



GROUP DELTA

Gatzke Dillon & Ballance LLP
2762 Gateway Road
Carlsbad, California 92009

May 17, 2019
Project No. SD605

Attention: Mr. Michael Masterson

Subject: Limited Soil and Groundwater Investigation Along Fuel Pipeline
SDSU Mission Valley
San Diego, California

Dear Mr. Masterson,

Group Delta Consultants (Group Delta) is submitting this supplemental environmental investigation report to summarize a limited soil and groundwater investigation near a known high-pressure fuel pipeline to screen for potential soil and groundwater contamination associated with any pipeline leakage in support of the proposed development at the San Diego State University (SDSU) Mission Valley campus (Site). Group Delta prepared this report per our Additional Service Request No. 1 dated April 1, 2019, and under the Agreement for Consultant Services dated January 23, 2019, and subsequent authorization dated April 17, 2019.

1.0 BACKGROUND

1.1 Site Description and Investigation Approach

The Site is the location of the SDCCU football stadium (formerly known as Qualcomm Stadium). The Site is bordered by Friars Road and San Diego Mission Road to the north, Murphy Canyon Creek and I-15 to the east, the San Diego River and I-8 to the south, and commercial development to the west. The Site location is shown in **Figure 1**. The football stadium is surrounded by extensive parking, and the grade at the Site slopes steeply from north to south. There is a trolley track and station at the southern end of the Site which connects to the SDSU campus. The trolley is operated by the San Diego Metropolitan Transit (MTS). The Kinder Morgan Mission Valley Terminal site (GeoTracker ID No. SL607392800) is located adjacent to the property in the northeast corner. Kinder Morgan Energy Partners, L.P. (Kinder Morgan) previously referred to the SDCCU stadium site as the “off-Terminal area”.

The proposed redevelopment includes a new stadium, along with a campus expansion, tailgate park, hotel and conference center, student housing, and park space. The layout of the proposed redevelopment project is shown in **Figure 2**.

Kinder Morgan operates a 10-inch steel, high-pressure fuel pipeline that runs along the eastern property boundary. The pipeline depth varies between 3 and 8 feet below ground surface (bgs)

along the eastern boundary of the Site and deepens to 16 feet bgs to cross under the Murphy Canyon Creek. According to information gathered by the SDSU Mission Valley project team, impacted soil was previously encountered during installation of a transformer serving the trolley in the southeast corner of the property boundary. Although no environmental records were available to confirm it.

A previous environmental and geotechnical investigation was completed at the Site in February and March 2019 by Group Delta; however, environmental samples were not collected near the Kinder Morgan pipeline (Group Delta, 2019a). A limited supplemental environmental investigation was conducted on April 30, 2019, along and south of the pipeline to screen for potential soil and groundwater contamination associated with any leakage in support of the proposed development at the Site. The investigation extended south of the pipeline to the transformer area. The fuel pipeline and limits of the investigation is shown in **Figure 3**.

1.2 Regional Geology

The Site is located within the Peninsular Ranges geomorphic province of southern California. This province stretches from the Los Angeles basin to the tip of Baja California. It is characterized as a series of northwest trending mountain ranges separated by subparallel fault zones. The Site is located within the coastal plain transected by the west-flowing San Diego River drainage known as Mission Valley, and it is underlain at depth by Eocene-age sedimentary deposits mapped as the Friars Formation.

The Friars Formation consists of six intertonguing, depositionally time-equivalent facies ranging from deep-marine, fine-grained siltstone and claystone to the southwest; to continental, coarse-grained sandstone and conglomerate to the northeast. The Friars Formation are nonmarine and near-shore deposits of lagoonal sandstone, siltstone, and claystone. The Friars Formation is found in Mission Valley at elevations below approximately 160 feet. Regionally, the Friars Formation dips gently to the southwest between 3 and 5 degrees.

Thick deposits of poorly consolidated, mostly granular alluvium associated with the San Diego River and Murphy Creek drainages, local deposits of slopewash and colluvium, and relatively shallow fill soils associated with the original stadium construction overlies the Friars Formation.

1.3 Site Geology

Based on a previous Group Delta's geotechnical investigation conducted at the Site, the soil underlying the Site is generally composed of fine to coarse-grained silty and clayey sand with various amounts of gravel and cobbles, with thin layers of interbedded silt and lean clay down to the sample depth of approximately 15 feet bgs. Group Delta's geotechnical investigation report describes the Site geology in more detail. Boring logs with detailed lithologic descriptions are provided in the referenced report (Group Delta, 2019b).

1.4 Groundwater

Groundwater was encountered in the subsurface explorations completed during the current and previous environmental and geotechnical investigation conducted by Group Delta at the Site. In general, groundwater was encountered at elevations of 47 to 49 feet along the northern portion of the site and elevations of 37 to 40 feet in the southwest portion of the Site. The depth to groundwater varied significantly from approximately 7 to 40 feet bgs.

