88	57 - 134	1	52	
Chrysene	120	98.8		ug/L		82	55 - 122	9	50	
Dibenz(a,h)anthracene	120	89.5		ug/L		75	48 - 146	9	50	
Fluoranthene	120	96.0		ug/L		80	54 - 128	2	52	
Fluorene	120	110		ug/L		92	45 - 125	3	56	
Indeno[1,2,3-cd]pyrene	120	93.2		ug/L		78	43 - 142	10	51	
1-Methylnaphthalene	120	95.3		ug/L		79	41 - 120	7	55	
2-Methylnaphthalene	120	97.6		ug/L		81	32 - 124	9	57	
Naphthalene	120	91.0		ug/L		76	39 - 125	1	56	
Phenanthrene	120	102		ug/L		85	48 - 120	4	56	
Pyrene	120	105		ug/L		88	48 - 132	5	52	
Benzo[a]anthracene	120	104		ug/L		86	61 - 135	11	49	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
2-Fluorobiphenyl	78		15 - 122
Nitrobenzene-d5 (Surr)	80		19 - 130
Terphenyl-d14 (Surr)	88		33 - 138

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 400-476573/4
Matrix: Water
Analysis Batch: 476573

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 11:39	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
a,a,a-Trifluorotoluene (fid)	104		78 - 119		02/04/20 11:39	1

Lab Sample ID: LCS 400-476573/1003
Matrix: Water
Analysis Batch: 476573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							RPD	Limit
Gasoline Range Organics (GRO) -C6-C10	1000	1010		ug/L		101	85 - 115	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
a,a,a-Trifluorotoluene (fid)	102		78 - 119

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 560-84840-A-3 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476573

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	<100		1000	1080		ug/L		108	35 - 150
Surrogate	%Recovery	MS Qualifier	Limits						
<i>a,a,a-Trifluorotoluene (fid)</i>	100		78 - 119						

Lab Sample ID: 560-84840-A-3 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476573

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	<100		1000	1120		ug/L		112	35 - 150	3	15
Surrogate	%Recovery	MSD Qualifier	Limits								
<i>a,a,a-Trifluorotoluene (fid)</i>	102		78 - 119								

Method: 8015C - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-476480/1-A

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476627

Prep Batch: 476480

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		02/03/20 13:50	02/05/20 00:57	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	65		40 - 140				02/03/20 13:50	02/05/20 00:57	1

Lab Sample ID: LCS 400-476480/2-A

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476627

Prep Batch: 476480

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	17000	10400		ug/L		61	40 - 120
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o-Terphenyl (Surr)</i>	76		40 - 140				

Lab Sample ID: LCSD 400-476480/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 476627

Prep Batch: 476480

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	17000	12200		ug/L		72	40 - 120	15	50

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QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method: 8015C - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCSD 400-476480/3-A
Matrix: Water
Analysis Batch: 476627

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476480

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl (Surr)	87		40 - 140

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 400-476390/1-A
Matrix: Water
Analysis Batch: 476932

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476390

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1
PCB-1221	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1
PCB-1232	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1
PCB-1242	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1
PCB-1248	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1
PCB-1254	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1
PCB-1260	<0.50		0.50		ug/L		02/03/20 09:20	02/06/20 16:57	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
DCB Decachlorobiphenyl	43		10 - 125	02/03/20 09:20	02/06/20 16:57	1
Tetrachloro- <i>m</i> -xylene	47		46 - 150	02/03/20 09:20	02/06/20 16:57	1

Lab Sample ID: LCS 400-476390/2-A
Matrix: Water
Analysis Batch: 476932

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							Limits	
PCB-1016	20.2	12.5		ug/L		62	54 - 126	
PCB-1260	20.1	13.6		ug/L		68	56 - 139	

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	36		10 - 125
Tetrachloro- <i>m</i> -xylene	44	X	46 - 150

Lab Sample ID: LCSD 400-476390/3-A
Matrix: Water
Analysis Batch: 476932

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476390

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
							Limits		RPD	Limit
PCB-1016	20.2	12.8		ug/L		63	54 - 126	9	40	
PCB-1260	20.1	16.4		ug/L		82	56 - 139	39	40	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
DCB Decachlorobiphenyl	69		10 - 125
Tetrachloro- <i>m</i> -xylene	46		46 - 150

QC Association Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

GC/MS VOA

Analysis Batch: 476419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-1	TW-1	Total/NA	Water	8260B	
400-183283-2	TW-2	Total/NA	Water	8260B	
400-183283-3	TW-5	Total/NA	Water	8260B	
400-183283-4	TW-6	Total/NA	Water	8260B	
400-183283-5	TW-7	Total/NA	Water	8260B	
400-183283-6	TW-3	Total/NA	Water	8260B	
400-183283-7	TW-4	Total/NA	Water	8260B	
MB 400-476419/4	Method Blank	Total/NA	Water	8260B	
LCS 400-476419/1002	Lab Control Sample	Total/NA	Water	8260B	
400-183301-A-4 MS	Matrix Spike	Total/NA	Water	8260B	
400-183301-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 476444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-6	TW-3	Total/NA	Water	3520C	
MB 400-476444/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 476746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-7	TW-4	Total/NA	Water	3520C	
MB 400-476746/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476746/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476746/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 476870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-6	TW-3	Total/NA	Water	8270D LL	476444
MB 400-476444/1-A	Method Blank	Total/NA	Water	8270D LL	476444
LCS 400-476444/2-A	Lab Control Sample	Total/NA	Water	8270D LL	476444
LCSD 400-476444/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	476444

Analysis Batch: 477222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-476746/1-A	Method Blank	Total/NA	Water	8270D LL	476746
LCS 400-476746/2-A	Lab Control Sample	Total/NA	Water	8270D LL	476746
LCSD 400-476746/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	476746

Analysis Batch: 477422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-7	TW-4	Total/NA	Water	8270D LL	476746

GC VOA

Analysis Batch: 476573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-1	TW-1	Total/NA	Water	8015C	
400-183283-2	TW-2	Total/NA	Water	8015C	
400-183283-3	TW-5	Total/NA	Water	8015C	

QC Association Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

GC VOA (Continued)

Analysis Batch: 476573 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-4	TW-6	Total/NA	Water	8015C	
400-183283-5	TW-7	Total/NA	Water	8015C	
400-183283-6	TW-3	Total/NA	Water	8015C	
400-183283-7	TW-4	Total/NA	Water	8015C	
MB 400-476573/4	Method Blank	Total/NA	Water	8015C	
LCS 400-476573/1003	Lab Control Sample	Total/NA	Water	8015C	
560-84840-A-3 MS	Matrix Spike	Total/NA	Water	8015C	
560-84840-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015C	

GC Semi VOA

Prep Batch: 476390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-6	TW-3	Total/NA	Water	3520C	
400-183283-7	TW-4	Total/NA	Water	3520C	
MB 400-476390/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-476390/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-476390/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 476480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-1	TW-1	Total/NA	Water	3510C	
400-183283-2	TW-2	Total/NA	Water	3510C	
400-183283-3	TW-5	Total/NA	Water	3510C	
400-183283-4	TW-6	Total/NA	Water	3510C	
400-183283-5	TW-7	Total/NA	Water	3510C	
400-183283-6	TW-3	Total/NA	Water	3510C	
400-183283-7	TW-4	Total/NA	Water	3510C	
MB 400-476480/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-476480/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-476480/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 476627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-1	TW-1	Total/NA	Water	8015C	476480
400-183283-2	TW-2	Total/NA	Water	8015C	476480
400-183283-3	TW-5	Total/NA	Water	8015C	476480
400-183283-4	TW-6	Total/NA	Water	8015C	476480
400-183283-5	TW-7	Total/NA	Water	8015C	476480
400-183283-6	TW-3	Total/NA	Water	8015C	476480
400-183283-7	TW-4	Total/NA	Water	8015C	476480
MB 400-476480/1-A	Method Blank	Total/NA	Water	8015C	476480
LCS 400-476480/2-A	Lab Control Sample	Total/NA	Water	8015C	476480
LCSD 400-476480/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	476480

Analysis Batch: 476932

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183283-6	TW-3	Total/NA	Water	8082A	476390
400-183283-7	TW-4	Total/NA	Water	8082A	476390
MB 400-476390/1-A	Method Blank	Total/NA	Water	8082A	476390
LCS 400-476390/2-A	Lab Control Sample	Total/NA	Water	8082A	476390

QC Association Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

GC Semi VOA (Continued)

Analysis Batch: 476932 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-476390/3-A	Lab Control Sample Dup	Total/NA	Water	8082A	476390

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-1

Lab Sample ID: 400-183283-1

Date Collected: 01/27/20 12:15

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 19:26	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 18:44	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 02:43	JAW	TAL PEN

Client Sample ID: TW-2

Lab Sample ID: 400-183283-2

Date Collected: 01/27/20 11:07

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 19:56	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 20:09	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 02:54	JAW	TAL PEN

Client Sample ID: TW-5

Lab Sample ID: 400-183283-3

Date Collected: 01/29/20 10:20

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 20:25	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 20:37	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 03:18	JAW	TAL PEN

Client Sample ID: TW-6

Lab Sample ID: 400-183283-4

Date Collected: 01/29/20 11:40

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 20:55	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 21:06	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 03:30	JAW	TAL PEN

Client Sample ID: TW-7

Lab Sample ID: 400-183283-5

Date Collected: 01/29/20 12:40

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 21:24	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 21:34	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 03:42	JAW	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Client Sample ID: TW-3

Lab Sample ID: 400-183283-6

Date Collected: 01/27/20 13:50

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 21:54	RS	TAL PEN
Total/NA	Prep	3520C			476444	02/03/20 11:34	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1	476870	02/06/20 15:03	KJA	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 22:02	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 03:53	JAW	TAL PEN
Total/NA	Prep	3520C			476390	02/03/20 09:21	JRW	TAL PEN
Total/NA	Analysis	8082A		1	476932	02/07/20 00:32	DS	TAL PEN

Client Sample ID: TW-4

Lab Sample ID: 400-183283-7

Date Collected: 01/29/20 08:45

Matrix: Water

Date Received: 01/30/20 09:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476419	02/03/20 22:23	RS	TAL PEN
Total/NA	Prep	3520C			476746	02/05/20 12:13	BAW	TAL PEN
Total/NA	Analysis	8270D LL		1	477422	02/11/20 08:57	PP1	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/04/20 22:31	CMW	TAL PEN
Total/NA	Prep	3510C			476480	02/03/20 13:51	CCR	TAL PEN
Total/NA	Analysis	8015C		1	476627	02/05/20 04:05	JAW	TAL PEN
Total/NA	Prep	3520C			476390	02/03/20 09:21	JRW	TAL PEN
Total/NA	Analysis	8082A		1	476932	02/07/20 01:02	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Laboratory: Eurofins TestAmerica, Pensacola

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460166	06-14-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Cyclohexane
8260B		Water	Dibromofluoromethane

Method Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183283-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL PEN
8015C	Diesel Range Organics (DRO) (GC)	EPA	TAL PEN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
5030C	Purge and Trap	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 400-183283-1

Login Number: 183283

List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Conrady, Hank W

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.1°C 0.2°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-183312-1
Client Project/Site: St.Paul's

For:
SCS Engineers
2877 Guardian Lane
Suite 1-F
Virginia Beach, Virginia 23452

Attn: Alexis Holcomb



Authorized for release by:
2/6/2020 10:55:09 AM

Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Glossary

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

Case Narrative

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Job ID: 400-183312-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-183312-1

Comments

No additional comments.

Receipt

The samples were received on 1/31/2020 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-8

Lab Sample ID: 400-183312-1

No Detections.

Client Sample ID: TW-9

Lab Sample ID: 400-183312-2

No Detections.

Client Sample ID: TW-10

Lab Sample ID: 400-183312-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	7.2		1.0		ug/L	1		8260B	Total/NA

Client Sample ID: TW-11

Lab Sample ID: 400-183312-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	760		110		ug/L	1		8015C	Total/NA

Client Sample ID: TW-12

Lab Sample ID: 400-183312-5

No Detections.

Client Sample ID: TW-13

Lab Sample ID: 400-183312-6

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Sample Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-183312-1	TW-8	Water	01/30/20 09:30	01/31/20 08:45	
400-183312-2	TW-9	Water	01/30/20 08:20	01/31/20 08:45	
400-183312-3	TW-10	Water	01/30/20 10:45	01/31/20 08:45	
400-183312-4	TW-11	Water	01/30/20 11:45	01/31/20 08:45	
400-183312-5	TW-12	Water	01/30/20 12:35	01/31/20 08:45	
400-183312-6	TW-13	Water	01/30/20 13:33	01/31/20 08:45	

- 1
- 2
- 3
- 4
- 5
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- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-8

Lab Sample ID: 400-183312-1

Date Collected: 01/30/20 09:30

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 14:01	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 14:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 14:01	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 14:01	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 14:01	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 14:01	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 14:01	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 14:01	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 14:01	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
2-Hexanone	<25		25		ug/L			02/03/20 14:01	1
Acetone	<25		25		ug/L			02/03/20 14:01	1
Benzene	<1.0		1.0		ug/L			02/03/20 14:01	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Bromoform	<5.0		5.0		ug/L			02/03/20 14:01	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 14:01	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 14:01	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Chloroform	<1.0		1.0		ug/L			02/03/20 14:01	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 14:01	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 14:01	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 14:01	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 14:01	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 14:01	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 14:01	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 14:01	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 14:01	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 14:01	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 14:01	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 14:01	1
Styrene	<1.0		1.0		ug/L			02/03/20 14:01	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 14:01	1
Toluene	<1.0		1.0		ug/L			02/03/20 14:01	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 14:01	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 14:01	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 14:01	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 14:01	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 14:01	1
Xylenes, Total	<10		10		ug/L			02/03/20 14:01	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-8

Lab Sample ID: 400-183312-1

Date Collected: 01/30/20 09:30

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 14:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	108		78 - 118		02/03/20 14:01	1
Dibromofluoromethane	87		81 - 121		02/03/20 14:01	1
Toluene-d8 (Surr)	112		80 - 120		02/03/20 14:01	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 00:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	106		78 - 119		02/05/20 00:53	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/04/20 10:02	02/05/20 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	71		40 - 140	02/04/20 10:02	02/05/20 18:13	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-9

Lab Sample ID: 400-183312-2

Date Collected: 01/30/20 08:20

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 16:46	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 16:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 16:46	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 16:46	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 16:46	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 16:46	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 16:46	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 16:46	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 16:46	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
2-Hexanone	<25		25		ug/L			02/03/20 16:46	1
Acetone	<25		25		ug/L			02/03/20 16:46	1
Benzene	<1.0		1.0		ug/L			02/03/20 16:46	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Bromoform	<5.0		5.0		ug/L			02/03/20 16:46	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 16:46	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 16:46	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Chloroform	<1.0		1.0		ug/L			02/03/20 16:46	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 16:46	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 16:46	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 16:46	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 16:46	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 16:46	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 16:46	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 16:46	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 16:46	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 16:46	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 16:46	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 16:46	1
Styrene	<1.0		1.0		ug/L			02/03/20 16:46	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 16:46	1
Toluene	<1.0		1.0		ug/L			02/03/20 16:46	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 16:46	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 16:46	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 16:46	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 16:46	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 16:46	1
Xylenes, Total	<10		10		ug/L			02/03/20 16:46	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-9

Lab Sample ID: 400-183312-2

Date Collected: 01/30/20 08:20

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		78 - 118		02/03/20 16:46	1
Dibromofluoromethane	95		81 - 121		02/03/20 16:46	1
Toluene-d8 (Surr)	110		80 - 120		02/03/20 16:46	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 01:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119		02/05/20 01:21	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/04/20 10:02	02/05/20 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	62		40 - 140	02/04/20 10:02	02/05/20 18:37	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-10

Lab Sample ID: 400-183312-3

Date Collected: 01/30/20 10:45

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 17:14	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 17:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 17:14	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 17:14	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 17:14	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 17:14	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 17:14	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 17:14	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 17:14	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
2-Hexanone	<25		25		ug/L			02/03/20 17:14	1
Acetone	<25		25		ug/L			02/03/20 17:14	1
Benzene	<1.0		1.0		ug/L			02/03/20 17:14	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Bromoform	<5.0		5.0		ug/L			02/03/20 17:14	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 17:14	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 17:14	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Chloroform	<1.0		1.0		ug/L			02/03/20 17:14	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 17:14	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 17:14	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 17:14	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 17:14	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 17:14	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 17:14	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 17:14	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 17:14	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 17:14	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 17:14	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 17:14	1
Styrene	<1.0		1.0		ug/L			02/03/20 17:14	1
Tetrachloroethene	7.2		1.0		ug/L			02/03/20 17:14	1
Toluene	<1.0		1.0		ug/L			02/03/20 17:14	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 17:14	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 17:14	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 17:14	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 17:14	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 17:14	1
Xylenes, Total	<10		10		ug/L			02/03/20 17:14	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-10

Lab Sample ID: 400-183312-3

Date Collected: 01/30/20 10:45

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		78 - 118		02/03/20 17:14	1
Dibromofluoromethane	95		81 - 121		02/03/20 17:14	1
Toluene-d8 (Surr)	111		80 - 120		02/03/20 17:14	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 01:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	98		78 - 119		02/05/20 01:50	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/04/20 10:02	02/05/20 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	55		40 - 140	02/04/20 10:02	02/05/20 18:49	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-11

Lab Sample ID: 400-183312-4

Date Collected: 01/30/20 11:45

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 17:42	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 17:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 17:42	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 17:42	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 17:42	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 17:42	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 17:42	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 17:42	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 17:42	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
2-Hexanone	<25		25		ug/L			02/03/20 17:42	1
Acetone	<25		25		ug/L			02/03/20 17:42	1
Benzene	<1.0		1.0		ug/L			02/03/20 17:42	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Bromoform	<5.0		5.0		ug/L			02/03/20 17:42	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 17:42	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 17:42	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Chloroform	<1.0		1.0		ug/L			02/03/20 17:42	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 17:42	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 17:42	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 17:42	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 17:42	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 17:42	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 17:42	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 17:42	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 17:42	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 17:42	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 17:42	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 17:42	1
Styrene	<1.0		1.0		ug/L			02/03/20 17:42	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 17:42	1
Toluene	<1.0		1.0		ug/L			02/03/20 17:42	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 17:42	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 17:42	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 17:42	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 17:42	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 17:42	1
Xylenes, Total	<10		10		ug/L			02/03/20 17:42	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-11

Lab Sample ID: 400-183312-4

Date Collected: 01/30/20 11:45

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 17:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		78 - 118					02/03/20 17:42	1
Dibromofluoromethane	95		81 - 121					02/03/20 17:42	1
Toluene-d8 (Surr)	111		80 - 120					02/03/20 17:42	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 02:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119					02/05/20 02:18	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	760		110		ug/L		02/04/20 10:02	02/05/20 19:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		40 - 140				02/04/20 10:02	02/05/20 19:01	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-12