1.5 Prior Environmental Site Remediation Activities

The SDSU Mission Valley site is located adjacent to the Kinder Morgan Terminal property, which was a source of fuel hydrocarbons to soil and groundwater at both properties. Floating separate-phase product or light non-aqueous phase liquid (LNAPL) was observed within the northeastern portion of the SDSU Mission Valley site at one time. Dissolved benzene concentrations up to 29,000 micrograms per liter ($\mu\text{g}/\text{l}$) were previously measured in groundwater at the site (in well R-9). The dissolved fuel hydrocarbon plume extended across the site from north to south in a hydraulically downgradient direction.

Under oversight by the San Diego Regional Water Quality Control Board (RWQCB), Kinder Morgan conducted soil and groundwater remediation at both properties. The approved remedy included groundwater and soil vapor extraction (SVE). Groundwater extraction depressed the water table, exposing fuel hydrocarbons for removal by SVE. In addition, a limited soil removal action was conducted in 2010 within the LNAPL source area using large diameter augers. Active remediation was completed at the SDSU Mission Valley site in 2014, and post-remediation monitoring of groundwater and SVE continued until August 2015. The RWQCB approved terminating post-remediation monitoring, although a No Further Action case closure letter has not yet been issued for the SDSU Mission Valley site. The monitoring and remediation wells were left in place at the site and have not yet been abandoned. In January 2019, the RWQCB also approved the shutdown of the groundwater extraction and treatment system at the Kinder Morgan Terminal. Post-remediation monitoring is ongoing at the Kinder Morgan Terminal (Geotracker Database; State Water Resources Control Board, 2019).

2.0 FIELD ACTIVITIES

The limited environmental field investigation consisted of direct-push boring advancement for collection of soil and groundwater samples along and south of the fuel pipeline. The field activities were completed between March 22 and 30, 2019. The field activities are summarized below.

2.1 Pre-Field Activities

Prior to conducting the investigation, an initial site reconnaissance was conducted to ensure accessibility and safety of the proposed sampling locations. A site-specific health and safety plan (HASP) was prepared in accordance with Occupational Safety and Health Administration (OSHA) standards for hazardous waste operations (29 CFR § 1910.120) and to establish general health and safety protocols for personnel. The site-specific HASP was made available to the field personnel and signed during tailgate meetings prior to starting the fieldwork.

A boring permit for soil and groundwater sampling was acquired from the San Diego County Department of Environmental Health (DEH). The DEH-approved boring permit is provided in **Appendix A**.

The locations of the borings were marked with white paint. Underground Service Alert (USA) of Southern California was notified at least 48 hours prior to commencement of field activities to confirm the absence of subsurface utilities at each boring location. In addition, a geophysical survey was conducted prior to drilling to identify subsurface piping, obstructions, or anomalies at the proposed boring locations and relocate as necessary. The drilling locations were accessible within the asphalt parking lot. Due to the proximity of the high-pressure jet fuel pipeline, a Kinder Morgan field representative was notified and was present on-site during sampling operations.

2.2 Field Investigation

Soil and groundwater sampling was performed on April 30, 2019, within the southeast quadrant of the Site. Five soil and groundwater sampling locations were completed including three locations at 400-foot intervals at a horizontal distance of 7 feet to the west of the existing pipeline. The investigation extended south of the south end of the pipeline at 200-foot intervals towards the MTS utility structure. The five borings were named as FP-1 through FP-5. Soil and groundwater sampling boring locations are presented in Figure 3.

Group Delta retained Millennium Environmental, Inc. (Millennium) of Anaheim, California to advance the five boring locations. Millennium used a direct-push drill rig with a percussion hammer to drive a 3-inch-diameter hollow steel rod lined with a plastic acetate sleeve into the ground. As the rod was advanced into the ground, soil filled the acetate sleeve for sample collection. A new acetate liner was used at each boring location. The borings were advanced to the total depths ranging from 10 to 15 feet bgs depending on the depth to groundwater. One soil sample was collected from each boring location at depths ranging from 7 to 10 feet bgs.

Lithology was logged using soil samples collected during drilling per the Unified Soil Classification System (USCS). A calibrated photoionization detector (PID) was used to collect headspace readings from the soil samples. The soil samples were screened for evidence of contamination including PID readings, hydrocarbon odor, and staining. A summary of the observations and

general soil conditions for each boring were recorded. The soil samples were transferred to sampling containers provided by the laboratory. Terra Cores® were used for volatile organic compounds (VOCs) sample collection. Samples were properly labeled and placed on ice within a box cooler.