Lab Sample ID: 400-183312-5

Date Collected: 01/30/20 12:35

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 18:09	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 18:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 18:09	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 18:09	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 18:09	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 18:09	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 18:09	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 18:09	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 18:09	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
2-Hexanone	<25		25		ug/L			02/03/20 18:09	1
Acetone	<25		25		ug/L			02/03/20 18:09	1
Benzene	<1.0		1.0		ug/L			02/03/20 18:09	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Bromoform	<5.0		5.0		ug/L			02/03/20 18:09	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 18:09	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 18:09	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Chloroform	<1.0		1.0		ug/L			02/03/20 18:09	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 18:09	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 18:09	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 18:09	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 18:09	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 18:09	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 18:09	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 18:09	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 18:09	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 18:09	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 18:09	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 18:09	1
Styrene	<1.0		1.0		ug/L			02/03/20 18:09	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 18:09	1
Toluene	<1.0		1.0		ug/L			02/03/20 18:09	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 18:09	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 18:09	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 18:09	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 18:09	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 18:09	1
Xylenes, Total	<10		10		ug/L			02/03/20 18:09	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-12

Lab Sample ID: 400-183312-5

Date Collected: 01/30/20 12:35

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 18:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		78 - 118		02/03/20 18:09	1
Dibromofluoromethane	95		81 - 121		02/03/20 18:09	1
Toluene-d8 (Surr)	111		80 - 120		02/03/20 18:09	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 02:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119		02/05/20 02:47	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/04/20 10:02	02/05/20 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	78		40 - 140	02/04/20 10:02	02/05/20 19:13	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-13

Lab Sample ID: 400-183312-6

Date Collected: 01/30/20 13:33

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 18:37	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 18:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 18:37	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 18:37	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 18:37	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 18:37	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 18:37	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 18:37	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 18:37	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
2-Hexanone	<25		25		ug/L			02/03/20 18:37	1
Acetone	<25		25		ug/L			02/03/20 18:37	1
Benzene	<1.0		1.0		ug/L			02/03/20 18:37	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Bromoform	<5.0		5.0		ug/L			02/03/20 18:37	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 18:37	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 18:37	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Chloroform	<1.0		1.0		ug/L			02/03/20 18:37	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 18:37	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 18:37	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 18:37	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 18:37	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 18:37	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 18:37	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 18:37	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 18:37	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 18:37	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 18:37	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 18:37	1
Styrene	<1.0		1.0		ug/L			02/03/20 18:37	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 18:37	1
Toluene	<1.0		1.0		ug/L			02/03/20 18:37	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 18:37	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 18:37	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 18:37	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 18:37	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 18:37	1
Xylenes, Total	<10		10		ug/L			02/03/20 18:37	1

Client Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-13

Lab Sample ID: 400-183312-6

Date Collected: 01/30/20 13:33

Matrix: Water

Date Received: 01/31/20 08:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<1.0		1.0		ug/L			02/03/20 18:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		78 - 118		02/03/20 18:37	1
Dibromofluoromethane	97		81 - 121		02/03/20 18:37	1
Toluene-d8 (Surr)	112		80 - 120		02/03/20 18:37	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 03:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119		02/05/20 03:15	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/04/20 10:02	02/05/20 19:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	72		40 - 140	02/04/20 10:02	02/05/20 19:25	1

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

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

Lab Sample ID: MB 400-476386/5
Matrix: Water
Analysis Batch: 476386

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/03/20 13:33	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/03/20 13:33	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/03/20 13:33	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
2-Hexanone	<25		25		ug/L			02/03/20 13:33	1
Acetone	<25		25		ug/L			02/03/20 13:33	1
Benzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Bromodichloromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Bromoform	<5.0		5.0		ug/L			02/03/20 13:33	1
Bromomethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Carbon disulfide	<1.0		1.0		ug/L			02/03/20 13:33	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/03/20 13:33	1
Chlorobenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Chlorobromomethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Chloroethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Chloroform	<1.0		1.0		ug/L			02/03/20 13:33	1
Chloromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 13:33	1
Cyclohexane	<1.0		1.0		ug/L			02/03/20 13:33	1
Dibromochloromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Ethylbenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/03/20 13:33	1
Isopropylbenzene	<1.0		1.0		ug/L			02/03/20 13:33	1
Methyl acetate	<5.0		5.0		ug/L			02/03/20 13:33	1
Methyl Ethyl Ketone	<25		25		ug/L			02/03/20 13:33	1
methyl isobutyl ketone	<25		25		ug/L			02/03/20 13:33	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/03/20 13:33	1
Methylene Chloride	<5.0		5.0		ug/L			02/03/20 13:33	1
Styrene	<1.0		1.0		ug/L			02/03/20 13:33	1
Tetrachloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
Toluene	<1.0		1.0		ug/L			02/03/20 13:33	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/03/20 13:33	1
Trichloroethene	<1.0		1.0		ug/L			02/03/20 13:33	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/03/20 13:33	1
Vinyl chloride	<1.0		1.0		ug/L			02/03/20 13:33	1

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

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

Lab Sample ID: MB 400-476386/5
Matrix: Water
Analysis Batch: 476386

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<10		10		ug/L			02/03/20 13:33	1
Naphthalene	<1.0		1.0		ug/L			02/03/20 13:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		78 - 118		02/03/20 13:33	1
Dibromofluoromethane	88		81 - 121		02/03/20 13:33	1
Toluene-d8 (Surr)	113		80 - 120		02/03/20 13:33	1

Lab Sample ID: LCS 400-476386/1002
Matrix: Water
Analysis Batch: 476386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	45.4		ug/L		91	68 - 130
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	70 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.5		ug/L		93	60 - 139
1,1,2-Trichloroethane	50.0	47.5		ug/L		95	70 - 130
1,1-Dichloroethane	50.0	40.2		ug/L		80	70 - 130
1,1-Dichloroethene	50.0	41.4		ug/L		83	63 - 134
1,2,3-Trichlorobenzene	50.0	42.3		ug/L		85	60 - 138
1,2,4-Trichlorobenzene	50.0	43.2		ug/L		86	60 - 140
1,2-Dibromo-3-Chloropropane	50.0	37.9		ug/L		76	54 - 135
1,2-Dichlorobenzene	50.0	44.4		ug/L		89	67 - 130
1,2-Dichloroethane	50.0	44.6		ug/L		89	69 - 130
1,2-Dichloropropane	50.0	41.1		ug/L		82	70 - 130
1,3-Dichlorobenzene	50.0	44.2		ug/L		88	70 - 130
1,4-Dichlorobenzene	50.0	42.6		ug/L		85	70 - 130
2-Hexanone	200	202		ug/L		101	65 - 137
Acetone	200	202		ug/L		101	43 - 160
Benzene	50.0	44.0		ug/L		88	70 - 130
Bromodichloromethane	50.0	44.1		ug/L		88	67 - 133
Bromoform	50.0	40.3		ug/L		81	57 - 140
Bromomethane	50.0	40.0		ug/L		80	10 - 160
Carbon disulfide	50.0	44.9		ug/L		90	61 - 137
Carbon tetrachloride	50.0	41.1		ug/L		82	61 - 137
Chlorobenzene	50.0	45.7		ug/L		91	70 - 130
Chlorobromomethane	50.0	35.9		ug/L		72	70 - 130
Chloroethane	50.0	39.5		ug/L		79	55 - 141
Chloroform	50.0	41.5		ug/L		83	69 - 130
Chloromethane	50.0	39.3		ug/L		79	58 - 137
cis-1,2-Dichloroethene	50.0	40.8		ug/L		82	68 - 130
cis-1,3-Dichloropropene	50.0	45.8		ug/L		92	69 - 132
Cyclohexane	50.0	40.2		ug/L		80	70 - 130
Dibromochloromethane	50.0	41.4		ug/L		83	67 - 135
Dichlorodifluoromethane	50.0	50.2		ug/L		100	41 - 146
Ethylbenzene	50.0	49.4		ug/L		99	70 - 130
Ethylene Dibromide	50.0	45.8		ug/L		92	70 - 130
Isopropylbenzene	50.0	47.1		ug/L		94	70 - 130

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

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

Lab Sample ID: LCS 400-476386/1002
Matrix: Water
Analysis Batch: 476386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	100	91.5		ug/L		92	45 - 159
Methyl Ethyl Ketone	200	171		ug/L		85	61 - 145
methyl isobutyl ketone	200	180		ug/L		90	69 - 138
Methyl tert-butyl ether	50.0	44.9		ug/L		90	66 - 130
Methylene Chloride	50.0	43.8		ug/L		88	66 - 135
Styrene	50.0	47.7		ug/L		95	70 - 130
Tetrachloroethene	50.0	42.2		ug/L		84	65 - 130
Toluene	50.0	47.9		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	42.3		ug/L		85	70 - 130
trans-1,3-Dichloropropene	50.0	50.5		ug/L		101	63 - 130
Trichloroethene	50.0	41.5		ug/L		83	70 - 130
Trichlorofluoromethane	50.0	43.2		ug/L		86	65 - 138
Vinyl chloride	50.0	41.2		ug/L		82	59 - 136
Xylenes, Total	100	97.9		ug/L		98	70 - 130
Naphthalene	50.0	44.6		ug/L		89	47 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		78 - 118
Dibromofluoromethane	95		81 - 121
Toluene-d8 (Surr)	113		80 - 120

Lab Sample ID: 400-183312-1 MS
Matrix: Water
Analysis Batch: 476386

Client Sample ID: TW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<1.0		50.0	44.6		ug/L		89	57 - 142
1,1,1,2-Tetrachloroethane	<1.0		50.0	52.7		ug/L		105	66 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	47.9		ug/L		96	55 - 150
1,1,2-Trichloroethane	<5.0		50.0	49.7		ug/L		99	66 - 131
1,1-Dichloroethane	<1.0		50.0	41.4		ug/L		83	61 - 144
1,1-Dichloroethene	<1.0		50.0	42.0		ug/L		84	54 - 147
1,2,3-Trichlorobenzene	<1.0		50.0	39.4		ug/L		79	43 - 145
1,2,4-Trichlorobenzene	<1.0		50.0	40.7		ug/L		81	39 - 148
1,2-Dibromo-3-Chloropropane	<5.0		50.0	39.6		ug/L		79	45 - 135
1,2-Dichlorobenzene	<1.0		50.0	43.7		ug/L		87	52 - 137
1,2-Dichloroethane	<1.0		50.0	45.3		ug/L		91	60 - 141
1,2-Dichloropropane	<1.0		50.0	41.4		ug/L		83	66 - 137
1,3-Dichlorobenzene	<1.0		50.0	43.3		ug/L		87	54 - 135
1,4-Dichlorobenzene	<1.0		50.0	41.2		ug/L		82	53 - 135
2-Hexanone	<25		200	204		ug/L		102	65 - 140
Acetone	<25		200	187		ug/L		94	43 - 150
Benzene	<1.0		50.0	43.7		ug/L		87	56 - 142
Bromodichloromethane	<1.0		50.0	44.7		ug/L		89	59 - 143
Bromoform	<5.0		50.0	40.9		ug/L		82	50 - 140
Bromomethane	<1.0		50.0	36.8		ug/L		74	10 - 150
Carbon disulfide	<1.0		50.0	44.9		ug/L		90	48 - 150
Carbon tetrachloride	<1.0		50.0	41.8		ug/L		84	55 - 145

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

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

Lab Sample ID: 400-183312-1 MS

Matrix: Water

Analysis Batch: 476386

Client Sample ID: TW-8

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Chlorobenzene	<1.0		50.0	44.5		ug/L		89	64 - 130	
Chlorobromomethane	<1.0		50.0	36.9		ug/L		74	64 - 140	
Chloroethane	<1.0		50.0	39.9		ug/L		80	50 - 150	
Chloroform	<1.0		50.0	38.8		ug/L		78	60 - 141	
Chloromethane	<1.0		50.0	38.1		ug/L		76	49 - 148	
cis-1,2-Dichloroethene	<1.0		50.0	41.2		ug/L		82	59 - 143	
cis-1,3-Dichloropropene	<5.0		50.0	47.2		ug/L		94	57 - 140	
Cyclohexane	<1.0		50.0	44.1		ug/L		88	58 - 141	
Dibromochloromethane	<1.0		50.0	41.3		ug/L		83	56 - 143	
Dichlorodifluoromethane	<1.0		50.0	51.5		ug/L		103	16 - 150	
Ethylbenzene	<1.0		50.0	48.0		ug/L		96	58 - 131	
Ethylene Dibromide	<1.0		50.0	47.3		ug/L		95	64 - 132	
Isopropylbenzene	<1.0		50.0	44.0		ug/L		88	56 - 133	
Methyl acetate	<5.0		100	93.1		ug/L		93	21 - 150	
Methyl Ethyl Ketone	<25		200	168		ug/L		84	55 - 150	
methyl isobutyl ketone	<25		200	182		ug/L		91	63 - 146	
Methyl tert-butyl ether	<1.0		50.0	45.5		ug/L		91	59 - 137	
Methylene Chloride	<5.0		50.0	41.4		ug/L		83	60 - 146	
Styrene	<1.0		50.0	46.3		ug/L		93	58 - 131	
Tetrachloroethene	<1.0		50.0	39.4		ug/L		79	52 - 133	
Toluene	<1.0		50.0	47.1		ug/L		94	65 - 130	
trans-1,2-Dichloroethene	<1.0		50.0	42.6		ug/L		85	61 - 143	
trans-1,3-Dichloropropene	<5.0		50.0	50.5		ug/L		101	53 - 133	
Trichloroethene	<1.0		50.0	40.7		ug/L		81	64 - 136	
Trichlorofluoromethane	<1.0		50.0	45.4		ug/L		91	54 - 150	
Vinyl chloride	<1.0		50.0	41.1		ug/L		82	46 - 150	
Xylenes, Total	<10		100	92.8		ug/L		93	59 - 130	
Naphthalene	<1.0		50.0	44.1		ug/L		88	25 - 150	

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	110		78 - 118
Dibromofluoromethane	97		81 - 121
Toluene-d8 (Surr)	112		80 - 120

Lab Sample ID: 400-183312-1 MSD

Matrix: Water

Analysis Batch: 476386

Client Sample ID: TW-8

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier							
1,1,1-Trichloroethane	<1.0		50.0	43.9		ug/L		88	57 - 142	1	30	
1,1,2,2-Tetrachloroethane	<1.0		50.0	51.6		ug/L		103	66 - 135	2	30	
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	48.5		ug/L		97	55 - 150	1	30	
1,1,2-Trichloroethane	<5.0		50.0	49.9		ug/L		100	66 - 131	0	30	
1,1-Dichloroethane	<1.0		50.0	39.8		ug/L		80	61 - 144	4	30	
1,1-Dichloroethene	<1.0		50.0	40.1		ug/L		80	54 - 147	4	30	
1,2,3-Trichlorobenzene	<1.0		50.0	35.9		ug/L		72	43 - 145	9	30	
1,2,4-Trichlorobenzene	<1.0		50.0	36.7		ug/L		73	39 - 148	10	30	
1,2-Dibromo-3-Chloropropane	<5.0		50.0	42.8		ug/L		86	45 - 135	8	30	

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

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

Lab Sample ID: 400-183312-1 MSD

Matrix: Water

Analysis Batch: 476386

Client Sample ID: TW-8

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,2-Dichlorobenzene	<1.0		50.0	39.4		ug/L		79	52 - 137	10	30
1,2-Dichloroethane	<1.0		50.0	45.4		ug/L		91	60 - 141	0	30
1,2-Dichloropropane	<1.0		50.0	40.8		ug/L		82	66 - 137	1	30
1,3-Dichlorobenzene	<1.0		50.0	38.0		ug/L		76	54 - 135	13	30
1,4-Dichlorobenzene	<1.0		50.0	35.4		ug/L		71	53 - 135	15	30
2-Hexanone	<25		200	206		ug/L		103	65 - 140	1	30
Acetone	<25		200	175		ug/L		87	43 - 150	7	30
Benzene	<1.0		50.0	42.2		ug/L		84	56 - 142	4	30
Bromodichloromethane	<1.0		50.0	41.3		ug/L		83	59 - 143	8	30
Bromoform	<5.0		50.0	40.5		ug/L		81	50 - 140	1	30
Bromomethane	<1.0		50.0	34.8		ug/L		70	10 - 150	6	50
Carbon disulfide	<1.0		50.0	43.7		ug/L		87	48 - 150	3	30
Carbon tetrachloride	<1.0		50.0	39.8		ug/L		80	55 - 145	5	30
Chlorobenzene	<1.0		50.0	40.9		ug/L		82	64 - 130	8	30
Chlorobromomethane	<1.0		50.0	35.0		ug/L		70	64 - 140	5	30
Chloroethane	<1.0		50.0	40.7		ug/L		81	50 - 150	2	30
Chloroform	<1.0		50.0	37.6		ug/L		75	60 - 141	3	30
Chloromethane	<1.0		50.0	38.0		ug/L		76	49 - 148	0	31
cis-1,2-Dichloroethene	<1.0		50.0	41.2		ug/L		82	59 - 143	0	30
cis-1,3-Dichloropropene	<5.0		50.0	43.4		ug/L		87	57 - 140	8	30
Cyclohexane	<1.0		50.0	40.2		ug/L		80	58 - 141	9	30
Dibromochloromethane	<1.0		50.0	41.3		ug/L		83	56 - 143	0	30
Dichlorodifluoromethane	<1.0		50.0	49.7		ug/L		99	16 - 150	4	31
Ethylbenzene	<1.0		50.0	42.4		ug/L		85	58 - 131	13	30
Ethylene Dibromide	<1.0		50.0	44.4		ug/L		89	64 - 132	6	30
Isopropylbenzene	<1.0		50.0	38.9		ug/L		78	56 - 133	12	30
Methyl acetate	<5.0		100	94.7		ug/L		95	21 - 150	2	30
Methyl Ethyl Ketone	<25		200	170		ug/L		85	55 - 150	1	30
methyl isobutyl ketone	<25		200	181		ug/L		90	63 - 146	1	30
Methyl tert-butyl ether	<1.0		50.0	44.7		ug/L		89	59 - 137	2	30
Methylene Chloride	<5.0		50.0	44.3		ug/L		89	60 - 146	7	32
Styrene	<1.0		50.0	41.4		ug/L		83	58 - 131	11	30
Tetrachloroethene	<1.0		50.0	35.7		ug/L		71	52 - 133	10	30
Toluene	<1.0		50.0	44.4		ug/L		89	65 - 130	6	30
trans-1,2-Dichloroethene	<1.0		50.0	39.8		ug/L		80	61 - 143	7	30
trans-1,3-Dichloropropene	<5.0		50.0	47.6		ug/L		95	53 - 133	6	30
Trichloroethene	<1.0		50.0	38.3		ug/L		77	64 - 136	6	30
Trichlorofluoromethane	<1.0		50.0	43.7		ug/L		87	54 - 150	4	30
Vinyl chloride	<1.0		50.0	41.7		ug/L		83	46 - 150	2	30
Xylenes, Total	<10		100	83.0		ug/L		83	59 - 130	11	30
Naphthalene	<1.0		50.0	43.3		ug/L		87	25 - 150	2	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	111		78 - 118
Dibromofluoromethane	92		81 - 121
Toluene-d8 (Surr)	110		80 - 120