Groundwater samples were collected by driving a Hydropunch™ sampling device approximately 5 feet below the water table. The groundwater was encountered at depths ranging between 8 and 13 feet bgs. At depth, the rods were pulled up approximately 4 feet, which retracted the outer protective sleeve of the Hydropunch™ sampler, exposing a disposable polyvinyl chloride (PVC) screen 4 ft in length. The screen was allowed to fill with water until equilibration was achieved. A peristaltic pump with dedicated tubing was used to collect grab groundwater samples using the laboratory-supplied containers. Samples were labeled with the well ID, time, and date of sample collection and placed on ice in the box cooler. One laboratory-prepared trip blank sample was transported with the box cooler. Chain-of-custody forms were completed and samples were transported on ice to the environmental testing laboratory. Upon completion of sampling, the sampler was removed and borings were backfilled with hydrated bentonite and patched with cement mixture matching the existing surface.

2.3 Investigation Derived Waste

Investigation derived waste (IDW) including drilling spoils and decontamination water were stored in labeled Department of Transportation (DOT)-approved 55-gallon drums at a secure location at the Site. The minimal amount of waste derived from the field investigations will be disposed at an appropriate waste disposal facility in accordance with State and Federal regulations.

3.0 LABORATORY ANALYSIS

The soil and groundwater samples were transported to Eurofins Calscience in Garden Grove, California, a laboratory certified by the State Water Resources Control Board's (SWRCB) Environmental Laboratory Accreditation Program (ELAP) for analysis.

3.1 Laboratory Methods

Soil and groundwater samples were analyzed for the following constituents:

- Total petroleum hydrocarbon (TPH) carbon chain analysis for gasoline range organics (GRO) and diesel range organics (DRO) by Environmental Protection Agency (EPA) Test Method 8015B Modified, and;
- VOCs by EPA Test Method 8260B.

The TPH carbon chain analysis included hydrocarbon ranges broader than typically found in jet fuel. Laboratory analytical results are included as **Appendix B**. Soil analytical results are summarized in **Tables 1 and 2**. Groundwater analytical results are summarized in **Tables 3 and 4**.

3.2 Quality Assurance/Quality Control

To assess for potential cross-contamination of soil and groundwater samples during collection, handling, preparation, packing, and/or analyses, and thereby ensure reliability of the analytical data, quality assurance/quality control (QA/QC) procedures were implemented. Trip blank sampling procedures were followed in the field during groundwater sampling as described in Section 2.2. A data quality analysis for soil and groundwater analytical data is provided in Section 5.3. Eurofins Calscience analyzed the soil and groundwater samples following QA/QC requirements prescribed in each method including initial and continuing calibration verification, QC reference standards, method blanks, laboratory control samples (LCS), laboratory control sample duplicates (LCSD), matrix spike (MS) samples, and matrix spike duplicates (MSD).

4.0 RESULTS & DISCUSSION

The following section provides a summary of the field and analytical results associated with the jet fuel pipeline investigation.

4.1 Field Observations

4.1.1 Headspace Measurements and Field Evidence of Impacted Soils

VOC concentrations in the soil were screened using a calibrated MiniRAE® 2000 hand-held PID. Headspace measurements were obtained by placing homogenized soil samples into plastic sealable bags. The bags were allowed to sit in the sun for a minimum of ten minutes to allow volatilization of VOCs if present. VOC concentrations were measured in the headspace of the plastic bag and recorded in the field notes. The headspace measurements recorded in the field were 0.0 parts per million (ppm) from ground surface to the total depth between 10 and 16 feet bgs for Borings FP1 through FP5. In addition, no field evidence of VOC-impacted soils was observed based on hydrocarbon odor or staining.

5.1 Soil Analytical Results

A total of five soil samples collected between 7 and 10 feet bgs were analyzed for TPH by EPA Method 8015B Modified and VOCs by EPA Method 8260B. TPH and VOCs results for the soil samples are provided in Tables 1 and 2, respectively.

Detected chemical concentrations were compared against residential soil screening levels established by the California Department of Toxic Substances Control (DTSC) and EPA. DTSC soil screening levels (SLs) are identified in HHRA Note 3, which was last update in April 2019 (DTSC,

2019). EPA soil regional screening levels (RSLs) were last updated in November 2018 (EPA, 2018). Detected chemical concentrations were compared against the lower of the DTSC and EPA residential soil screening levels as a conservative approach for protection of human health at the site.

5.1.1 **TPH**

A total of five soil samples were analyzed for TPH-GRO by EPA Method 8015B Modified as shown in Table 1 including a hydrocarbon range of C4-C12. TPH-GRO was not detected in any of the soil samples.

A total of five soil samples were analyzed for TPH-DRO by EPA Method 8015B Modified as shown in Table 1 including a hydrocarbon range of C13-C22. TPH-DRO was detected in three of the five soil samples (60% frequency) at concentrations ranging from 1.4 to 4.8 milligrams per kilogram (mg/kg). Although not included in the TPH-DRO concentration reported by the laboratory, some fuel hydrocarbons between C23 and C28 were additionally detected in one of the five soil samples (20% frequency) as shown in Table 1.