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 400-476573/4
Matrix: Water
Analysis Batch: 476573

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 11:39	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac			
%Recovery	Qualifier								
a,a,a-Trifluorotoluene (fid)	104		78 - 119		02/04/20 11:39	1			

Lab Sample ID: LCS 400-476573/1003
Matrix: Water
Analysis Batch: 476573

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Gasoline Range Organics (GRO) -C6-C10	1000	1010		ug/L		101	85 - 115
Surrogate	LCS	LCS	Limits				
%Recovery	Qualifier						
a,a,a-Trifluorotoluene (fid)	102		78 - 119				

Lab Sample ID: 560-84840-A-3 MS
Matrix: Water
Analysis Batch: 476573

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Gasoline Range Organics (GRO) -C6-C10	<100		1000	1080		ug/L		108	35 - 150
Surrogate	MS	MS	Limits						
%Recovery	Qualifier								
a,a,a-Trifluorotoluene (fid)	100		78 - 119						

Lab Sample ID: 560-84840-A-3 MSD
Matrix: Water
Analysis Batch: 476573

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Gasoline Range Organics (GRO) -C6-C10	<100		1000	1120		ug/L		112	35 - 150	3	15
Surrogate	MSD	MSD	Limits								
%Recovery	Qualifier										
a,a,a-Trifluorotoluene (fid)	102		78 - 119								

Method: 8015C - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-476555/1-A
Matrix: Water
Analysis Batch: 476785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476555

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	<130		130		ug/L		02/04/20 10:02	02/05/20 16:15	1

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Method: 8015C - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 400-476555/1-A
Matrix: Water
Analysis Batch: 476785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476555

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl (Surr)	57		40 - 140	02/04/20 10:02	02/05/20 16:15	1

Lab Sample ID: LCS 400-476555/2-A
Matrix: Water
Analysis Batch: 476785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476555

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	17000	11000		ug/L		64	40 - 120	1	50

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl (Surr)	66		40 - 140

Lab Sample ID: LCSD 400-476555/3-A
Matrix: Water
Analysis Batch: 476785

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476555

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	17000	11100		ug/L		65	40 - 120	1	50

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl (Surr)	73		40 - 140

QC Association Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

GC/MS VOA

Analysis Batch: 476386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183312-1	TW-8	Total/NA	Water	8260B	
400-183312-2	TW-9	Total/NA	Water	8260B	
400-183312-3	TW-10	Total/NA	Water	8260B	
400-183312-4	TW-11	Total/NA	Water	8260B	
400-183312-5	TW-12	Total/NA	Water	8260B	
400-183312-6	TW-13	Total/NA	Water	8260B	
MB 400-476386/5	Method Blank	Total/NA	Water	8260B	
LCS 400-476386/1002	Lab Control Sample	Total/NA	Water	8260B	
400-183312-1 MS	TW-8	Total/NA	Water	8260B	
400-183312-1 MSD	TW-8	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 476573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183312-1	TW-8	Total/NA	Water	8015C	
400-183312-2	TW-9	Total/NA	Water	8015C	
400-183312-3	TW-10	Total/NA	Water	8015C	
400-183312-4	TW-11	Total/NA	Water	8015C	
400-183312-5	TW-12	Total/NA	Water	8015C	
400-183312-6	TW-13	Total/NA	Water	8015C	
MB 400-476573/4	Method Blank	Total/NA	Water	8015C	
LCS 400-476573/1003	Lab Control Sample	Total/NA	Water	8015C	
560-84840-A-3 MS	Matrix Spike	Total/NA	Water	8015C	
560-84840-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015C	

GC Semi VOA

Prep Batch: 476555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183312-1	TW-8	Total/NA	Water	3510C	
400-183312-2	TW-9	Total/NA	Water	3510C	
400-183312-3	TW-10	Total/NA	Water	3510C	
400-183312-4	TW-11	Total/NA	Water	3510C	
400-183312-5	TW-12	Total/NA	Water	3510C	
400-183312-6	TW-13	Total/NA	Water	3510C	
MB 400-476555/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-476555/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-476555/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 476785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183312-1	TW-8	Total/NA	Water	8015C	476555
400-183312-2	TW-9	Total/NA	Water	8015C	476555
400-183312-3	TW-10	Total/NA	Water	8015C	476555
400-183312-4	TW-11	Total/NA	Water	8015C	476555
400-183312-5	TW-12	Total/NA	Water	8015C	476555
400-183312-6	TW-13	Total/NA	Water	8015C	476555
MB 400-476555/1-A	Method Blank	Total/NA	Water	8015C	476555
LCS 400-476555/2-A	Lab Control Sample	Total/NA	Water	8015C	476555
LCSD 400-476555/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	476555

Eurofins TestAmerica, Pensacola

Lab Chronicle

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-8
Date Collected: 01/30/20 09:30
Date Received: 01/31/20 08:45

Lab Sample ID: 400-183312-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476386	02/03/20 14:01	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/05/20 00:53	CMW	TAL PEN
Total/NA	Prep	3510C			476555	02/04/20 10:02	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476785	02/05/20 18:13	JAW	TAL PEN

Client Sample ID: TW-9
Date Collected: 01/30/20 08:20
Date Received: 01/31/20 08:45

Lab Sample ID: 400-183312-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476386	02/03/20 16:46	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/05/20 01:21	CMW	TAL PEN
Total/NA	Prep	3510C			476555	02/04/20 10:02	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476785	02/05/20 18:37	JAW	TAL PEN

Client Sample ID: TW-10
Date Collected: 01/30/20 10:45
Date Received: 01/31/20 08:45

Lab Sample ID: 400-183312-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476386	02/03/20 17:14	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/05/20 01:50	CMW	TAL PEN
Total/NA	Prep	3510C			476555	02/04/20 10:02	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476785	02/05/20 18:49	JAW	TAL PEN

Client Sample ID: TW-11
Date Collected: 01/30/20 11:45
Date Received: 01/31/20 08:45

Lab Sample ID: 400-183312-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476386	02/03/20 17:42	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/05/20 02:18	CMW	TAL PEN
Total/NA	Prep	3510C			476555	02/04/20 10:02	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476785	02/05/20 19:01	JAW	TAL PEN

Client Sample ID: TW-12
Date Collected: 01/30/20 12:35
Date Received: 01/31/20 08:45

Lab Sample ID: 400-183312-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	476386	02/03/20 18:09	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/05/20 02:47	CMW	TAL PEN
Total/NA	Prep	3510C			476555	02/04/20 10:02	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476785	02/05/20 19:13	JAW	TAL PEN

Lab Chronicle

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Client Sample ID: TW-13

Date Collected: 01/30/20 13:33

Date Received: 01/31/20 08:45

Lab Sample ID: 400-183312-6

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Analysis	8260B		1	476386	02/03/20 18:37	RS	TAL PEN
Total/NA	Analysis	8015C		1	476573	02/05/20 03:15	CMW	TAL PEN
Total/NA	Prep	3510C			476555	02/04/20 10:02	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476785	02/05/20 19:25	JAW	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Laboratory: Eurofins TestAmerica, Pensacola

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460166	06-14-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Cyclohexane
8260B		Water	Dibromofluoromethane

Method Summary

Client: SCS Engineers
Project/Site: St.Paul's

Job ID: 400-183312-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL PEN
8015C	Diesel Range Organics (DRO) (GC)	EPA	TAL PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
5030C	Purge and Trap	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



Chain of Custody Record



Client Information	Sampler: ALEXIS HOLCOMB	Lab PM: Swafford, Mark H	Carrier Tracking No(s):
Client Contact: Alexis Holcomb	Phone: 703 869-1596	E-Mail: mark.swafford@testamericainc.com	COC No: 400-90970-33436.1
Company: SCS Engineers			Page: Page 1 of 2
			Job #: 400-183312 COC

Address: 2877 Guardian Lane Suite 1-F	Due Date Requested:	Analysis Requested				Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)			
City: Virginia Beach	TAT Requested (days): 10	Field Filtered Sample (Yes or No)	Perform IN/MS/SD (Yes or No)	8016C_DRO - (MOD) DRO C10-C28	8016C_GRO - GRO (Cs-C10)				
State, Zip: VA, 23452	PO #: Purchase Order Requested						8280B - TCL Volatiles	8082A - TCL PCBs by 8082A	8270D - TCL Semivolatiles
Phone: 787-201-9264	WO #:								
Email: AHolcomb@scsengineers.com	Project #: 40005152								
Project Name: St. Paul's Sampling	SSOW#:								
Site:									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Analysis Requested										Total Number of containers	Special Instructions/Note:										
					Field Filtered Sample (Yes or No)	Perform IN/MS/SD (Yes or No)	8016C_DRO - (MOD) DRO C10-C28	8016C_GRO - GRO (Cs-C10)	8280B - TCL Volatiles	8082A - TCL PCBs by 8082A	8270D - TCL Semivolatiles															
B-1				Water	X	X																				
B-2				Water																						
B-5				Water																						
B-6				Water																						
B-7				Water																						
B-8 TW-8	1/30/20	930	G	Water	X	X	X																			
B-9 TW-9	1/30/20	820	G	Water	X	X	X																			
B-10 TW-10	1/30/20	1045	G	Water	X	X	X																			
B-11 TW-11	1/30/20	1145	G	Water	X	X	X																			
B-12 TW-12	1/30/20	1235	G	Water	X	X	X																			
B-13 TW-13	1/30/20	1333	G	Water	X	X	X																			

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
---	---

Deliverable Requested: I, II, III, IV, Other (specify) _____
 Special Instructions/QC Requirements: _____

Empty Kit Relinquished by: _____		Date: _____	Time: _____	Method of Shipment: _____	
Relinquished by: _____	Date/Time: 1/30/20 14:23	Company: _____	Received by: _____	Date/Time: 1/30/20 14:23	Company: ETA
Relinquished by: _____	Date/Time: 1/30/20 1600	Company: ETA	Received by: _____	Date/Time: _____	Company: _____
Relinquished by: _____	Date/Time: _____	Company: _____	Received by: _____	Date/Time: 1-30-20 0845	Company: TA-PEN
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: _____	Cooler Temperature(s) °C and Other Remarks: 2.5°C IR-8			

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Virginia Beach

#202



Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 400-183312-1

Login Number: 183312

List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Conrady, Hank W

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-183435-1
Client Project/Site: St. Paul's

For:
SCS Engineers
2877 Guardian Lane
Suite 1-F
Virginia Beach, Virginia 23452

Attn: Alexis Holcomb



Authorized for release by:
2/12/2020 2:21:56 PM

Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Case Narrative

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Job ID: 400-183435-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative 400-183435-1

Comments

No additional comments.

Receipt

The samples were received on 2/4/2020 9:07 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

GC/MS VOA

Method 8260C: The continuing calibration verification (CCV) associated with batch 400-477459 recovered outside acceptance criteria, low biased, for Chloromethane and Dichlorodifluoromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8260C: The laboratory control sample (LCS) for analytical batch 400-477459 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 400-477459 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane, Bromomethane, Chloroethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-14

Lab Sample ID: 400-183435-1

No Detections.

Client Sample ID: TW-15

Lab Sample ID: 400-183435-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.9		1.0		ug/L	1		8260C	Total/NA
Cyclohexane	3.6		1.0		ug/L	1		8260C	Total/NA
Ethylbenzene	2.2		1.0		ug/L	1		8260C	Total/NA
Isopropylbenzene	3.2		1.0		ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.7		1.0		ug/L	1		8260C	Total/NA
Methylcyclohexane	2.8		1.0		ug/L	1		8260C	Total/NA
Toluene	9.0		1.0		ug/L	1		8260C	Total/NA
Gasoline Range Organics (GRO) -C6-C10	500		100		ug/L	1		8015C	Total/NA
Diesel Range Organics [C10-C28]	300		110		ug/L	1		8015C	Total/NA

Client Sample ID: TW-16

Lab Sample ID: 400-183435-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	170		120		ug/L	1		8015C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Sample Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-183435-1	TW-14	Water	02/03/20 08:35	02/04/20 09:07	
400-183435-2	TW-15	Water	02/03/20 11:05	02/04/20 09:07	
400-183435-3	TW-16	Water	02/03/20 09:52	02/04/20 09:07	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-14

Lab Sample ID: 400-183435-1

Date Collected: 02/03/20 08:35

Matrix: Water

Date Received: 02/04/20 09:07

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/11/20 17:31	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/11/20 17:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/11/20 17:31	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/11/20 17:31	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/11/20 17:31	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/11/20 17:31	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/11/20 17:31	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/11/20 17:31	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/11/20 17:31	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
2-Butanone (MEK)	<25		25		ug/L			02/11/20 17:31	1
2-Hexanone	<25		25		ug/L			02/11/20 17:31	1
4-Methyl-2-pentanone (MIBK)	<25		25		ug/L			02/11/20 17:31	1
Acetone	<25		25		ug/L			02/11/20 17:31	1
Benzene	<1.0		1.0		ug/L			02/11/20 17:31	1
Bromoform	<5.0		5.0		ug/L			02/11/20 17:31	1
Bromomethane	<1.0 *		1.0		ug/L			02/11/20 17:31	1
Carbon disulfide	<1.0		1.0		ug/L			02/11/20 17:31	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/11/20 17:31	1
Chlorobenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
Chlorobromomethane	<1.0		1.0		ug/L			02/11/20 17:31	1
Chlorodibromomethane	<1.0		1.0		ug/L			02/11/20 17:31	1
Chloroethane	<1.0		1.0		ug/L			02/11/20 17:31	1
Chloroform	<1.0		1.0		ug/L			02/11/20 17:31	1
Chloromethane	<1.0		1.0		ug/L			02/11/20 17:31	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 17:31	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 17:31	1
Cyclohexane	<1.0		1.0		ug/L			02/11/20 17:31	1
Dichlorobromomethane	<1.0		1.0		ug/L			02/11/20 17:31	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/11/20 17:31	1
Ethylbenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/11/20 17:31	1
Isopropylbenzene	<1.0		1.0		ug/L			02/11/20 17:31	1
Methyl acetate	<5.0		5.0		ug/L			02/11/20 17:31	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/11/20 17:31	1
Methylcyclohexane	<1.0		1.0		ug/L			02/11/20 17:31	1
Methylene Chloride	<5.0		5.0		ug/L			02/11/20 17:31	1
Styrene	<1.0		1.0		ug/L			02/11/20 17:31	1
Tetrachloroethene	<1.0		1.0		ug/L			02/11/20 17:31	1
Toluene	<1.0		1.0		ug/L			02/11/20 17:31	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 17:31	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 17:31	1
Trichloroethene	<1.0		1.0		ug/L			02/11/20 17:31	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/11/20 17:31	1
Vinyl chloride	<1.0		1.0		ug/L			02/11/20 17:31	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-14

Lab Sample ID: 400-183435-1

Date Collected: 02/03/20 08:35

Matrix: Water

Date Received: 02/04/20 09:07

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<10		10		ug/L			02/11/20 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	87		78 - 118					02/11/20 17:31	1
Dibromofluoromethane	107		81 - 121					02/11/20 17:31	1
Toluene-d8 (Surr)	96		80 - 120					02/11/20 17:31	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 01:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	95		78 - 119					02/05/20 01:16	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<110		110		ug/L		02/05/20 10:32	02/06/20 23:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	51		40 - 140				02/05/20 10:32	02/06/20 23:58	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-15

Lab Sample ID: 400-183435-2

Date Collected: 02/03/20 11:05

Matrix: Water

Date Received: 02/04/20 09:07

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/11/20 17:55	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/11/20 17:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/11/20 17:55	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/11/20 17:55	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/11/20 17:55	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/11/20 17:55	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:55	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:55	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/11/20 17:55	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:55	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/11/20 17:55	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/11/20 17:55	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:55	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 17:55	1
2-Butanone (MEK)	<25		25		ug/L			02/11/20 17:55	1
2-Hexanone	<25		25		ug/L			02/11/20 17:55	1
4-Methyl-2-pentanone (MIBK)	<25		25		ug/L			02/11/20 17:55	1
Acetone	<25		25		ug/L			02/11/20 17:55	1
Benzene	5.9		1.0		ug/L			02/11/20 17:55	1
Bromoform	<5.0		5.0		ug/L			02/11/20 17:55	1
Bromomethane	<1.0 *		1.0		ug/L			02/11/20 17:55	1
Carbon disulfide	<1.0		1.0		ug/L			02/11/20 17:55	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/11/20 17:55	1
Chlorobenzene	<1.0		1.0		ug/L			02/11/20 17:55	1
Chlorobromomethane	<1.0		1.0		ug/L			02/11/20 17:55	1
Chlorodibromomethane	<1.0		1.0		ug/L			02/11/20 17:55	1
Chloroethane	<1.0		1.0		ug/L			02/11/20 17:55	1
Chloroform	<1.0		1.0		ug/L			02/11/20 17:55	1
Chloromethane	<1.0		1.0		ug/L			02/11/20 17:55	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 17:55	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 17:55	1
Cyclohexane	3.6		1.0		ug/L			02/11/20 17:55	1
Dichlorobromomethane	<1.0		1.0		ug/L			02/11/20 17:55	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/11/20 17:55	1
Ethylbenzene	2.2		1.0		ug/L			02/11/20 17:55	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/11/20 17:55	1
Isopropylbenzene	3.2		1.0		ug/L			02/11/20 17:55	1
Methyl acetate	<5.0		5.0		ug/L			02/11/20 17:55	1
Methyl tert-butyl ether	1.7		1.0		ug/L			02/11/20 17:55	1
Methylcyclohexane	2.8		1.0		ug/L			02/11/20 17:55	1
Methylene Chloride	<5.0		5.0		ug/L			02/11/20 17:55	1
Styrene	<1.0		1.0		ug/L			02/11/20 17:55	1
Tetrachloroethene	<1.0		1.0		ug/L			02/11/20 17:55	1
Toluene	9.0		1.0		ug/L			02/11/20 17:55	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 17:55	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 17:55	1
Trichloroethene	<1.0		1.0		ug/L			02/11/20 17:55	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/11/20 17:55	1
Vinyl chloride	<1.0		1.0		ug/L			02/11/20 17:55	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-15

Lab Sample ID: 400-183435-2

Date Collected: 02/03/20 11:05

Matrix: Water

Date Received: 02/04/20 09:07

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<10		10		ug/L			02/11/20 17:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		78 - 118					02/11/20 17:55	1
Dibromofluoromethane	103		81 - 121					02/11/20 17:55	1
Toluene-d8 (Surr)	94		80 - 120					02/11/20 17:55	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	500		100		ug/L			02/05/20 01:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	105		78 - 119					02/05/20 01:48	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	300		110		ug/L		02/05/20 10:32	02/07/20 00:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	52		40 - 140				02/05/20 10:32	02/07/20 00:10	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-16