There are no residential screening levels specifically for TPH-GRO and DRO. However, EPA has residential RSLs for TPH aromatics and aliphatics. TPH-GRO and DRO hydrocarbon ranges will contain low to medium range aromatics and aliphatics, which have RSLs ranging from 82 to 520 mg/kg. The detected TPH-DRO concentrations in soil at the site are below the entire range of EPA RSLs for low to medium aromatic and aliphatic hydrocarbons. The detected TPH-DRO concentrations are additionally below the 100 mg/kg threshold referenced in the State Water Resources Control Board (SWRCB) Low Threat Underground Storage Tank Case Closure Policy (SWRCB, 2012).

5.1.2 **VOCs**

A total of five soil samples were analyzed for 71 VOCs and fuel oxygenates by EPA Method 8260B as shown in Table 2. Acetone was the only VOC detection in one of five soil samples (20% frequency) at a concentration of 0.046 mg/kg, which is below the EPA residential RSL of 61,000 mg/kg. No other VOCs were detected in the soil samples.

5.2 **Groundwater Analytical Results**

Groundwater was gauged and sampled at the five boring locations. The groundwater samples were analyzed for TPH by EPA Method 8015B Modified and VOCs by EPA Method 8260B. TPH and VOCs results for the groundwater samples are provided in Tables 3 and 4, respectively, along with the depth to groundwater.

5.2.1 Groundwater Levels

The depth to groundwater ranged from approximately 8 to 13 feet bgs. The depth to groundwater was consistent with historical ranges previously reported at the Site near the Murphy Canyon Creek.

5.2.2 TPH

A total of five groundwater samples were analyzed for TPH-GRO by EPA Method 8015B Modified as shown in Table 3 including a hydrocarbon range of C4-C12. TPH-GRO was detected in one of the five groundwater samples (20% frequency) at a concentration of 26J micrograms per liter ($\mu\text{g}/\text{l}$); j-flagged results are greater than or equal to the method detection limit but less than the reporting limit.

A total of five groundwater samples were analyzed for TPH-DRO by EPA Method 8015B Modified as shown in Table 3 including a hydrocarbon range of C13-C22. TPH-DRO was detected in two of the five groundwater samples (40% frequency) at concentrations of 79 and 130 $\mu\text{g}/\text{l}$. Although not included in the TPH-DRO concentration reported by the laboratory, some fuel hydrocarbons between C23 and C28 were additionally detected in one of the five groundwater samples (20% frequency) as shown in Table 3. There are no State or Federal maximum contaminant levels (MCLs) for TPH (SWRCB, 2018).

5.2.3 VOCs

No VOCs or fuel oxygenates were detected above the laboratory detection limits in any of the five groundwater samples as shown in Table 4. The laboratory detection limits were equal to or below the Federal and State MCLs.

5.3 Data Quality Analysis

Laboratory QA/QC measures included method blanks, surrogates, MS/MSDs, and LCS/LCSDs. A review of the laboratory QA/QC results indicates satisfactory data reporting, and the data are of sufficient quality for the purposes of this investigation. There were no detections in any of the method blanks, and none of the other QA/QC performance criteria exceeded the laboratory acceptance limits.

One trip blank was submitted along with the groundwater samples and analyzed for VOCs and fuel oxygenates by EPA Method 8260B. No VOCs or fuel oxygenates were detected in the trip blank sample, indicating no cross-contamination of the groundwater samples during transport to the laboratory.

6.0 CONCLUSIONS

A limited supplemental environmental investigation was conducted along an 800-foot section of the Kinder Morgan fuel pipeline within the eastern property line to screen for potential soil and groundwater contamination in support of the proposed development at the Site. The investigation extended approximately 400 feet south of the pipeline to the MTS transformer area. During the investigation, five borings were advanced at depths ranging from 10 to 15 feet bgs. Five soil samples were collected between 7 and 10 feet bgs along the Kinder Morgan pipeline and near the MTS utility structure. The depth to groundwater ranged from approximately 8 to 13 feet bgs, and five grab groundwater samples were collected.

No field evidence of VOC-impacted soils based on PID, hydrocarbon odor, and stanning was observed during the investigation. Although some low residual TPH concentrations were detected in the soil and groundwater samples, none of the concentrations exceeded applicable screening levels. No VOCs were detected in soil or groundwater samples except for acetone in one soil sample at a low concentration significantly below the residential screening level. Residual TPH and VOC detections were consistent with a previous investigation conducted at the Site in February and March 2019. Based on the limited supplemental investigation results, no evidence of a fuel pipeline leak was observed along the eastern boundary of the Site.

7.0 CLOSING

We appreciate your selection of Group Delta for this project and look forward to assisting you further on this and other projects. If you have any questions, please do not hesitate to contact us.

Sincerely,

GROUP DELTA CONSULTANTS, INC.



Brian Dean
Associate Environmental Engineer



Alex Santini, P.E.
Project Environmental Engineer



Attachments:

- Figure 1 – Site Location
- Figure 2 – Proposed Development
- Figure 3 – Site Plan

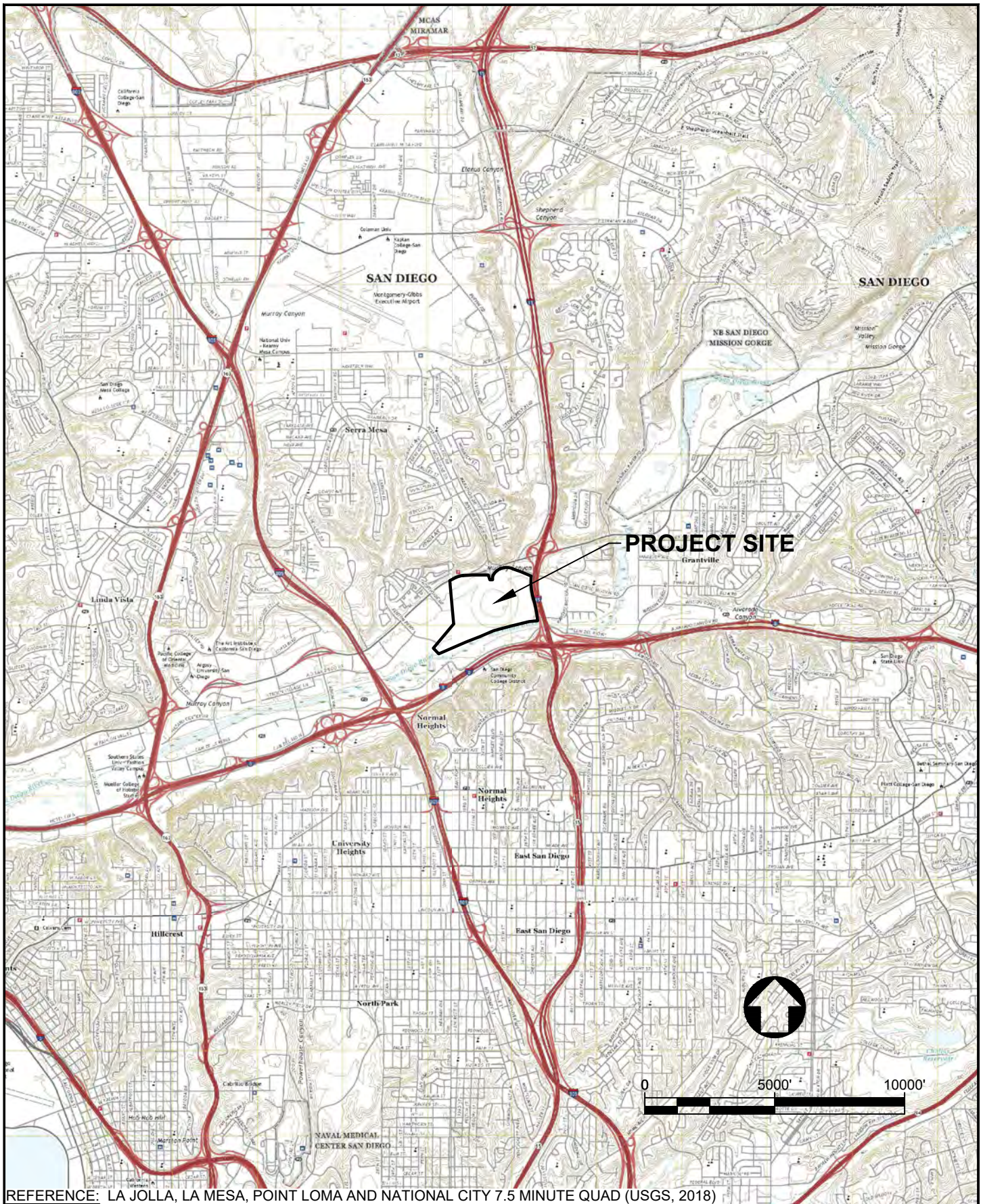
Table 1 – TPH in Soil Analytical Results
Table 2 – VOCs in Soil Analytical Results
Table 3 – TPH in Groundwater Analytical Results
Table 4 – VOCs in Groundwater Analytical Results

Appendix A – Boring Construction Permit
Appendix B – Laboratory Analytical Report

References:

- California Department of Toxic Substances Control (2019). *Human and Ecological Risk Office (HERO), Human Health Risk Assessment (HHRA) Note 3, DTSC-modified Screening Levels*, April.
- Group Delta Consultants, Inc. (2019a). Report of Environmental Investigation, SDSU Mission Valley, San Diego, California,” April 5.
- Group Delta Consultants, Inc. (2019b). *Report of Geotechnical Investigation, Aztec Stadium, SDSU Mission Valley, San Diego, California,”* April 5.
- State Water Resources Control Board (2012). *Low-Threat Underground Storage Tank Case Closure Policy*, November.
- State Water Resource Control Board (2018). *Maximum Contamination Levels and Regulatory Dates for Drinking Water*, October.
- State Water Resources Control Board (2019). *Geotracker Database, Mission Valley Terminal (SL607392800) accessed May*
https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SL607392800
- United States Environmental Protection Agency (2018), *Regional Screening Levels (RSLs) updated November*. <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