Lab Sample ID: 400-183435-3

Date Collected: 02/03/20 09:52

Matrix: Water

Date Received: 02/04/20 09:07

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/11/20 18:19	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/11/20 18:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/11/20 18:19	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/11/20 18:19	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/11/20 18:19	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/11/20 18:19	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/11/20 18:19	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/11/20 18:19	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/11/20 18:19	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
2-Butanone (MEK)	<25		25		ug/L			02/11/20 18:19	1
2-Hexanone	<25		25		ug/L			02/11/20 18:19	1
4-Methyl-2-pentanone (MIBK)	<25		25		ug/L			02/11/20 18:19	1
Acetone	<25		25		ug/L			02/11/20 18:19	1
Benzene	<1.0		1.0		ug/L			02/11/20 18:19	1
Bromoform	<5.0		5.0		ug/L			02/11/20 18:19	1
Bromomethane	<1.0 *		1.0		ug/L			02/11/20 18:19	1
Carbon disulfide	<1.0		1.0		ug/L			02/11/20 18:19	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/11/20 18:19	1
Chlorobenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
Chlorobromomethane	<1.0		1.0		ug/L			02/11/20 18:19	1
Chlorodibromomethane	<1.0		1.0		ug/L			02/11/20 18:19	1
Chloroethane	<1.0		1.0		ug/L			02/11/20 18:19	1
Chloroform	<1.0		1.0		ug/L			02/11/20 18:19	1
Chloromethane	<1.0		1.0		ug/L			02/11/20 18:19	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 18:19	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 18:19	1
Cyclohexane	<1.0		1.0		ug/L			02/11/20 18:19	1
Dichlorobromomethane	<1.0		1.0		ug/L			02/11/20 18:19	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/11/20 18:19	1
Ethylbenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/11/20 18:19	1
Isopropylbenzene	<1.0		1.0		ug/L			02/11/20 18:19	1
Methyl acetate	<5.0		5.0		ug/L			02/11/20 18:19	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/11/20 18:19	1
Methylcyclohexane	<1.0		1.0		ug/L			02/11/20 18:19	1
Methylene Chloride	<5.0		5.0		ug/L			02/11/20 18:19	1
Styrene	<1.0		1.0		ug/L			02/11/20 18:19	1
Tetrachloroethene	<1.0		1.0		ug/L			02/11/20 18:19	1
Toluene	<1.0		1.0		ug/L			02/11/20 18:19	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 18:19	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 18:19	1
Trichloroethene	<1.0		1.0		ug/L			02/11/20 18:19	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/11/20 18:19	1
Vinyl chloride	<1.0		1.0		ug/L			02/11/20 18:19	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-16

Lab Sample ID: 400-183435-3

Date Collected: 02/03/20 09:52

Matrix: Water

Date Received: 02/04/20 09:07

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<10		10		ug/L			02/11/20 18:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		78 - 118					02/11/20 18:19	1
Dibromofluoromethane	105		81 - 121					02/11/20 18:19	1
Toluene-d8 (Surr)	93		80 - 120					02/11/20 18:19	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/05/20 02:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	94		78 - 119					02/05/20 02:19	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	170		120		ug/L		02/05/20 10:32	02/07/20 00:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	59		40 - 140				02/05/20 10:32	02/07/20 00:33	1

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 400-477459/28

Matrix: Water

Analysis Batch: 477459

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<1.0		1.0		ug/L			02/11/20 13:04	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			02/11/20 13:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			02/11/20 13:04	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			02/11/20 13:04	1
1,1-Dichloroethane	<1.0		1.0		ug/L			02/11/20 13:04	1
1,1-Dichloroethene	<1.0		1.0		ug/L			02/11/20 13:04	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			02/11/20 13:04	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
1,2-Dichloroethane	<1.0		1.0		ug/L			02/11/20 13:04	1
1,2-Dichloropropane	<1.0		1.0		ug/L			02/11/20 13:04	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
2-Butanone (MEK)	<25		25		ug/L			02/11/20 13:04	1
2-Hexanone	<25		25		ug/L			02/11/20 13:04	1
4-Methyl-2-pentanone (MIBK)	<25		25		ug/L			02/11/20 13:04	1
Acetone	<25		25		ug/L			02/11/20 13:04	1
Benzene	<1.0		1.0		ug/L			02/11/20 13:04	1
Bromoform	<5.0		5.0		ug/L			02/11/20 13:04	1
Bromomethane	<1.0		1.0		ug/L			02/11/20 13:04	1
Carbon disulfide	<1.0		1.0		ug/L			02/11/20 13:04	1
Carbon tetrachloride	<1.0		1.0		ug/L			02/11/20 13:04	1
Chlorobenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
Chlorobromomethane	<1.0		1.0		ug/L			02/11/20 13:04	1
Chlorodibromomethane	<1.0		1.0		ug/L			02/11/20 13:04	1
Chloroethane	<1.0		1.0		ug/L			02/11/20 13:04	1
Chloroform	<1.0		1.0		ug/L			02/11/20 13:04	1
Chloromethane	<1.0		1.0		ug/L			02/11/20 13:04	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 13:04	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 13:04	1
Cyclohexane	<1.0		1.0		ug/L			02/11/20 13:04	1
Dichlorobromomethane	<1.0		1.0		ug/L			02/11/20 13:04	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			02/11/20 13:04	1
Ethylbenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
Ethylene Dibromide	<1.0		1.0		ug/L			02/11/20 13:04	1
Isopropylbenzene	<1.0		1.0		ug/L			02/11/20 13:04	1
Methyl acetate	<5.0		5.0		ug/L			02/11/20 13:04	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			02/11/20 13:04	1
Methylcyclohexane	<1.0		1.0		ug/L			02/11/20 13:04	1
Methylene Chloride	<5.0		5.0		ug/L			02/11/20 13:04	1
Styrene	<1.0		1.0		ug/L			02/11/20 13:04	1
Tetrachloroethene	<1.0		1.0		ug/L			02/11/20 13:04	1
Toluene	<1.0		1.0		ug/L			02/11/20 13:04	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			02/11/20 13:04	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			02/11/20 13:04	1
Trichloroethene	<1.0		1.0		ug/L			02/11/20 13:04	1
Trichlorofluoromethane	<1.0		1.0		ug/L			02/11/20 13:04	1

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 400-477459/28

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 477459

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<1.0		1.0		ug/L			02/11/20 13:04	1
Xylenes, Total	<10		10		ug/L			02/11/20 13:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		78 - 118		02/11/20 13:04	1
Dibromofluoromethane	106		81 - 121		02/11/20 13:04	1
Toluene-d8 (Surr)	92		80 - 120		02/11/20 13:04	1

Lab Sample ID: LCS 400-477459/1002

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 477459

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	68 - 130
1,1,2,2-Tetrachloroethane	50.0	51.4		ug/L		103	70 - 131
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	62.2		ug/L		124	60 - 139
1,1,2-Trichloroethane	50.0	55.6		ug/L		111	70 - 130
1,1-Dichloroethane	50.0	49.0		ug/L		98	70 - 130
1,1-Dichloroethene	50.0	59.7		ug/L		119	63 - 134
1,2,3-Trichlorobenzene	50.0	49.6		ug/L		99	60 - 138
1,2-Dibromo-3-Chloropropane	50.0	50.0		ug/L		100	54 - 135
1,2-Dichlorobenzene	50.0	52.1		ug/L		104	67 - 130
1,2-Dichloroethane	50.0	53.3		ug/L		107	69 - 130
1,2-Dichloropropane	50.0	47.8		ug/L		96	70 - 130
1,3-Dichlorobenzene	50.0	52.0		ug/L		104	70 - 130
1,4-Dichlorobenzene	50.0	50.9		ug/L		102	70 - 130
2-Butanone (MEK)	200	215		ug/L		108	61 - 145
2-Hexanone	200	207		ug/L		103	65 - 137
4-Methyl-2-pentanone (MIBK)	200	205		ug/L		103	69 - 138
Acetone	200	232		ug/L		116	43 - 160
Benzene	50.0	50.7		ug/L		101	70 - 130
Bromoform	50.0	48.3		ug/L		97	57 - 140
Bromomethane	50.0	90.7	*	ug/L		181	10 - 160
Carbon disulfide	50.0	56.5		ug/L		113	61 - 137
Carbon tetrachloride	50.0	50.8		ug/L		102	61 - 137
Chlorobenzene	50.0	51.5		ug/L		103	70 - 130
Chlorobromomethane	50.0	54.4		ug/L		109	70 - 130
Chlorodibromomethane	50.0	52.9		ug/L		106	67 - 135
Chloroethane	50.0	69.7		ug/L		139	55 - 141
Chloroform	50.0	52.6		ug/L		105	69 - 130
Chloromethane	50.0	38.9		ug/L		78	58 - 137
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	49.1		ug/L		98	69 - 132
Cyclohexane	50.0	50.6		ug/L		101	70 - 130
Dichlorobromomethane	50.0	51.4		ug/L		103	67 - 133
Dichlorodifluoromethane	50.0	28.8		ug/L		58	41 - 146
Ethylbenzene	50.0	50.1		ug/L		100	70 - 130
Ethylene Dibromide	50.0	55.3		ug/L		111	70 - 130

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 400-477459/1002

Matrix: Water

Analysis Batch: 477459

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	50.0	52.8		ug/L		106	70 - 130
Methyl acetate	100	92.7		ug/L		93	45 - 159
Methyl tert-butyl ether	50.0	50.0		ug/L		100	66 - 130
Methylcyclohexane	50.0	51.7		ug/L		103	70 - 130
Methylene Chloride	50.0	50.6		ug/L		101	66 - 135
m-Xylene & p-Xylene	50.0	50.5		ug/L		101	70 - 130
o-Xylene	50.0	50.7		ug/L		101	70 - 130
Styrene	50.0	52.1		ug/L		104	70 - 130
Tetrachloroethene	50.0	59.9		ug/L		120	65 - 130
Toluene	50.0	50.7		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	51.3		ug/L		103	70 - 130
trans-1,3-Dichloropropene	50.0	51.0		ug/L		102	63 - 130
Trichloroethene	50.0	54.2		ug/L		108	70 - 130
Trichlorofluoromethane	50.0	64.5		ug/L		129	65 - 138
Vinyl chloride	50.0	46.3		ug/L		93	59 - 136
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	90		78 - 118
Dibromofluoromethane	107		81 - 121
Toluene-d8 (Surr)	95		80 - 120

Lab Sample ID: 400-183566-A-9 MS

Matrix: Water

Analysis Batch: 477459

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	<1.0		50.0	50.8		ug/L		102	57 - 142
1,1,1,2-Tetrachloroethane	<1.0		50.0	47.0		ug/L		94	66 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	66.3		ug/L		133	55 - 150
1,1,2-Trichloroethane	<5.0		50.0	50.5		ug/L		101	66 - 131
1,1-Dichloroethane	<1.0		50.0	48.4		ug/L		97	61 - 144
1,1-Dichloroethene	<1.0		50.0	65.7		ug/L		131	54 - 147
1,2,3-Trichlorobenzene	<1.0		50.0	42.7		ug/L		85	43 - 145
1,2-Dibromo-3-Chloropropane	<5.0		50.0	45.4		ug/L		91	45 - 135
1,2-Dichlorobenzene	<1.0		50.0	46.6		ug/L		93	52 - 137
1,2-Dichloroethane	<1.0		50.0	53.0		ug/L		106	60 - 141
1,2-Dichloropropane	<1.0		50.0	47.2		ug/L		94	66 - 137
1,3-Dichlorobenzene	<1.0		50.0	46.1		ug/L		92	54 - 135
1,4-Dichlorobenzene	<1.0		50.0	43.9		ug/L		88	53 - 135
2-Butanone (MEK)	<25		200	185		ug/L		93	55 - 150
2-Hexanone	<25		200	178		ug/L		89	65 - 140
4-Methyl-2-pentanone (MIBK)	<25		200	193		ug/L		96	63 - 146
Acetone	<25		200	222		ug/L		111	43 - 150
Benzene	<1.0		50.0	50.7		ug/L		101	56 - 142
Bromoform	<5.0		50.0	47.0		ug/L		94	50 - 140
Bromomethane	<1.0	F1 *	50.0	87.4	F1	ug/L		175	10 - 150
Carbon disulfide	<1.0		50.0	52.7		ug/L		105	48 - 150

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-183566-A-9 MS

Client Sample ID: Matrix Spike

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 477459

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Carbon tetrachloride	<1.0		50.0	50.1		ug/L		100	55 - 145
Chlorobenzene	<1.0		50.0	47.7		ug/L		95	64 - 130
Chlorobromomethane	<1.0		50.0	53.7		ug/L		107	64 - 140
Chlorodibromomethane	<1.0		50.0	50.1		ug/L		100	56 - 143
Chloroethane	<1.0		50.0	69.7		ug/L		139	50 - 150
Chloroform	<1.0		50.0	51.3		ug/L		103	60 - 141
Chloromethane	<1.0		50.0	39.1		ug/L		78	49 - 148
cis-1,2-Dichloroethene	<1.0		50.0	48.7		ug/L		97	59 - 143
cis-1,3-Dichloropropene	<5.0		50.0	47.7		ug/L		95	57 - 140
Cyclohexane	<1.0		50.0	49.6		ug/L		99	58 - 141
Dichlorobromomethane	<1.0		50.0	50.5		ug/L		101	59 - 143
Dichlorodifluoromethane	<1.0		50.0	28.7		ug/L		57	16 - 150
Ethylbenzene	<1.0		50.0	44.8		ug/L		90	58 - 131
Ethylene Dibromide	<1.0		50.0	51.7		ug/L		103	64 - 132
Isopropylbenzene	<1.0		50.0	46.3		ug/L		93	56 - 133
Methyl acetate	<5.0		100	90.7		ug/L		91	21 - 150
Methyl tert-butyl ether	<1.0		50.0	49.3		ug/L		99	59 - 137
Methylcyclohexane	<1.0		50.0	50.4		ug/L		101	62 - 141
Methylene Chloride	<5.0		50.0	50.8		ug/L		102	60 - 146
m-Xylene & p-Xylene	<5.0		50.0	44.8		ug/L		90	57 - 130
o-Xylene	<5.0		50.0	46.2		ug/L		92	61 - 130
Styrene	<1.0		50.0	47.0		ug/L		94	58 - 131
Tetrachloroethene	<1.0		50.0	51.3		ug/L		103	52 - 133
Toluene	<1.0		50.0	48.1		ug/L		96	65 - 130
trans-1,2-Dichloroethene	<1.0		50.0	50.5		ug/L		101	61 - 143
trans-1,3-Dichloropropene	<5.0		50.0	46.5		ug/L		93	53 - 133
Trichloroethene	<1.0		50.0	54.1		ug/L		108	64 - 136
Trichlorofluoromethane	<1.0		50.0	67.5		ug/L		135	54 - 150
Vinyl chloride	<1.0		50.0	45.4		ug/L		91	46 - 150
Xylenes, Total	<10		100	90.9		ug/L		91	59 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		78 - 118
Dibromofluoromethane	107		81 - 121
Toluene-d8 (Surr)	92		80 - 120

Lab Sample ID: 400-183566-A-9 MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 477459

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	<1.0		50.0	50.2		ug/L		100	57 - 142	1	30
1,1,1,2-Tetrachloroethane	<1.0		50.0	49.2		ug/L		98	66 - 135	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	63.7		ug/L		127	55 - 150	4	30
1,1,2-Trichloroethane	<5.0		50.0	50.5		ug/L		101	66 - 131	0	30
1,1-Dichloroethane	<1.0		50.0	47.0		ug/L		94	61 - 144	3	30
1,1-Dichloroethene	<1.0		50.0	62.4		ug/L		125	54 - 147	5	30
1,2,3-Trichlorobenzene	<1.0		50.0	43.6		ug/L		87	43 - 145	2	30

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-183566-A-9 MSD

Matrix: Water

Analysis Batch: 477459

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limit
1,2-Dibromo-3-Chloropropane	<5.0		50.0	49.3		ug/L		99	45 - 135	8	30
1,2-Dichlorobenzene	<1.0		50.0	45.7		ug/L		91	52 - 137	2	30
1,2-Dichloroethane	<1.0		50.0	51.1		ug/L		102	60 - 141	4	30
1,2-Dichloropropane	<1.0		50.0	48.8		ug/L		98	66 - 137	3	30
1,3-Dichlorobenzene	<1.0		50.0	44.3		ug/L		89	54 - 135	4	30
1,4-Dichlorobenzene	<1.0		50.0	42.2		ug/L		84	53 - 135	4	30
2-Butanone (MEK)	<25		200	214		ug/L		107	55 - 150	14	30
2-Hexanone	<25		200	195		ug/L		97	65 - 140	9	30
4-Methyl-2-pentanone (MIBK)	<25		200	206		ug/L		103	63 - 146	7	30
Acetone	<25		200	228		ug/L		114	43 - 150	2	30
Benzene	<1.0		50.0	49.5		ug/L		99	56 - 142	2	30
Bromoform	<5.0		50.0	48.1		ug/L		96	50 - 140	2	30
Bromomethane	<1.0	F1 *	50.0	95.2	F1	ug/L		190	10 - 150	8	50
Carbon disulfide	<1.0		50.0	57.2		ug/L		114	48 - 150	8	30
Carbon tetrachloride	<1.0		50.0	48.8		ug/L		98	55 - 145	3	30
Chlorobenzene	<1.0		50.0	44.4		ug/L		89	64 - 130	7	30
Chlorobromomethane	<1.0		50.0	52.2		ug/L		104	64 - 140	3	30
Chlorodibromomethane	<1.0		50.0	48.9		ug/L		98	56 - 143	3	30
Chloroethane	<1.0		50.0	66.1		ug/L		132	50 - 150	5	30
Chloroform	<1.0		50.0	50.9		ug/L		102	60 - 141	1	30
Chloromethane	<1.0		50.0	39.6		ug/L		79	49 - 148	1	31
cis-1,2-Dichloroethene	<1.0		50.0	46.9		ug/L		94	59 - 143	4	30
cis-1,3-Dichloropropene	<5.0		50.0	48.5		ug/L		97	57 - 140	2	30
Cyclohexane	<1.0		50.0	49.2		ug/L		98	58 - 141	1	30
Dichlorobromomethane	<1.0		50.0	49.8		ug/L		100	59 - 143	2	30
Dichlorodifluoromethane	<1.0		50.0	33.6		ug/L		67	16 - 150	16	31
Ethylbenzene	<1.0		50.0	43.1		ug/L		86	58 - 131	4	30
Ethylene Dibromide	<1.0		50.0	49.8		ug/L		100	64 - 132	4	30
Isopropylbenzene	<1.0		50.0	44.5		ug/L		89	56 - 133	4	30
Methyl acetate	<5.0		100	94.3		ug/L		94	21 - 150	4	30
Methyl tert-butyl ether	<1.0		50.0	50.0		ug/L		100	59 - 137	1	30
Methylcyclohexane	<1.0		50.0	49.4		ug/L		99	62 - 141	2	30
Methylene Chloride	<5.0		50.0	50.8		ug/L		102	60 - 146	0	32
m-Xylene & p-Xylene	<5.0		50.0	42.8		ug/L		86	57 - 130	5	30
o-Xylene	<5.0		50.0	43.7		ug/L		87	61 - 130	5	30
Styrene	<1.0		50.0	44.5		ug/L		89	58 - 131	5	30
Tetrachloroethene	<1.0		50.0	48.5		ug/L		97	52 - 133	6	30
Toluene	<1.0		50.0	45.4		ug/L		91	65 - 130	6	30
trans-1,2-Dichloroethene	<1.0		50.0	48.3		ug/L		97	61 - 143	5	30
trans-1,3-Dichloropropene	<5.0		50.0	47.8		ug/L		96	53 - 133	3	30
Trichloroethene	<1.0		50.0	50.3		ug/L		101	64 - 136	7	30
Trichlorofluoromethane	<1.0		50.0	60.1		ug/L		120	54 - 150	11	30
Vinyl chloride	<1.0		50.0	46.0		ug/L		92	46 - 150	1	30
Xylenes, Total	<10		100	86.5		ug/L		86	59 - 130	5	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	94		78 - 118
Dibromofluoromethane	108		81 - 121

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 400-183566-A-9 MSD
Matrix: Water
Analysis Batch: 477459

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Toluene-d8 (Surr)	94		80 - 120

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 400-476563/3
Matrix: Water
Analysis Batch: 476563

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			02/04/20 12:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	96		78 - 119		02/04/20 12:34	1

Lab Sample ID: LCS 400-476563/1002
Matrix: Water
Analysis Batch: 476563

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1000	928		ug/L		93	85 - 115

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	94		78 - 119

Lab Sample ID: 400-183363-D-1 MS
Matrix: Water
Analysis Batch: 476563

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	790		1000	1650		ug/L		86	35 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	86		78 - 119

Lab Sample ID: 400-183363-D-1 MSD
Matrix: Water
Analysis Batch: 476563

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO) -C6-C10	790		1000	1610		ug/L		82	35 - 150	2	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	86		78 - 119

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-476704/1-A
Matrix: Water
Analysis Batch: 476920

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 476704

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L		02/05/20 10:32	02/06/20 20:41	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	71		40 - 140				02/05/20 10:32	02/06/20 20:41	1

Lab Sample ID: LCS 400-476704/2-A
Matrix: Water
Analysis Batch: 476920

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 476704

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	17000	9090		ug/L		53	40 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl (Surr)	62		40 - 140				

Lab Sample ID: LCSD 400-476704/3-A
Matrix: Water
Analysis Batch: 476920

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 476704

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics [C10-C28]	17000	12200		ug/L		72	40 - 120	29	50
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl (Surr)	82		40 - 140						

QC Association Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

GC/MS VOA

Analysis Batch: 477459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183435-1	TW-14	Total/NA	Water	8260C	
400-183435-2	TW-15	Total/NA	Water	8260C	
400-183435-3	TW-16	Total/NA	Water	8260C	
MB 400-477459/28	Method Blank	Total/NA	Water	8260C	
LCS 400-477459/1002	Lab Control Sample	Total/NA	Water	8260C	
400-183566-A-9 MS	Matrix Spike	Total/NA	Water	8260C	
400-183566-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 476563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183435-1	TW-14	Total/NA	Water	8015C	
400-183435-2	TW-15	Total/NA	Water	8015C	
400-183435-3	TW-16	Total/NA	Water	8015C	
MB 400-476563/3	Method Blank	Total/NA	Water	8015C	
LCS 400-476563/1002	Lab Control Sample	Total/NA	Water	8015C	
400-183363-D-1 MS	Matrix Spike	Total/NA	Water	8015C	
400-183363-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8015C	

GC Semi VOA

Prep Batch: 476704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183435-1	TW-14	Total/NA	Water	3510C	
400-183435-2	TW-15	Total/NA	Water	3510C	
400-183435-3	TW-16	Total/NA	Water	3510C	
MB 400-476704/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-476704/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-476704/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 476920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-183435-1	TW-14	Total/NA	Water	8015C	476704
400-183435-2	TW-15	Total/NA	Water	8015C	476704
400-183435-3	TW-16	Total/NA	Water	8015C	476704
MB 400-476704/1-A	Method Blank	Total/NA	Water	8015C	476704
LCS 400-476704/2-A	Lab Control Sample	Total/NA	Water	8015C	476704
LCSD 400-476704/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	476704

Lab Chronicle

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Client Sample ID: TW-14

Lab Sample ID: 400-183435-1

Date Collected: 02/03/20 08:35

Matrix: Water

Date Received: 02/04/20 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	477459	02/11/20 17:31	RS	TAL PEN
Total/NA	Analysis	8015C		1	476563	02/05/20 01:16	GRK	TAL PEN
Total/NA	Prep	3510C			476704	02/05/20 10:32	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476920	02/06/20 23:58	JAW	TAL PEN

Client Sample ID: TW-15

Lab Sample ID: 400-183435-2

Date Collected: 02/03/20 11:05

Matrix: Water

Date Received: 02/04/20 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	477459	02/11/20 17:55	RS	TAL PEN
Total/NA	Analysis	8015C		1	476563	02/05/20 01:48	GRK	TAL PEN
Total/NA	Prep	3510C			476704	02/05/20 10:32	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476920	02/07/20 00:10	JAW	TAL PEN

Client Sample ID: TW-16

Lab Sample ID: 400-183435-3

Date Collected: 02/03/20 09:52

Matrix: Water

Date Received: 02/04/20 09:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	477459	02/11/20 18:19	RS	TAL PEN
Total/NA	Analysis	8015C		1	476563	02/05/20 02:19	GRK	TAL PEN
Total/NA	Prep	3510C			476704	02/05/20 10:32	CAO	TAL PEN
Total/NA	Analysis	8015C		1	476920	02/07/20 00:33	JAW	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Laboratory: Eurofins TestAmerica, Pensacola

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460166	06-14-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	Dibromofluoromethane

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-183435-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL PEN
8015C	Diesel Range Organics (DRO) (GC)	EPA	TAL PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PEN
5030C	Purge and Trap	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001



Chain of Custody Record



400-183435 COC

Client Information	Sampler: ALEXIS HOLCOMB	Lab PM: Swafford, Mark H	Carrier Tracking No(s):	COC No: 400-90970-33436.2
Client Contact: Alexis Holcomb	Phone: 703 869 1596	E-Mail: mark.swafford@testamericainc.com		Page: Page 2 of 2
Company: SCS Engineers				Job #: 02218113.09

Address: 2877 Guardian Lane Suite 1-F	Due Date Requested:	Analysis Requested Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) 8016C_DRO - (MOD) DRO C10-C28 8016C_GRO - GRO (C6-C10) 8280B - TCL Volatiles 8082A - TCL PCBs by 8082A 8270D - TCL Semivolatiles	Total Number of containers	Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)		
City: Virginia Beach	TAT Requested (days): 10					
State, Zip: VA, 23452	PO #: Purchase Order Requested					
Phone: 757 201 9264	WO #:					
Email: AHolcomb@scsengineers.com	Project #: 40005152					
Project Name: St. Paul's Sampling	SSOW#:					

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)						Total Number of containers	Special Instructions/Note:
					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8016C_DRO - (MOD) DRO C10-C28	8016C_GRO - GRO (C6-C10)	8280B - TCL Volatiles	8082A - TCL PCBs by 8082A		
B-14 TW-14	2/3/20	835	G	Water	X	X	X					
B-15 TW-15	2/3/20	1105	G	Water	X	X	X					
B-16 TW-16	2/3/20	952	G	Water	X	X	X					
B-3				Water								
B-4				Water								

Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: 2/3/20 1305	Company: SCS	Received by: <i>[Signature]</i>
Relinquished by: <i>[Signature]</i>	Date/Time: 2/3/20 1600	Company:	Date/Time: 2/3/20 1305
Relinquished by: <i>[Signature]</i>	Date/Time:	Company:	Date/Time: 2/4/20 9:55
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.3 °C 1R7 <i>[Signature]</i>	

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Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 400-183435-1

Login Number: 183435

List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Conrady, Hank W

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

Laboratory Job ID: 400-185244-1
Client Project/Site: St. Paul's

For:
SCS Engineers
2877 Guardian Lane
Suite 1-F
Virginia Beach, Virginia 23452

Attn: Keith Matteson



Authorized for release by:
3/24/2020 10:48:56 AM

Mark Swafford, Project Manager II
(850)471-6207
mark.swafford@testamericainc.com

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results through
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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Definitions/Glossary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time

General Chemistry

Qualifier	Qualifier Description
F3	Duplicate RPD exceeds the control limit

Glossary

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

Case Narrative

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Job ID: 400-185244-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative 400-185244-1

Comments

No additional comments.

Receipt

The samples were received on 3/12/2020 8:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

Receipt Exceptions

The container label said there was No preservative in the 250ml ambers, but the containers themselves are preserved with HYDROCHLORIC ACID. Logged in per containers

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC VOA

Method 8015C: The following sample was diluted because the base dilution for methanol preserved samples is 1:50: TW-17 (400-185244-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC Semi VOA

Method 8015C: The following samples were re-prepared outside of preparation holding time due to detection in the Method Blank above the RL: TW-17 (400-185244-1) and DUPLICATE (400-185244-2).

Method 8015C: Diesel Range Organics [C10-C28] was detected above the reporting limit (RL) in the method blank associated with preparation batch 400-482052 and 400-482052 and analytical batch 400-482341 as well as in the following samples: TW-17 (400-185244-1), DUPLICATE (400-185244-2) and (MB 400-482052/1-A). All affected samples were re-extracted and/or re-analyzed outside of holding time. Both sets of data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 400-482811.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: TW-17

Lab Sample ID: 400-185244-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	270	B	120		ug/L	1		8015C	Total/NA
Diesel Range Organics [C10-C28] - RE	130	H	130		ug/L	1		8015C	Total/NA

Client Sample ID: DUPLICATE

Lab Sample ID: 400-185244-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	210	B	120		ug/L	1		8015C	Total/NA

Client Sample ID: TW-17

Lab Sample ID: 400-185244-3

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Pensacola

Sample Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-185244-1	TW-17	Water	03/10/20 17:30	03/12/20 08:55	
400-185244-2	DUPLICATE	Water	03/10/20 17:30	03/12/20 08:55	
400-185244-3	TW-17	Solid	03/09/20 18:00	03/12/20 08:55	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: TW-17

Lab Sample ID: 400-185244-1

Date Collected: 03/10/20 17:30

Matrix: Water

Date Received: 03/12/20 08:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/19/20 00:11	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/19/20 00:11	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			03/19/20 00:11	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/19/20 00:11	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/19/20 00:11	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			03/19/20 00:11	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/19/20 00:11	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/19/20 00:11	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
2-Hexanone	<25		25		ug/L			03/19/20 00:11	1
Acetone	<25		25		ug/L			03/19/20 00:11	1
Benzene	<1.0		1.0		ug/L			03/19/20 00:11	1
Bromoform	<5.0		5.0		ug/L			03/19/20 00:11	1
Bromomethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Carbon disulfide	<1.0		1.0		ug/L			03/19/20 00:11	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/19/20 00:11	1
Chlorobenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
Chlorobromomethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Dibromochloromethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Chloroethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Chloroform	<1.0		1.0		ug/L			03/19/20 00:11	1
Chloromethane	<1.0		1.0		ug/L			03/19/20 00:11	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/19/20 00:11	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			03/19/20 00:11	1
Bromodichloromethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Ethylbenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
Ethylene Dibromide	<1.0		1.0		ug/L			03/19/20 00:11	1
Isopropylbenzene	<1.0		1.0		ug/L			03/19/20 00:11	1
Methyl Ethyl Ketone	<25		25		ug/L			03/19/20 00:11	1
methyl isobutyl ketone	<25		25		ug/L			03/19/20 00:11	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			03/19/20 00:11	1
Methylene Chloride	<5.0		5.0		ug/L			03/19/20 00:11	1
Styrene	<1.0		1.0		ug/L			03/19/20 00:11	1
Tetrachloroethene	<1.0		1.0		ug/L			03/19/20 00:11	1
Toluene	<1.0		1.0		ug/L			03/19/20 00:11	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/19/20 00:11	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			03/19/20 00:11	1
Trichloroethene	<1.0		1.0		ug/L			03/19/20 00:11	1
Trichlorofluoromethane	<1.0		1.0		ug/L			03/19/20 00:11	1
Vinyl chloride	<1.0		1.0		ug/L			03/19/20 00:11	1
Xylenes, Total	<10		10		ug/L			03/19/20 00:11	1
Methyl acetate	<5.0		5.0		ug/L			03/19/20 00:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			03/19/20 00:11	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: TW-17

Lab Sample ID: 400-185244-1

Date Collected: 03/10/20 17:30

Matrix: Water

Date Received: 03/12/20 08:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		78 - 118		03/19/20 00:11	1
Dibromofluoromethane	91		81 - 121		03/19/20 00:11	1
Toluene-d8 (Surr)	103		80 - 120		03/19/20 00:11	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			03/15/20 19:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		78 - 119		03/15/20 19:59	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	270	B	120		ug/L		03/16/20 09:27	03/17/20 19:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	94		40 - 140	03/16/20 09:27	03/17/20 19:28	1

Method: 8015C - Diesel Range Organics (DRO) (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	130	H	130		ug/L		03/20/20 08:49	03/23/20 16:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	103		40 - 140	03/20/20 08:49	03/23/20 16:32	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: DUPLICATE

Lab Sample ID: 400-185244-2

Date Collected: 03/10/20 17:30

Matrix: Water

Date Received: 03/12/20 08:55

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/19/20 00:41	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/19/20 00:41	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			03/19/20 00:41	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/19/20 00:41	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/19/20 00:41	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			03/19/20 00:41	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/19/20 00:41	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/19/20 00:41	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
2-Hexanone	<25		25		ug/L			03/19/20 00:41	1
Acetone	<25		25		ug/L			03/19/20 00:41	1
Benzene	<1.0		1.0		ug/L			03/19/20 00:41	1
Bromoform	<5.0		5.0		ug/L			03/19/20 00:41	1
Bromomethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Carbon disulfide	<1.0		1.0		ug/L			03/19/20 00:41	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/19/20 00:41	1
Chlorobenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
Chlorobromomethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Dibromochloromethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Chloroethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Chloroform	<1.0		1.0		ug/L			03/19/20 00:41	1
Chloromethane	<1.0		1.0		ug/L			03/19/20 00:41	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/19/20 00:41	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			03/19/20 00:41	1
Bromodichloromethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Ethylbenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
Ethylene Dibromide	<1.0		1.0		ug/L			03/19/20 00:41	1
Isopropylbenzene	<1.0		1.0		ug/L			03/19/20 00:41	1
Methyl Ethyl Ketone	<25		25		ug/L			03/19/20 00:41	1
methyl isobutyl ketone	<25		25		ug/L			03/19/20 00:41	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			03/19/20 00:41	1
Methylene Chloride	<5.0		5.0		ug/L			03/19/20 00:41	1
Styrene	<1.0		1.0		ug/L			03/19/20 00:41	1
Tetrachloroethene	<1.0		1.0		ug/L			03/19/20 00:41	1
Toluene	<1.0		1.0		ug/L			03/19/20 00:41	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/19/20 00:41	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			03/19/20 00:41	1
Trichloroethene	<1.0		1.0		ug/L			03/19/20 00:41	1
Trichlorofluoromethane	<1.0		1.0		ug/L			03/19/20 00:41	1
Vinyl chloride	<1.0		1.0		ug/L			03/19/20 00:41	1
Xylenes, Total	<10		10		ug/L			03/19/20 00:41	1
Methyl acetate	<5.0		5.0		ug/L			03/19/20 00:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			03/19/20 00:41	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: DUPLICATE

Lab Sample ID: 400-185244-2

Date Collected: 03/10/20 17:30

Matrix: Water

Date Received: 03/12/20 08:55

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		78 - 118		03/19/20 00:41	1
Dibromofluoromethane	93		81 - 121		03/19/20 00:41	1
Toluene-d8 (Surr)	104		80 - 120		03/19/20 00:41	1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			03/15/20 20:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	104		78 - 119		03/15/20 20:31	1

Method: 8015C - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	210	B	120		ug/L		03/16/20 09:27	03/17/20 19:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	99		40 - 140	03/16/20 09:27	03/17/20 19:38	1

Method: 8015C - Diesel Range Organics (DRO) (GC) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<120	H	120		ug/L		03/20/20 08:49	03/23/20 16:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	102		40 - 140	03/20/20 08:49	03/23/20 16:44	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: TW-17

Lab Sample ID: 400-185244-3

Date Collected: 03/09/20 18:00

Matrix: Solid

Date Received: 03/12/20 08:55

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,1,2,2-Tetrachloroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,1,2-Trichloroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,1-Dichloroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,1-Dichloroethene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,2,3-Trichlorobenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,2,4-Trichlorobenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,2-Dibromo-3-Chloropropane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,2-Dichlorobenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,2-Dichloroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,2-Dichloropropane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,3-Dichlorobenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
1,4-Dichlorobenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
2-Hexanone	<0.027		0.027		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Acetone	<0.027		0.027		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Benzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Bromodichloromethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Bromoform	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Bromomethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Carbon disulfide	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Carbon tetrachloride	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Chlorobenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Chlorobromomethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Chloroethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Chloroform	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Chloromethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
cis-1,2-Dichloroethene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
cis-1,3-Dichloropropene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Dibromochloromethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Dichlorodifluoromethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Ethylbenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Ethylene Dibromide	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Isopropylbenzene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Methyl acetate	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Methyl Ethyl Ketone	<0.027		0.027		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
methyl isobutyl ketone	<0.027		0.027		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Methyl tert-butyl ether	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Methylene Chloride	<0.016		0.016		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Styrene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Tetrachloroethene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Toluene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
trans-1,2-Dichloroethene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
trans-1,3-Dichloropropene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Trichloroethene	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Trichlorofluoromethane	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Vinyl chloride	<0.0055		0.0055		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1
Xylenes, Total	<0.011		0.011		mg/Kg	☼	03/18/20 06:31	03/18/20 12:36	1

Client Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: TW-17

Lab Sample ID: 400-185244-3

Date Collected: 03/09/20 18:00

Matrix: Solid

Date Received: 03/12/20 08:55

Percent Solids: 85.1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		67 - 130	03/18/20 06:31	03/18/20 12:36	1
Dibromofluoromethane	94		77 - 127	03/18/20 06:31	03/18/20 12:36	1
Toluene-d8 (Surr)	104		76 - 127	03/18/20 06:31	03/18/20 12:36	1

Method: 8015C - Gasoline Range Organics (GRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<7.2		7.2		mg/Kg	☼	03/17/20 13:31	03/17/20 13:53	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	102		65 - 125	03/17/20 13:31	03/17/20 13:53	50

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<5.8		5.8		mg/Kg	☼	03/13/20 10:12	03/18/20 06:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	102		27 - 151	03/13/20 10:12	03/18/20 06:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14.9		0.01		%			03/16/20 10:34	1