FIGURES

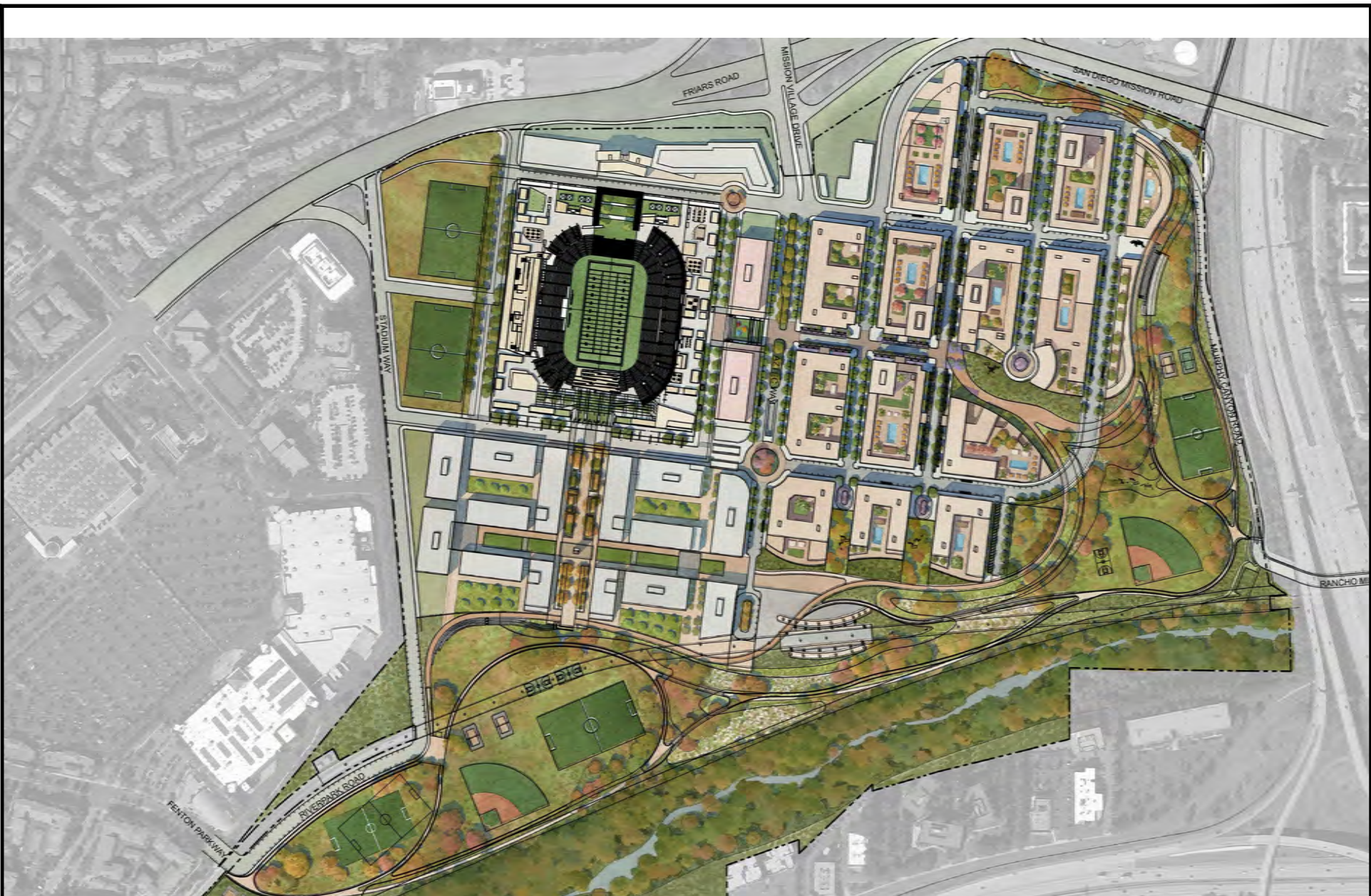


REFERENCE: LA JOLLA, LA MESA, POINT LOMA AND NATIONAL CITY 7.5 MINUTE QUAD (USGS, 2018)

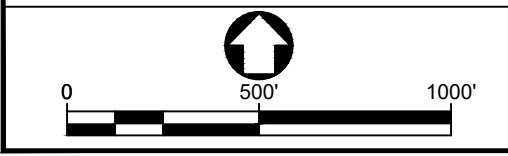
SDSU MISSION VALLEY
SAN DIEGO, CALIFORNIA