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: MB 400-482427/1-A

Matrix: Solid

Analysis Batch: 482400

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 482427

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,1,2-Trichloroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,1-Dichloroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,1-Dichloroethene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,2,3-Trichlorobenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,2,4-Trichlorobenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,2-Dibromo-3-Chloropropane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,2-Dichlorobenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,2-Dichloroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,2-Dichloropropane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,3-Dichlorobenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,4-Dichlorobenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
2-Hexanone	<0.025		0.025		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Acetone	<0.025		0.025		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Benzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Bromoform	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Bromomethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Carbon disulfide	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Carbon tetrachloride	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Chlorobenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Chlorobromomethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Chloroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Chloroform	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Chloromethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
cis-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
cis-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Bromodichloromethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Dibromochloromethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Dichlorodifluoromethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Ethylbenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Ethylene Dibromide	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Isopropylbenzene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Methyl Ethyl Ketone	<0.025		0.025		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
methyl isobutyl ketone	<0.025		0.025		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Methyl tert-butyl ether	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Methylene Chloride	<0.015		0.015		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Styrene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Tetrachloroethene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Toluene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
trans-1,2-Dichloroethene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
trans-1,3-Dichloropropene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Trichloroethene	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Trichlorofluoromethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Methyl acetate	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Vinyl chloride	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0050		0.0050		mg/Kg		03/18/20 06:31	03/18/20 08:38	1
Xylenes, Total	<0.010		0.010		mg/Kg		03/18/20 06:31	03/18/20 08:38	1

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: MB 400-482427/1-A
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482427

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene	105		67 - 130	03/18/20 06:31	03/18/20 08:38	1
Dibromofluoromethane	93		77 - 127	03/18/20 06:31	03/18/20 08:38	1
Toluene-d8 (Surr)	104		76 - 127	03/18/20 06:31	03/18/20 08:38	1

Lab Sample ID: LCS 400-482427/2-A
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	0.0500	0.0480		mg/Kg		96	63 - 130
1,1,1,2-Tetrachloroethane	0.0500	0.0500		mg/Kg		100	60 - 131
1,1,2-Trichloroethane	0.0500	0.0466		mg/Kg		93	65 - 130
1,1-Dichloroethane	0.0500	0.0463		mg/Kg		93	59 - 130
1,1-Dichloroethene	0.0500	0.0492		mg/Kg		98	55 - 137
1,2,3-Trichlorobenzene	0.0500	0.0593		mg/Kg		119	58 - 135
1,2,4-Trichlorobenzene	0.0500	0.0583		mg/Kg		117	56 - 138
1,2-Dibromo-3-Chloropropane	0.0500	0.0483		mg/Kg		97	49 - 130
1,2-Dichlorobenzene	0.0500	0.0512		mg/Kg		102	64 - 130
1,2-Dichloroethane	0.0500	0.0427		mg/Kg		85	62 - 130
1,2-Dichloropropane	0.0500	0.0457		mg/Kg		91	64 - 130
1,3-Dichlorobenzene	0.0500	0.0516		mg/Kg		103	66 - 130
1,4-Dichlorobenzene	0.0500	0.0522		mg/Kg		104	65 - 130
2-Hexanone	0.200	0.163		mg/Kg		82	57 - 131
Acetone	0.200	0.141		mg/Kg		70	48 - 160
Benzene	0.0500	0.0458		mg/Kg		92	65 - 130
Bromoform	0.0500	0.0507		mg/Kg		101	52 - 136
Bromomethane	0.0500	0.0490		mg/Kg		98	12 - 160
Carbon disulfide	0.0500	0.0461		mg/Kg		92	46 - 141
Carbon tetrachloride	0.0500	0.0443		mg/Kg		89	60 - 130
Chlorobenzene	0.0500	0.0484		mg/Kg		97	70 - 130
Chlorobromomethane	0.0500	0.0502		mg/Kg		100	65 - 130
Chloroethane	0.0500	0.0537		mg/Kg		107	55 - 134
Chloroform	0.0500	0.0434		mg/Kg		87	62 - 130
Chloromethane	0.0500	0.0463		mg/Kg		93	49 - 136
cis-1,2-Dichloroethene	0.0500	0.0445		mg/Kg		89	53 - 135
cis-1,3-Dichloropropene	0.0500	0.0465		mg/Kg		93	61 - 130
Bromodichloromethane	0.0500	0.0457		mg/Kg		91	61 - 130
Dibromochloromethane	0.0500	0.0468		mg/Kg		94	58 - 132
Dichlorodifluoromethane	0.0500	0.0588		mg/Kg		118	34 - 143
Ethylbenzene	0.0500	0.0466		mg/Kg		93	70 - 130
Ethylene Dibromide	0.0500	0.0459		mg/Kg		92	67 - 130
Isopropylbenzene	0.0500	0.0486		mg/Kg		97	70 - 130
Methyl Ethyl Ketone	0.200	0.148		mg/Kg		74	55 - 130
methyl isobutyl ketone	0.200	0.167		mg/Kg		84	58 - 130
Methyl tert-butyl ether	0.0500	0.0449		mg/Kg		90	63 - 130
Methylene Chloride	0.0500	0.0495		mg/Kg		99	57 - 132
Styrene	0.0500	0.0476		mg/Kg		95	68 - 130
Tetrachloroethene	0.0500	0.0472		mg/Kg		94	67 - 130

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: LCS 400-482427/2-A
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482427

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Toluene	0.0500	0.0439		mg/Kg		88	70 - 130
trans-1,2-Dichloroethene	0.0500	0.0474		mg/Kg		95	58 - 134
trans-1,3-Dichloropropene	0.0500	0.0473		mg/Kg		95	60 - 130
Trichloroethene	0.0500	0.0458		mg/Kg		92	65 - 130
Trichlorofluoromethane	0.0500	0.0497		mg/Kg		99	61 - 136
Methyl acetate	0.100	0.0767		mg/Kg		77	49 - 139
Vinyl chloride	0.0500	0.0526		mg/Kg		105	52 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0500	0.0455		mg/Kg		91	47 - 143
Xylenes, Total	0.100	0.0925		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	103		67 - 130
Dibromofluoromethane	92		77 - 127
Toluene-d8 (Surr)	107		76 - 127

Lab Sample ID: 400-185096-A-2-E MS
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 482427

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	<0.0063		0.0648	0.0519		mg/Kg	☼	80	41 - 130
1,1,2,2-Tetrachloroethane	<0.0063		0.0648	0.0445		mg/Kg	☼	69	10 - 149
1,1,2-Trichloroethane	<0.0063		0.0648	0.0466		mg/Kg	☼	72	37 - 130
1,1-Dichloroethane	<0.0063		0.0648	0.0511		mg/Kg	☼	79	41 - 130
1,1-Dichloroethene	<0.0063		0.0648	0.0530		mg/Kg	☼	82	39 - 138
1,2,3-Trichlorobenzene	<0.0063		0.0648	0.0328		mg/Kg	☼	51	10 - 146
1,2,4-Trichlorobenzene	<0.0063		0.0648	0.0348		mg/Kg	☼	54	10 - 141
1,2-Dibromo-3-Chloropropane	<0.0063		0.0648	0.0403		mg/Kg	☼	62	14 - 132
1,2-Dichlorobenzene	<0.0063		0.0648	0.0400		mg/Kg	☼	62	20 - 130
1,2-Dichloroethane	<0.0063		0.0648	0.0415		mg/Kg	☼	64	37 - 130
1,2-Dichloropropane	<0.0063		0.0648	0.0483		mg/Kg	☼	75	39 - 130
1,3-Dichlorobenzene	<0.0063		0.0648	0.0413		mg/Kg	☼	64	22 - 130
1,4-Dichlorobenzene	<0.0063		0.0648	0.0416		mg/Kg	☼	64	21 - 130
2-Hexanone	<0.031		0.259	0.164		mg/Kg	☼	63	20 - 142
Acetone	0.054		0.259	0.208		mg/Kg	☼	59	10 - 150
Benzene	<0.0063		0.0648	0.0481		mg/Kg	☼	74	38 - 131
Bromoform	<0.0063		0.0648	0.0440		mg/Kg	☼	68	24 - 136
Bromomethane	<0.0063		0.0648	0.0549		mg/Kg	☼	85	10 - 150
Carbon disulfide	<0.0063		0.0648	0.0512		mg/Kg	☼	79	29 - 141
Carbon tetrachloride	<0.0063		0.0648	0.0491		mg/Kg	☼	76	36 - 134
Chlorobenzene	<0.0063		0.0648	0.0461		mg/Kg	☼	71	37 - 130
Chlorobromomethane	<0.0063		0.0648	0.0518		mg/Kg	☼	80	37 - 134
Chloroethane	<0.0063		0.0648	0.0563		mg/Kg	☼	87	36 - 139
Chloroform	<0.0063		0.0648	0.0482		mg/Kg	☼	74	39 - 130
Chloromethane	<0.0063		0.0648	0.0484		mg/Kg	☼	75	35 - 136
cis-1,2-Dichloroethene	<0.0063		0.0648	0.0465		mg/Kg	☼	72	32 - 135
cis-1,3-Dichloropropene	<0.0063		0.0648	0.0471		mg/Kg	☼	73	34 - 130
Bromodichloromethane	<0.0063		0.0648	0.0466		mg/Kg	☼	72	37 - 130

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: 400-185096-A-2-E MS
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 482427

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Dibromochloromethane	<0.0063		0.0648	0.0459		mg/Kg	☼	71		32 - 132
Dichlorodifluoromethane	<0.0063		0.0648	0.0614		mg/Kg	☼	95		21 - 146
Ethylbenzene	<0.0063		0.0648	0.0469		mg/Kg	☼	72		35 - 130
Ethylene Dibromide	<0.0063		0.0648	0.0466		mg/Kg	☼	72		35 - 130
Isopropylbenzene	<0.0063		0.0648	0.0464		mg/Kg	☼	72		31 - 132
Methyl Ethyl Ketone	<0.031		0.259	0.180		mg/Kg	☼	65		19 - 139
methyl isobutyl ketone	<0.031		0.259	0.168		mg/Kg	☼	65		21 - 144
Methyl tert-butyl ether	<0.0063		0.0648	0.0486		mg/Kg	☼	75		34 - 132
Methylene Chloride	<0.019		0.0648	0.0494		mg/Kg	☼	76		36 - 132
Styrene	<0.0063		0.0648	0.0428		mg/Kg	☼	66		31 - 130
Tetrachloroethene	<0.0063		0.0648	0.0451		mg/Kg	☼	70		27 - 147
Toluene	<0.0063		0.0648	0.0450		mg/Kg	☼	69		42 - 130
trans-1,2-Dichloroethene	<0.0063		0.0648	0.0510		mg/Kg	☼	79		40 - 134
trans-1,3-Dichloropropene	<0.0063		0.0648	0.0445		mg/Kg	☼	69		31 - 130
Trichloroethene	<0.0063		0.0648	0.0491		mg/Kg	☼	76		34 - 144
Trichlorofluoromethane	<0.0063		0.0648	0.0505		mg/Kg	☼	78		41 - 143
Methyl acetate	<0.0063		0.130	0.108		mg/Kg	☼	83		10 - 150
Vinyl chloride	<0.0063		0.0648	0.0582		mg/Kg	☼	90		35 - 136
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0063		0.0648	0.0523		mg/Kg	☼	81		32 - 146
Xylenes, Total	<0.013		0.130	0.0901		mg/Kg	☼	69		35 - 130
		MS	MS							
Surrogate	%Recovery	Qualifier	Limits							
4-Bromofluorobenzene	101		67 - 130							
Dibromofluoromethane	93		77 - 127							
Toluene-d8 (Surr)	105		76 - 127							

Lab Sample ID: 400-185096-A-2-F MSD
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 482427

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
1,1,1-Trichloroethane	<0.0063		0.0641	0.0563		mg/Kg	☼	88		41 - 130	8	40
1,1,2,2-Tetrachloroethane	<0.0063		0.0641	0.0520		mg/Kg	☼	81		10 - 149	16	44
1,1,2-Trichloroethane	<0.0063		0.0641	0.0497		mg/Kg	☼	78		37 - 130	6	33
1,1-Dichloroethane	<0.0063		0.0641	0.0535		mg/Kg	☼	83		41 - 130	5	35
1,1-Dichloroethene	<0.0063		0.0641	0.0574		mg/Kg	☼	90		39 - 138	8	37
1,2,3-Trichlorobenzene	<0.0063		0.0641	0.0371		mg/Kg	☼	58		10 - 146	12	47
1,2,4-Trichlorobenzene	<0.0063		0.0641	0.0390		mg/Kg	☼	61		10 - 141	11	53
1,2-Dibromo-3-Chloropropane	<0.0063		0.0641	0.0466		mg/Kg	☼	73		14 - 132	14	38
1,2-Dichlorobenzene	<0.0063		0.0641	0.0448		mg/Kg	☼	70		20 - 130	11	40
1,2-Dichloroethane	<0.0063		0.0641	0.0435		mg/Kg	☼	68		37 - 130	5	32
1,2-Dichloropropane	<0.0063		0.0641	0.0524		mg/Kg	☼	82		39 - 130	8	35
1,3-Dichlorobenzene	<0.0063		0.0641	0.0460		mg/Kg	☼	72		22 - 130	11	41
1,4-Dichlorobenzene	<0.0063		0.0641	0.0462		mg/Kg	☼	72		21 - 130	11	40
2-Hexanone	<0.031		0.256	0.180		mg/Kg	☼	70		20 - 142	9	37
Acetone	0.054		0.256	0.223		mg/Kg	☼	66		10 - 150	7	38
Benzene	<0.0063		0.0641	0.0525		mg/Kg	☼	82		38 - 131	9	36
Bromoform	<0.0063		0.0641	0.0503		mg/Kg	☼	78		24 - 136	13	34

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: 400-185096-A-2-F MSD
Matrix: Solid
Analysis Batch: 482400

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 482427

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	<0.0063		0.0641	0.0617		mg/Kg	☼	96	10 - 150	12	47
Carbon disulfide	<0.0063		0.0641	0.0542		mg/Kg	☼	85	29 - 141	6	39
Carbon tetrachloride	<0.0063		0.0641	0.0509		mg/Kg	☼	80	36 - 134	4	44
Chlorobenzene	<0.0063		0.0641	0.0499		mg/Kg	☼	78	37 - 130	8	37
Chlorobromomethane	<0.0063		0.0641	0.0484		mg/Kg	☼	76	37 - 134	7	38
Chloroethane	<0.0063		0.0641	0.0529		mg/Kg	☼	83	36 - 139	6	42
Chloroform	<0.0063		0.0641	0.0492		mg/Kg	☼	77	39 - 130	2	35
Chloromethane	<0.0063		0.0641	0.0501		mg/Kg	☼	78	35 - 136	4	41
cis-1,2-Dichloroethene	<0.0063		0.0641	0.0498		mg/Kg	☼	78	32 - 135	7	35
cis-1,3-Dichloropropene	<0.0063		0.0641	0.0504		mg/Kg	☼	79	34 - 130	7	35
Bromodichloromethane	<0.0063		0.0641	0.0516		mg/Kg	☼	81	37 - 130	10	34
Dibromochloromethane	<0.0063		0.0641	0.0497		mg/Kg	☼	78	32 - 132	8	34
Dichlorodifluoromethane	<0.0063		0.0641	0.0593		mg/Kg	☼	93	21 - 146	3	46
Ethylbenzene	<0.0063		0.0641	0.0494		mg/Kg	☼	77	35 - 130	5	46
Ethylene Dibromide	<0.0063		0.0641	0.0494		mg/Kg	☼	77	35 - 130	6	31
Isopropylbenzene	<0.0063		0.0641	0.0481		mg/Kg	☼	75	31 - 132	4	51
Methyl Ethyl Ketone	<0.031		0.256	0.200		mg/Kg	☼	74	19 - 139	11	41
methyl isobutyl ketone	<0.031		0.256	0.193		mg/Kg	☼	75	21 - 144	13	39
Methyl tert-butyl ether	<0.0063		0.0641	0.0527		mg/Kg	☼	82	34 - 132	8	31
Methylene Chloride	<0.019		0.0641	0.0521		mg/Kg	☼	81	36 - 132	5	38
Styrene	<0.0063		0.0641	0.0461		mg/Kg	☼	72	31 - 130	7	39
Tetrachloroethene	<0.0063		0.0641	0.0472		mg/Kg	☼	74	27 - 147	5	44
Toluene	<0.0063		0.0641	0.0471		mg/Kg	☼	74	42 - 130	5	37
trans-1,2-Dichloroethene	<0.0063		0.0641	0.0576		mg/Kg	☼	90	40 - 134	12	38
trans-1,3-Dichloropropene	<0.0063		0.0641	0.0487		mg/Kg	☼	76	31 - 130	9	34
Trichloroethene	<0.0063		0.0641	0.0522		mg/Kg	☼	81	34 - 144	6	42
Trichlorofluoromethane	<0.0063		0.0641	0.0516		mg/Kg	☼	80	41 - 143	2	42
Methyl acetate	<0.0063		0.128	0.115		mg/Kg	☼	90	10 - 150	6	34
Vinyl chloride	<0.0063		0.0641	0.0627		mg/Kg	☼	98	35 - 136	8	43
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0063		0.0641	0.0485		mg/Kg	☼	76	32 - 146	7	58
Xylenes, Total	<0.013		0.128	0.0947		mg/Kg	☼	74	35 - 130	5	39

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene	105		67 - 130
Dibromofluoromethane	96		77 - 127
Toluene-d8 (Surr)	105		76 - 127

Lab Sample ID: MB 400-482494/16
Matrix: Water
Analysis Batch: 482494

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			03/18/20 16:44	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			03/18/20 16:44	1
1,1,2-Trichloroethane	<5.0		5.0		ug/L			03/18/20 16:44	1
1,1-Dichloroethane	<1.0		1.0		ug/L			03/18/20 16:44	1
1,1-Dichloroethene	<1.0		1.0		ug/L			03/18/20 16:44	1
1,2,3-Trichlorobenzene	<1.0		1.0		ug/L			03/18/20 16:44	1

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: MB 400-482494/16

Matrix: Water

Analysis Batch: 482494

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
1,2-Dibromo-3-Chloropropane	<5.0		5.0		ug/L			03/18/20 16:44	1
1,2-Dichlorobenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
1,2-Dichloroethane	<1.0		1.0		ug/L			03/18/20 16:44	1
1,2-Dichloropropane	<1.0		1.0		ug/L			03/18/20 16:44	1
1,3-Dichlorobenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
1,4-Dichlorobenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
2-Hexanone	<25		25		ug/L			03/18/20 16:44	1
Acetone	<25		25		ug/L			03/18/20 16:44	1
Benzene	<1.0		1.0		ug/L			03/18/20 16:44	1
Bromoform	<5.0		5.0		ug/L			03/18/20 16:44	1
Bromomethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Carbon disulfide	<1.0		1.0		ug/L			03/18/20 16:44	1
Carbon tetrachloride	<1.0		1.0		ug/L			03/18/20 16:44	1
Chlorobenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
Chlorobromomethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Chloroethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Chloroform	<1.0		1.0		ug/L			03/18/20 16:44	1
Chloromethane	<1.0		1.0		ug/L			03/18/20 16:44	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			03/18/20 16:44	1
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			03/18/20 16:44	1
Bromodichloromethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Dibromochloromethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Dichlorodifluoromethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Ethylbenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
Ethylene Dibromide	<1.0		1.0		ug/L			03/18/20 16:44	1
Isopropylbenzene	<1.0		1.0		ug/L			03/18/20 16:44	1
Methyl Ethyl Ketone	<25		25		ug/L			03/18/20 16:44	1
methyl isobutyl ketone	<25		25		ug/L			03/18/20 16:44	1
Methyl tert-butyl ether	<1.0		1.0		ug/L			03/18/20 16:44	1
Methylene Chloride	<5.0		5.0		ug/L			03/18/20 16:44	1
Styrene	<1.0		1.0		ug/L			03/18/20 16:44	1
Tetrachloroethene	<1.0		1.0		ug/L			03/18/20 16:44	1
Toluene	<1.0		1.0		ug/L			03/18/20 16:44	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			03/18/20 16:44	1
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			03/18/20 16:44	1
Trichloroethene	<1.0		1.0		ug/L			03/18/20 16:44	1
Trichlorofluoromethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Methyl acetate	<5.0		5.0		ug/L			03/18/20 16:44	1
Vinyl chloride	<1.0		1.0		ug/L			03/18/20 16:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		1.0		ug/L			03/18/20 16:44	1
Xylenes, Total	<10		10		ug/L			03/18/20 16:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		78 - 118		03/18/20 16:44	1
Dibromofluoromethane	91		81 - 121		03/18/20 16:44	1
Toluene-d8 (Surr)	102		80 - 120		03/18/20 16:44	1

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: LCS 400-482494/1002

Matrix: Water

Analysis Batch: 482494

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.0		ug/L		94	68 - 130
1,1,1,2-Tetrachloroethane	50.0	49.9		ug/L		100	70 - 131
1,1,2-Trichloroethane	50.0	43.5		ug/L		87	70 - 130
1,1-Dichloroethane	50.0	45.7		ug/L		91	70 - 130
1,1-Dichloroethene	50.0	47.0		ug/L		94	63 - 134
1,2,3-Trichlorobenzene	50.0	58.0		ug/L		116	60 - 138
1,2,4-Trichlorobenzene	50.0	57.0		ug/L		114	60 - 140
1,2-Dibromo-3-Chloropropane	50.0	46.7		ug/L		93	54 - 135
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	67 - 130
1,2-Dichloroethane	50.0	45.4		ug/L		91	69 - 130
1,2-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/L		103	70 - 130
1,4-Dichlorobenzene	50.0	51.6		ug/L		103	70 - 130
2-Hexanone	200	153		ug/L		77	65 - 137
Acetone	200	133		ug/L		66	43 - 160
Benzene	50.0	45.4		ug/L		91	70 - 130
Bromoform	50.0	48.9		ug/L		98	57 - 140
Bromomethane	50.0	49.0		ug/L		98	10 - 160
Carbon disulfide	50.0	46.2		ug/L		92	61 - 137
Carbon tetrachloride	50.0	43.5		ug/L		87	61 - 137
Chlorobenzene	50.0	46.7		ug/L		93	70 - 130
Chlorobromomethane	50.0	42.8		ug/L		86	70 - 130
Chloroethane	50.0	44.6		ug/L		89	55 - 141
Chloroform	50.0	45.5		ug/L		91	69 - 130
Chloromethane	50.0	46.0		ug/L		92	58 - 137
cis-1,2-Dichloroethene	50.0	44.7		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	45.4		ug/L		91	69 - 132
Bromodichloromethane	50.0	45.6		ug/L		91	67 - 133
Dibromochloromethane	50.0	45.7		ug/L		91	67 - 135
Dichlorodifluoromethane	50.0	54.6		ug/L		109	41 - 146
Ethylbenzene	50.0	44.9		ug/L		90	70 - 130
Ethylene Dibromide	50.0	45.0		ug/L		90	70 - 130
Isopropylbenzene	50.0	46.6		ug/L		93	70 - 130
Methyl Ethyl Ketone	200	161		ug/L		81	61 - 145
methyl isobutyl ketone	200	162		ug/L		81	69 - 138
Methyl tert-butyl ether	50.0	45.1		ug/L		90	66 - 130
Methylene Chloride	50.0	47.5		ug/L		95	66 - 135
Styrene	50.0	45.1		ug/L		90	70 - 130
Tetrachloroethene	50.0	44.8		ug/L		90	65 - 130
Toluene	50.0	42.3		ug/L		85	70 - 130
trans-1,2-Dichloroethene	50.0	51.2		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	44.7		ug/L		89	63 - 130
Trichloroethene	50.0	46.6		ug/L		93	70 - 130
Trichlorofluoromethane	50.0	48.0		ug/L		96	65 - 138
Methyl acetate	100	77.6		ug/L		78	45 - 159
Vinyl chloride	50.0	57.4		ug/L		115	59 - 136
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.0		ug/L		90	60 - 139
Xylenes, Total	100	88.7		ug/L		89	70 - 130

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	105		78 - 118
Dibromofluoromethane	95		81 - 121
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: 400-185087-A-1 MS
Matrix: Water
Analysis Batch: 482494

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
1,1,1-Trichloroethane	<1.0		50.0	45.8		ug/L		92	57 - 142
1,1,1,2-Tetrachloroethane	<1.0		50.0	47.0		ug/L		94	66 - 135
1,1,2-Trichloroethane	<5.0		50.0	45.5		ug/L		91	66 - 131
1,1-Dichloroethane	<1.0		50.0	40.3		ug/L		81	61 - 144
1,1-Dichloroethene	<1.0		50.0	46.9		ug/L		94	54 - 147
1,2,3-Trichlorobenzene	<1.0		50.0	45.2		ug/L		90	43 - 145
1,2,4-Trichlorobenzene	<1.0		50.0	42.6		ug/L		85	39 - 148
1,2-Dibromo-3-Chloropropane	<5.0		50.0	45.7		ug/L		91	45 - 135
1,2-Dichlorobenzene	<1.0		50.0	41.4		ug/L		83	52 - 137
1,2-Dichloroethane	<1.0		50.0	37.1		ug/L		74	60 - 141
1,2-Dichloropropane	<1.0		50.0	44.9		ug/L		90	66 - 137
1,3-Dichlorobenzene	<1.0		50.0	39.4		ug/L		79	54 - 135
1,4-Dichlorobenzene	<1.0		50.0	39.5		ug/L		79	53 - 135
2-Hexanone	<25		200	166		ug/L		83	65 - 140
Acetone	<25		200	141		ug/L		70	43 - 150
Benzene	<1.0		50.0	43.8		ug/L		88	56 - 142
Bromoform	<5.0		50.0	47.0		ug/L		94	50 - 140
Bromomethane	<1.0		50.0	41.1		ug/L		82	10 - 150
Carbon disulfide	<1.0		50.0	42.8		ug/L		86	48 - 150
Carbon tetrachloride	<1.0		50.0	41.2		ug/L		82	55 - 145
Chlorobenzene	<1.0		50.0	41.1		ug/L		82	64 - 130
Chlorobromomethane	<1.0		50.0	49.2		ug/L		98	64 - 140
Chloroethane	<1.0		50.0	46.5		ug/L		93	50 - 150
Chloroform	<1.0		50.0	41.1		ug/L		82	60 - 141
Chloromethane	<1.0		50.0	38.8		ug/L		78	49 - 148
cis-1,2-Dichloroethene	<1.0		50.0	43.6		ug/L		87	59 - 143
cis-1,3-Dichloropropene	<5.0		50.0	44.2		ug/L		88	57 - 140
Bromodichloromethane	<1.0		50.0	44.2		ug/L		88	59 - 143
Dibromochloromethane	<1.0		50.0	44.9		ug/L		90	56 - 143
Dichlorodifluoromethane	<1.0		50.0	49.9		ug/L		100	16 - 150
Ethylbenzene	<1.0		50.0	39.2		ug/L		78	58 - 131
Ethylene Dibromide	<1.0		50.0	46.2		ug/L		92	64 - 132
Isopropylbenzene	<1.0		50.0	37.8		ug/L		76	56 - 133
Methyl Ethyl Ketone	<25		200	171		ug/L		86	55 - 150
methyl isobutyl ketone	<25		200	165		ug/L		82	63 - 146
Methyl tert-butyl ether	<1.0		50.0	45.6		ug/L		91	59 - 137
Methylene Chloride	<5.0		50.0	47.9		ug/L		96	60 - 146
Styrene	<1.0		50.0	40.0		ug/L		80	58 - 131
Tetrachloroethene	<1.0		50.0	37.1		ug/L		74	52 - 133
Toluene	<1.0		50.0	39.2		ug/L		78	65 - 130
trans-1,2-Dichloroethene	<1.0		50.0	45.0		ug/L		90	61 - 143
trans-1,3-Dichloropropene	<5.0		50.0	43.1		ug/L		86	53 - 133

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: 400-185087-A-1 MS

Matrix: Water

Analysis Batch: 482494

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Trichloroethene	<1.0		50.0	42.6		ug/L		85	64 - 136
Trichlorofluoromethane	<1.0		50.0	42.0		ug/L		84	54 - 150
Methyl acetate	<5.0		100	80.0		ug/L		80	21 - 150
Vinyl chloride	<1.0		50.0	49.8		ug/L		100	46 - 150
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	29.7		ug/L		59	55 - 150
Xylenes, Total	<10		100	76.2		ug/L		76	59 - 130
Surrogate		MS		MS					
		%Recovery		Qualifier					Limits
4-Bromofluorobenzene		102							78 - 118
Dibromofluoromethane		91							81 - 121
Toluene-d8 (Surr)		105							80 - 120

Lab Sample ID: 400-185087-A-1 MSD

Matrix: Water

Analysis Batch: 482494

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
1,1,1-Trichloroethane	<1.0		50.0	42.6		ug/L		85	57 - 142	7	30
1,1,2,2-Tetrachloroethane	<1.0		50.0	44.6		ug/L		89	66 - 135	5	30
1,1,2-Trichloroethane	<5.0		50.0	42.4		ug/L		85	66 - 131	7	30
1,1-Dichloroethane	<1.0		50.0	39.6		ug/L		79	61 - 144	2	30
1,1-Dichloroethene	<1.0		50.0	42.6		ug/L		85	54 - 147	10	30
1,2,3-Trichlorobenzene	<1.0		50.0	41.6		ug/L		83	43 - 145	8	30
1,2,4-Trichlorobenzene	<1.0		50.0	38.1		ug/L		76	39 - 148	11	30
1,2-Dibromo-3-Chloropropane	<5.0		50.0	43.3		ug/L		87	45 - 135	5	30
1,2-Dichlorobenzene	<1.0		50.0	36.2		ug/L		72	52 - 137	13	30
1,2-Dichloroethane	<1.0		50.0	36.0		ug/L		72	60 - 141	3	30
1,2-Dichloropropane	<1.0		50.0	41.8		ug/L		84	66 - 137	7	30
1,3-Dichlorobenzene	<1.0		50.0	34.4		ug/L		69	54 - 135	14	30
1,4-Dichlorobenzene	<1.0		50.0	34.4		ug/L		69	53 - 135	14	30
2-Hexanone	<25		200	153		ug/L		77	65 - 140	8	30
Acetone	<25		200	122		ug/L		61	43 - 150	14	30
Benzene	<1.0		50.0	40.0		ug/L		80	56 - 142	9	30
Bromoform	<5.0		50.0	44.2		ug/L		88	50 - 140	6	30
Bromomethane	<1.0		50.0	45.2		ug/L		90	10 - 150	10	50
Carbon disulfide	<1.0		50.0	40.3		ug/L		81	48 - 150	6	30
Carbon tetrachloride	<1.0		50.0	39.2		ug/L		78	55 - 145	5	30
Chlorobenzene	<1.0		50.0	35.7		ug/L		71	64 - 130	14	30
Chlorobromomethane	<1.0		50.0	40.2		ug/L		80	64 - 140	20	30
Chloroethane	<1.0		50.0	42.4		ug/L		85	50 - 150	9	30
Chloroform	<1.0		50.0	40.6		ug/L		81	60 - 141	1	30
Chloromethane	<1.0		50.0	41.4		ug/L		83	49 - 148	7	31
cis-1,2-Dichloroethene	<1.0		50.0	40.0		ug/L		80	59 - 143	9	30
cis-1,3-Dichloropropene	<5.0		50.0	40.3		ug/L		81	57 - 140	9	30
Bromodichloromethane	<1.0		50.0	40.7		ug/L		81	59 - 143	8	30
Dibromochloromethane	<1.0		50.0	40.1		ug/L		80	56 - 143	11	30
Dichlorodifluoromethane	<1.0		50.0	52.3		ug/L		105	16 - 150	5	31
Ethylbenzene	<1.0		50.0	31.9		ug/L		64	58 - 131	20	30

Eurofins TestAmerica, Pensacola

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

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

Lab Sample ID: 400-185087-A-1 MSD
Matrix: Water
Analysis Batch: 482494

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene Dibromide	<1.0		50.0	41.4		ug/L		83	64 - 132	11	30
Isopropylbenzene	<1.0		50.0	30.2		ug/L		60	56 - 133	22	30
Methyl Ethyl Ketone	<25		200	157		ug/L		78	55 - 150	9	30
methyl isobutyl ketone	<25		200	155		ug/L		77	63 - 146	6	30
Methyl tert-butyl ether	<1.0		50.0	43.9		ug/L		88	59 - 137	4	30
Methylene Chloride	<5.0		50.0	43.3		ug/L		87	60 - 146	10	32
Styrene	<1.0		50.0	33.0		ug/L		66	58 - 131	19	30
Tetrachloroethene	<1.0		50.0	31.2		ug/L		62	52 - 133	17	30
Toluene	<1.0		50.0	33.7		ug/L		67	65 - 130	15	30
trans-1,2-Dichloroethene	<1.0		50.0	44.4		ug/L		89	61 - 143	1	30
trans-1,3-Dichloropropene	<5.0		50.0	38.3		ug/L		77	53 - 133	12	30
Trichloroethene	<1.0		50.0	39.2		ug/L		78	64 - 136	8	30
Trichlorofluoromethane	<1.0		50.0	42.2		ug/L		84	54 - 150	0	30
Methyl acetate	<5.0		100	70.7		ug/L		71	21 - 150	12	30
Vinyl chloride	<1.0		50.0	50.8		ug/L		102	46 - 150	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.0		50.0	28.8		ug/L		58	55 - 150	3	30
Xylenes, Total	<10		100	63.2		ug/L		63	59 - 130	19	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	104		78 - 118
Dibromofluoromethane	98		81 - 121
Toluene-d8 (Surr)	104		80 - 120

Method: 8015C - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 400-482296/2-A
Matrix: Solid
Analysis Batch: 482255

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<0.10		0.10		mg/Kg		03/17/20 10:00	03/17/20 11:27	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene (fid)	103		65 - 125	03/17/20 10:00	03/17/20 11:27	1

Lab Sample ID: LCS 400-482296/1-A
Matrix: Solid
Analysis Batch: 482255

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.06		mg/Kg		106	62 - 141

Surrogate	LCS %Recovery	LCS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	102		65 - 125

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Method: 8015C - Gasoline Range Organics (GRO) (GC) (Continued)

Lab Sample ID: 400-185244-3 MS
Matrix: Solid
Analysis Batch: 482255

Client Sample ID: TW-17
Prep Type: Total/NA
Prep Batch: 482296
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO) -C6-C10	<7.2		71.5	84.7		mg/Kg	☼	118	10 - 150
Surrogate	%Recovery	MS Qualifier	Limits						
<i>a,a,a-Trifluorotoluene (fid)</i>	101		65 - 125						

Lab Sample ID: 400-185244-3 MSD
Matrix: Solid
Analysis Batch: 482255

Client Sample ID: TW-17
Prep Type: Total/NA
Prep Batch: 482296
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO) -C6-C10	<7.2		71.5	86.8		mg/Kg	☼	121	10 - 150	2	32
Surrogate	%Recovery	MSD Qualifier	Limits								
<i>a,a,a-Trifluorotoluene (fid)</i>	102		65 - 125								

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)

Lab Sample ID: MB 400-482003/3
Matrix: Water
Analysis Batch: 482003

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	<100		100		ug/L			03/15/20 12:06	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene (fid)</i>	104		78 - 119					03/15/20 12:06	1

Lab Sample ID: LCS 400-482003/1002
Matrix: Water
Analysis Batch: 482003

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1000	1050		ug/L		105	85 - 115
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
<i>a,a,a-Trifluorotoluene (fid)</i>	101		78 - 119				

Lab Sample ID: 400-185239-C-3 MS
Matrix: Water
Analysis Batch: 482003

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	<100		1000	1080		ug/L		108	35 - 150

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QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) (Continued)

Lab Sample ID: 400-185239-C-3 MS
Matrix: Water
Analysis Batch: 482003

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	100		78 - 119

Lab Sample ID: 400-185239-C-3 MSD
Matrix: Water
Analysis Batch: 482003

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	<100		1000	1030		ug/L		103	35 - 150	5	15

Surrogate	MSD %Recovery	MSD Qualifier	Limits
a,a,a-Trifluorotoluene (fid)	99		78 - 119

Method: 8015C - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 400-482052/1-A
Matrix: Water
Analysis Batch: 482341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482052

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	832		130		ug/L		03/16/20 09:26	03/17/20 16:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	95		40 - 140	03/16/20 09:26	03/17/20 16:12	1

Lab Sample ID: LCS 400-482052/2-A
Matrix: Water
Analysis Batch: 482341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482052

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	17000	13800		ug/L		81	40 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl (Surr)	111		40 - 140

Lab Sample ID: LCSD 400-482052/3-A
Matrix: Water
Analysis Batch: 482341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 482052

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	17000	13100		ug/L		77	40 - 120	5	50

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl (Surr)	97		40 - 140

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Method: 8015C - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 400-482811/1-A
Matrix: Water
Analysis Batch: 483184

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 482811

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<130		130		ug/L	-	03/20/20 08:48	03/23/20 14:01	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	93		40 - 140				03/20/20 08:48	03/23/20 14:01	1

Lab Sample ID: LCS 400-482811/2-A
Matrix: Water
Analysis Batch: 483184

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 482811

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]	16700	13200		ug/L	-	79	40 - 120		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
<i>o</i> -Terphenyl (Surr)	108		40 - 140						

Lab Sample ID: LCSD 400-482811/3-A
Matrix: Water
Analysis Batch: 483184

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 482811

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Diesel Range Organics [C10-C28]	16700	12600		ug/L	-	75	40 - 120	5	50
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl (Surr)	94		40 - 140						

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Lab Sample ID: MB 400-481786/1-A
Matrix: Solid
Analysis Batch: 482382