SITE LOCATION

PROJECT NUMBER: SD605	FIGURE NUMBER: 1




REFERENCE: MAP PROVIDED BY RICK ENGINEERING COMPANY, DATED 2/12/2019

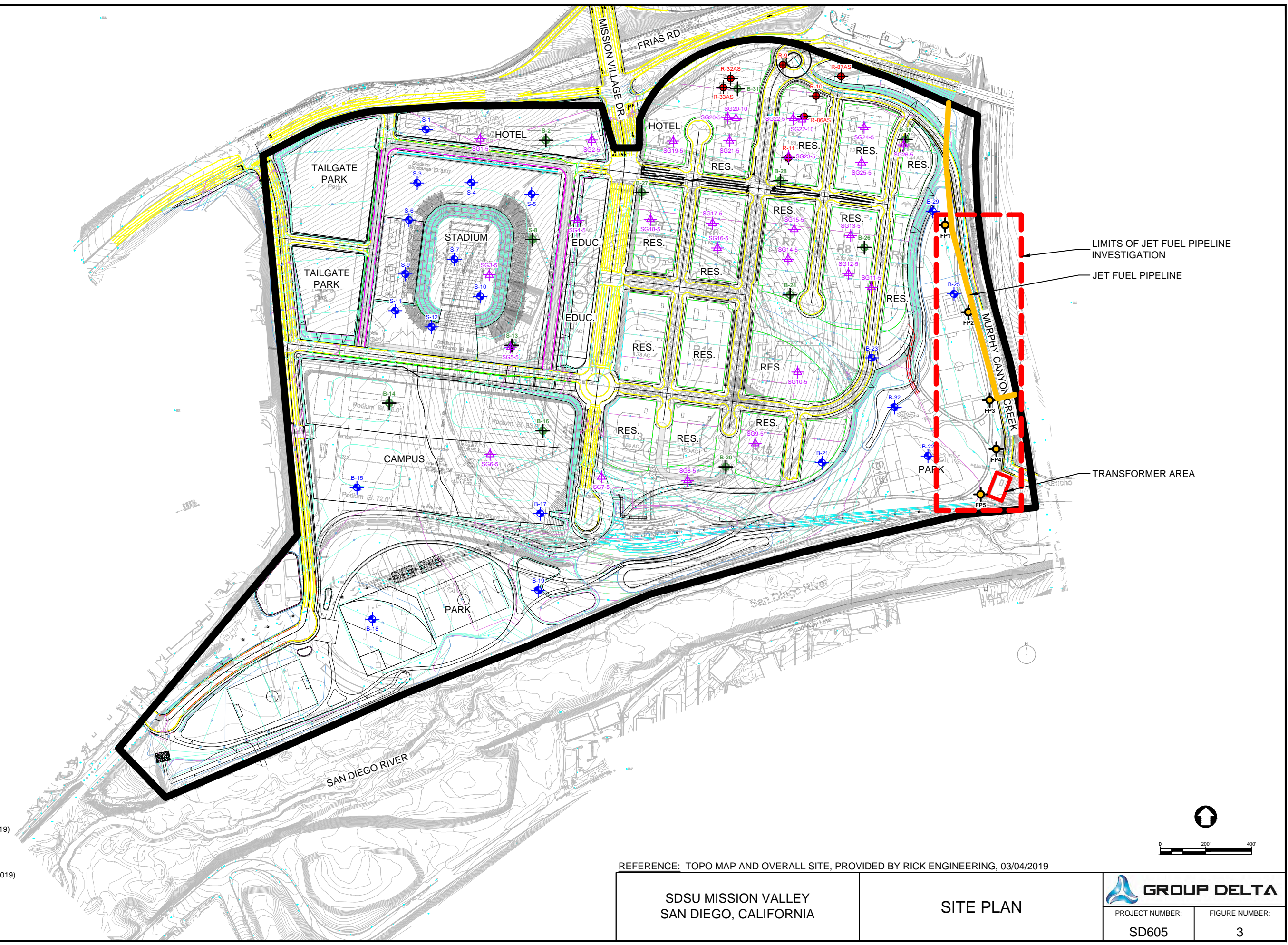







SDSU MISSION VALLEY
SAN DIEGO, CALIFORNIA

PROPOSED
DEVELOPMENT

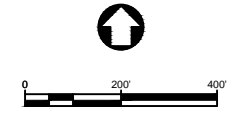
 GROUP DELTA	
PROJECT NUMBER: SD605	FIGURE NUMBER: 2

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- LEGEND:**
-  GEOTECHNICAL BORING LOCATIONS (GROUP DELTA, 2019)
 -  GEOTECHNICAL AND ENVIRONMENTAL BORING LOCATIONS (GROUP DELTA, 2019)
 -  MONITORING WELL LOCATIONS (SELECTED, PRE EXISTING)
 -  SOIL GAS LOCATIONS (GROUP DELTA, 2019)
 -  ENVIRONMENTAL BORING LOCATION JET FUEL PIPELINE INVESTIGATION (GROUP DELTA, 2019)