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 481786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	<5.0		5.0		mg/Kg	-	03/13/20 10:12	03/18/20 04:22	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl (Surr)	75		27 - 151				03/13/20 10:12	03/18/20 04:22	1

Lab Sample ID: LCS 400-481786/2-A
Matrix: Solid
Analysis Batch: 482382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 481786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits		
Diesel Range Organics [C10-C28]	344	256		mg/Kg	-	74	38 - 138		

QC Sample Results

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Method: 8015C - Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) (Continued)

Lab Sample ID: LCS 400-481786/2-A
Matrix: Solid
Analysis Batch: 482382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 481786

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl (Surr)	99		27 - 151

Lab Sample ID: 400-185251-A-1-A MS
Matrix: Solid
Analysis Batch: 482382

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 481786

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	Limits
Diesel Range Organics [C10-C28]	98		376	331		mg/Kg	☼	62	62	204
Surrogate	MS	MS								
<i>o</i> -Terphenyl (Surr)	%Recovery	Qualifier	Limits							
	101		27 - 151							

Lab Sample ID: 400-185251-A-1-B MSD
Matrix: Solid
Analysis Batch: 482382

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 481786

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	Limit	
Diesel Range Organics [C10-C28]	98		382	390		mg/Kg	☼	76	62	204	17	30
Surrogate	MSD	MSD										
<i>o</i> -Terphenyl (Surr)	%Recovery	Qualifier	Limits									
	119		27 - 151									

Method: Moisture - Percent Moisture

Lab Sample ID: 400-185342-A-1 DU
Matrix: Solid
Analysis Batch: 482059

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	RPD	
	Result	Qualifier	Result	Qualifier				Limit	Limit
Percent Moisture	0.9		0.7	F3	%		23	23	10

QC Association Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

GC/MS VOA

Analysis Batch: 482400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	8260B	482427
MB 400-482427/1-A	Method Blank	Total/NA	Solid	8260B	482427
LCS 400-482427/2-A	Lab Control Sample	Total/NA	Solid	8260B	482427
400-185096-A-2-E MS	Matrix Spike	Total/NA	Solid	8260B	482427
400-185096-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8260B	482427

Prep Batch: 482427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	5035	
MB 400-482427/1-A	Method Blank	Total/NA	Solid	5035	
LCS 400-482427/2-A	Lab Control Sample	Total/NA	Solid	5035	
400-185096-A-2-E MS	Matrix Spike	Total/NA	Solid	5035	
400-185096-A-2-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 482494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-1	TW-17	Total/NA	Water	8260B	
400-185244-2	DUPLICATE	Total/NA	Water	8260B	
MB 400-482494/16	Method Blank	Total/NA	Water	8260B	
LCS 400-482494/1002	Lab Control Sample	Total/NA	Water	8260B	
400-185087-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
400-185087-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 482003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-1	TW-17	Total/NA	Water	8015C	
400-185244-2	DUPLICATE	Total/NA	Water	8015C	
MB 400-482003/3	Method Blank	Total/NA	Water	8015C	
LCS 400-482003/1002	Lab Control Sample	Total/NA	Water	8015C	
400-185239-C-3 MS	Matrix Spike	Total/NA	Water	8015C	
400-185239-C-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8015C	

Analysis Batch: 482255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	8015C	482296
MB 400-482296/2-A	Method Blank	Total/NA	Solid	8015C	482296
LCS 400-482296/1-A	Lab Control Sample	Total/NA	Solid	8015C	482296
400-185244-3 MS	TW-17	Total/NA	Solid	8015C	482296
400-185244-3 MSD	TW-17	Total/NA	Solid	8015C	482296

Prep Batch: 482296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	5035	
MB 400-482296/2-A	Method Blank	Total/NA	Solid	5035	
LCS 400-482296/1-A	Lab Control Sample	Total/NA	Solid	5035	
400-185244-3 MS	TW-17	Total/NA	Solid	5035	
400-185244-3 MSD	TW-17	Total/NA	Solid	5035	

QC Association Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

GC Semi VOA

Prep Batch: 481786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	3546	
MB 400-481786/1-A	Method Blank	Total/NA	Solid	3546	
LCS 400-481786/2-A	Lab Control Sample	Total/NA	Solid	3546	
400-185251-A-1-A MS	Matrix Spike	Total/NA	Solid	3546	
400-185251-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	3546	

Prep Batch: 482052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-1	TW-17	Total/NA	Water	3510C	
400-185244-2	DUPLICATE	Total/NA	Water	3510C	
MB 400-482052/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-482052/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-482052/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 482341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-1	TW-17	Total/NA	Water	8015C	482052
400-185244-2	DUPLICATE	Total/NA	Water	8015C	482052
MB 400-482052/1-A	Method Blank	Total/NA	Water	8015C	482052
LCS 400-482052/2-A	Lab Control Sample	Total/NA	Water	8015C	482052
LCSD 400-482052/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	482052

Analysis Batch: 482382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	8015C	481786
MB 400-481786/1-A	Method Blank	Total/NA	Solid	8015C	481786
LCS 400-481786/2-A	Lab Control Sample	Total/NA	Solid	8015C	481786
400-185251-A-1-A MS	Matrix Spike	Total/NA	Solid	8015C	481786
400-185251-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015C	481786

Prep Batch: 482811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-1 - RE	TW-17	Total/NA	Water	3510C	
400-185244-2 - RE	DUPLICATE	Total/NA	Water	3510C	
MB 400-482811/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-482811/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-482811/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 483184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-1 - RE	TW-17	Total/NA	Water	8015C	482811
400-185244-2 - RE	DUPLICATE	Total/NA	Water	8015C	482811
MB 400-482811/1-A	Method Blank	Total/NA	Water	8015C	482811
LCS 400-482811/2-A	Lab Control Sample	Total/NA	Water	8015C	482811
LCSD 400-482811/3-A	Lab Control Sample Dup	Total/NA	Water	8015C	482811

General Chemistry

Analysis Batch: 482059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185244-3	TW-17	Total/NA	Solid	Moisture	

QC Association Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

General Chemistry (Continued)

Analysis Batch: 482059 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-185342-A-1 DU	Duplicate	Total/NA	Solid	Moisture	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Client Sample ID: TW-17

Date Collected: 03/10/20 17:30

Date Received: 03/12/20 08:55

Lab Sample ID: 400-185244-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	482494	03/19/20 00:11	RS	TAL PEN
Total/NA	Analysis	8015C		1	482003	03/15/20 19:59	CMW	TAL PEN
Total/NA	Prep	3510C	RE		482811	03/20/20 08:49	CAO	TAL PEN
Total/NA	Analysis	8015C	RE	1	483184	03/23/20 16:32	JAW	TAL PEN
Total/NA	Prep	3510C			482052	03/16/20 09:27	CAO	TAL PEN
Total/NA	Analysis	8015C		1	482341	03/17/20 19:28	TAJ	TAL PEN

Client Sample ID: DUPLICATE

Date Collected: 03/10/20 17:30

Date Received: 03/12/20 08:55

Lab Sample ID: 400-185244-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	482494	03/19/20 00:41	RS	TAL PEN
Total/NA	Analysis	8015C		1	482003	03/15/20 20:31	CMW	TAL PEN
Total/NA	Prep	3510C	RE		482811	03/20/20 08:49	CAO	TAL PEN
Total/NA	Analysis	8015C	RE	1	483184	03/23/20 16:44	JAW	TAL PEN
Total/NA	Prep	3510C			482052	03/16/20 09:27	CAO	TAL PEN
Total/NA	Analysis	8015C		1	482341	03/17/20 19:38	TAJ	TAL PEN

Client Sample ID: TW-17

Date Collected: 03/09/20 18:00

Date Received: 03/12/20 08:55

Lab Sample ID: 400-185244-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	482059	03/16/20 10:34	BKG	TAL PEN

Client Sample ID: TW-17

Date Collected: 03/09/20 18:00

Date Received: 03/12/20 08:55

Lab Sample ID: 400-185244-3

Matrix: Solid

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			482427	03/18/20 06:31	RS	TAL PEN
Total/NA	Analysis	8260B		1	482400	03/18/20 12:36	RS	TAL PEN
Total/NA	Prep	5035			482296	03/17/20 13:31	CMW	TAL PEN
Total/NA	Analysis	8015C		50	482255	03/17/20 13:53	CMW	TAL PEN
Total/NA	Prep	3546			481786	03/13/20 10:12	SHB	TAL PEN
Total/NA	Analysis	8015C		1	482382	03/18/20 06:31	JAW	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Accreditation/Certification Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Laboratory: Eurofins TestAmerica, Pensacola

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Virginia	NELAP	460166	06-14-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260B		Water	Dibromofluoromethane
8260B	5035	Solid	Dibromofluoromethane
Moisture		Solid	Percent Moisture



Method Summary

Client: SCS Engineers
Project/Site: St. Paul's

Job ID: 400-185244-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8015C	Gasoline Range Organics (GRO) (GC)	SW846	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)	SW846	TAL PEN
8015C	Diesel Range Organics (DRO) (GC)	EPA	TAL PEN
8015C	Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	SW846	TAL PEN
Moisture	Percent Moisture	EPA	TAL PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL PEN
3546	Microwave Extraction	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
5030C	Purge and Trap	SW846	TAL PEN
5035	Closed System Purge and Trap	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency


SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Chain of Custody Record

St. Paul

Client Information				Sample: <u>Justin Drooger</u>	Lab PM: Swafford, Mark H	Carrier Tracking No(s):	COC No: 400-92537-33727.1					
Client Contact: Alexis Holcomb				Phone: <u>571-353-2000</u>	E-Mail: mark.swafford@testamericainc.com		Page: Page 1 of 1					
Company: SCS Engineers				Analysis Requested				Job #:				
Address: 2877 Guardian Lane Suite 1-F				 <p>400-185244 COC</p>				Preservation Codes: A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Z - other (specify)				
City: Virginia Beach									Due Date Requested:			
State, Zip: VA, 23452									TAT Requested (days):			
Phone: 757-201-9264(Tel)									PO #: PO 02-RE03788-4			
Email: <u>adrooger@scsengineers.com</u> <u>AHolcomb@scsengineers.com</u>									WO #:			
Project Name: St. Paul's Sampling				Project #: 40005152				Other:				
Site:				SSOW#:								
Sample Identification		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Special Instructions/Note:					
						Perform MS/MSD (Yes or No) 8082A - TCL PCBs by 8082A 8270D - TCL Semivolatiles 8016C_DRO - DRO C10-C28 8016C_GRO - GRO (Cs-C10) 8260B - TCL Volatiles						
						Total Number of containers 8260B DRO/6AD						
						Preservation Code: N N A A A TW-17 DUPLICATE TW-17	Virginia Beach #202					
Possible Hazard Identification				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)								
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months								
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:								
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:								
Relinquished by: <u>[Signature]</u>		Date/Time: <u>3/10/2020 1000</u>	Company: <u>ETA</u>	Received by: <u>[Signature]</u>		Date/Time: <u>3/11/20 1246</u>	Company: <u>ETA</u>					
Relinquished by: <u>[Signature]</u>		Date/Time: <u>3/11/20 1630</u>	Company: <u>ETA</u>	Received by: <u>[Signature]</u>		Date/Time: <u>3/12/20 855</u>	Company: <u>ETA</u>					
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: <u>3.1°C IR8</u>								

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Login Sample Receipt Checklist

Client: SCS Engineers

Job Number: 400-185244-1

Login Number: 185244

List Source: Eurofins TestAmerica, Pensacola

List Number: 1

Creator: Hinrichsen, Megan E

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.1°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	False	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	Refer to Job Narrative for details.
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX D – GROUNDWATER SAMPLING LOGS

Well Sampling / MicroPurge Log

SCS ENGINEERS
 2877 Guardian Lane, Suite 1-F
 Virginia Beach Virginia 23452
 (757)-466-3361

Project Name:	St. Paul's Transit Site	Job Number:	02218113.09
Well Number:	TW-11 (B-11)	Date:	1/27/2020
Well Diameter (in):	1	Pump Used:	Peristaltic
Depth to Pump (ft):	~9	1 Well Volume (gal):	0.18
Total Well Depth (ft):	10	Purging Time Initiated:	11:15
Depth to Water (ft):	5.4	Purging Time Completed:	11:45
Water Column Thickness (ft):	4.6	Total Gallons Purged:	0.9

WELL PURGING RECORD

Time	Volume Purged (gallons)	10% Temperature (°C)	10% D.O. (mg/L)	±10 ORP (mV)	10% pH (s.u.)	3% Specific Conductance (mS/cm)	10% or <=5 Turbidity (NTU)	Comments (water color, odor, sediment, cloudy, etc.)
11:20	0.125	13.9	0.41	35	6.71	0.73	1100+	muddy brown, petroleum odor
11:25	0.30	13.7	0.81	27	6.72	0.73	383	grey, strong odor
11:30	0.40	13.1	0.39	24	6.74	0.73	172	
11:35	0.60	13.4	0.4	19	6.74	0.73	137	grey tint
11:40	0.75	13.5	0.39	14	6.74	0.73	81	clear

GROUNDWATER SAMPLING RECORD

Sample Number	Collection Time	Parameter	Container	Preservative
TW-11	11:45	8260B - TCL Volatiles	3 - 40mL VOA	HCl
		8015C - TPH DRO	2 - 250mL amber	HCl
		8015C - TPH GRO	3 - 40mL VOA	HCl

Samples Shipped By: _____ courier Laboratory: _____ TestAmerica
 Sampler(s): _____ ALH Checked By: _____

Well Sampling / MicroPurge Log

SCS ENGINEERS
 2877 Guardian Lane, Suite 1-F
 Virginia Beach Virginia 23452
 (757)-466-3361

Project Name:	St. Paul's Transit Site	Job Number:	02218113.09
Well Number:	TW-13 (B-13)	Date:	1/27/2020
Well Diameter (in):	1	Pump Used:	Peristaltic
Depth to Pump (ft):	~11	1 Well Volume (gal):	0.19
Total Well Depth (ft):	12 (+2.17 stick-up)	Purging Time Initiated:	13:08
Depth to Water (ft):	9.52	Purging Time Completed:	13:33
Water Column Thickness (ft):	4.65	Total Gallons Purged:	0.7

WELL PURGING RECORD

Time	Volume Purged (gallons)	10% Temperature (°C)	10% D.O. (mg/L)	±10 ORP (mV)	10% pH (s.u.)	3% Specific Conductance (mS/cm)	10% or <=5 Turbidity (NTU)	Comments (water color, odor, sediment, cloudy, etc.)
13:13	0.125	13	0.56	52	6.46	0.635	1066	cloudy brown, no odor
13:18	0.250	12.3	0.41	51	6.47	0.628	830	
13:23	0.375	12.5	0.31	50	6.46	0.624	464	
13:28	0.500	12.8	0.26	50	6.46	0.620	224	

GROUNDWATER SAMPLING RECORD

Sample Number	Collection Time	Parameter	Container	Preservative
TW-13	13:33	8260B - TCL Volatiles	3 - 40mL VOA	HCl
		8015C - TPH DRO	2 - 250mL amber	HCl
		8015C - TPH GRO	3 - 40mL VOA	HCl

Samples Shipped By: _____ courier Laboratory: _____ TestAmerica
 Sampler(s): _____ ALH Checked By: _____

Well Sampling / MicroPurge Log

SCS ENGINEERS
 2877 Guardian Lane, Suite 1-F
 Virginia Beach Virginia 23452
 (757)-466-3361

Project Name: St. Paul's Transit Site	Job Number: 02218113.09
Well Number: TW-14 (B-14)	Date: 2/3/2020
Well Diameter (in): 1	Pump Used: Peristaltic
Depth to Pump (ft): ~11	1 Well Volume (gal): 0.16
Total Well Depth (ft): 12	Purging Time Initiated: 8:09
Depth to Water (ft): 7.99	Purging Time Completed: 8:35
Water Column Thickness (ft): 4.01	Total Gallons Purged: 0.5

WELL PURGING RECORD

Time	Volume Purged (gallons)	10% Temperature (°C)	10% D.O. (mg/L)	±10 ORP (mV)	10% pH (s.u.)	3% Specific Conductance (mS/cm)	10% or <=5 Turbidity (NTU)	Comments (water color, odor, sediment, cloudy, etc.)
8:14	0.10	14.6	0.95	85	6.64	1.00	556	cloudy tan/grey
8:19	0.20	14.5	0.67	79	6.60	0.99	309	floating black particles
8:24	0.25	14.3	0.52	74	6.60	0.99	200	
8:29	0.375	14.7	0.48	70	6.60	0.99	115	
8:34	0.475	14.9	0.43	67	6.57	0.98	59	clear, strong petroleum odor

GROUNDWATER SAMPLING RECORD

Sample Number	Collection Time	Parameter	Container	Preservative
TW-14	8:35	8260B - TCL Volatiles	3 - 40mL VOA	HCl
		8015C - TPH DRO	2 - 250mL amber	HCl
		8015C - TPH GRO	3 - 40mL VOA	HCl

Samples Shipped By: _____ courier Laboratory: _____ TestAmerica
 Sampler(s): _____ ALH Checked By: _____

Well Sampling / MicroPurge Log

SCS ENGINEERS
 2877 Guardian Lane, Suite 1-F
 Virginia Beach Virginia 23452
 (757)-466-3361

Project Name:	St. Paul's Transit Site	Job Number:	02218113.09
Well Number:	TW-16 (B-16)	Date:	2/3/2020
Well Diameter (in):	1	Pump Used:	Peristaltic
Depth to Pump (ft):	~9	1 Well Volume (gal):	0.18
Total Well Depth (ft):	10	Purging Time Initiated:	9:19
Depth to Water (ft):	5.49	Purging Time Completed:	9:52
Water Column Thickness (ft):	4.51	Total Gallons Purged:	0.8

WELL PURGING RECORD

Time	Volume Purged (gallons)	10% Temperature (°C)	10% D.O. (mg/L)	±10 ORP (mV)	10% pH (s.u.)	3% Specific Conductance (mS/cm)	10% or <=5 Turbidity (NTU)	Comments (water color, odor, sediment, cloudy, etc.)
9:24	0.125	15.7	1.32	52	6.56	0.370	1100+	muddy brown
9:29	0.250	15.7	1.26	50	6.62	0.438	708	grey tint, no odor
9:34	0.375	15.6	0.58	44	6.63	0.482	297	
9:39	0.500	15.7	0.39	41	6.71	0.489	170	
9:44	0.625	16	0.34	37	6.74	0.495	94	
9:49	0.750	16.2	0.3	35	6.75	0.503	60	clear

GROUNDWATER SAMPLING RECORD

Sample Number	Collection Time	Parameter	Container	Preservative
TW-16	9:52	8260B - TCL Volatiles	3 - 40mL VOA	HCl
		8015C - TPH DRO	2 - 250mL amber	HCl
		8015C - TPH GRO	3 - 40mL VOA	HCl

Samples Shipped By: _____ courier Laboratory: _____ TestAmerica
 Sampler(s): _____ ALH Checked By: _____