REFERENCE: TOPO MAP AND OVERALL SITE, PROVIDED BY RICK ENGINEERING, 03/04/2019



SDSU MISSION VALLEY SAN DIEGO, CALIFORNIA		SITE PLAN	
PROJECT NUMBER: SD605	FIGURE NUMBER: 3		

TABLES

Table 1
 TPH in Soil Analytical Results
 Jet Fuel Pipeline Investigation
 San Diego State University- Mission Valley
 San Diego, California

Boring Number	Sample Depth (feet bgs)	Sample Date	C4-C5	C6	C7	C8	C9-C10	C11-C12	TPH-GRO Total	C13-C14	C15-C16	C17-C18	C19-C20	C21-C22	TPH-DRO Total	C23-C24	C25-C26	C27-C28
FP1	10.0	4/30/2019	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	<0.099	2.8 J	<5.0	<5.0	<5.0	<5.0	2.8	<5.0	<5.0	<5.0
FP2	8.0	4/30/2019	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<0.095	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
FP3	9.0	4/30/2019	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	<0.091	<5.0	<5.0	<5.0	<5.0	1.4 J	1.4	<5.0	<5.0	<5.0
FP4	7.0	4/30/2019	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<0.097	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
FP5	8.0	4/30/2019	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.7 J	<5.0	<5.0	<5.0	3.0 J	4.8	6.5	11	22

Notes:

- bgs below ground surface
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline Range Organics
- DRO Diesel Range Organics
- J results greater than or equal to method detection limit, but less than reporting limit
- Bold** indicates detected concentration
- <0.0 not detected above the indicated reporting limit

All analyses completed using US EPA Test Method 8015B.

All results shown in milligrams per kilogram (mg/kg).

Table 2
 VOCs in Soil Analytical Results
 Jet Fuel Pipeline Investigation
 San Diego State University- Mission Valley
 San Diego, California

Boring Number	Sample Depth (feet bgs)	Sample Date	Acetone	Benzene	Ethylbenzene	Methyl-t-Butyl Ether	Tert-Butyl Alcohol	Toluene	p/m-Xylene	o-Xylene
FP1	10.0	4/30/2019	<46	<0.92	<0.92	<1.8	<18	<0.92	<1.8	<0.92
FP2	8.0	4/30/2019	<60	<1.2	<1.2	<2.4	<24	<1.2	<2.4	<1.2
FP3	9.0	4/30/2019	<46	<0.93	<0.93	<1.9	<19	<0.93	<1.9	<0.93
FP4	7.0	4/30/2019	46	<0.85	<0.85	<1.7	<17	<0.85	<1.7	<0.85
FP5	8.0	4/30/2019	<43	<0.87	<0.87	<1.7	<17	<0.87	<1.7	<0.87

Notes:

bgs below ground surface

Bold indicates detected concentration

<0.0 not detected above the indicated reporting limit

All analyses completed using US EPA Test Method 8260B.

All results shown in micrograms per kilogram (µg/kg).

Table 3
 TPH in Groundwater Analytical Results
 Jet Fuel Pipeline Investigation
 San Diego State University- Mission Valley
 San Diego, California

Boring Number	Groundwater Depth (feet bgs)	Sample Date	C4-C5	C6	C7	C8	C9-C10	C11-C12	TPH-GRO Total	C13-C14	C15-C16	C17-C18	C19-C20	C21-C22	TPH-DRO Total	C23-C24	C25-C26	C27-C28
FP1	13.0	4/30/2019	<50	<50	<50	<50	<50	<50	26 J	30 J	34 J	15 J	<46	<46	79	<46	<46	<46
FP2	10.0	4/30/2019	<50	<50	<50	<50	<50	<50	<50	27 J	49	21 J	16 J	16 J	130	<45	<45	<45
FP3	10.0	4/30/2019	<50	<50	<50	<50	<50	<50	<50	<45	<45	<45	<45	<45	<50	<45	16 J	16 J
FP4	8.0	4/30/2019	<50	<50	<50	<50	<50	<50	<50	<46	<46	<46	<46	<46	<50	<46	<46	<46
FP5	9.0	4/30/2019	<50	<50	<50	<50	<50	<50	<50	<45	<45	<45	<45	<45	<50	<45	<45	<45

Notes:

- bgs below ground surface
- TPH Total Petroleum Hydrocarbons
- GRO Gasoline Range Organics
- DRO Diesel Range Organics
- J results greater than or equal to method detection limit, but less than reporting limit
- Bold** indicates detected concentration
- <0.0 not detected above the indicated reporting limit

All analyses completed using US EPA Test Method 8015B.
 All results shown in micrograms per liter (µg/L).

Table 4
 VOCs in Groundwater Analytical Results
 Jet Fuel Pipeline Investigation
 San Diego State University- Mission Valley
 San Diego, California

Boring Number	Groundwater Depth (feet bgs)	Sample Date	Acetone	Benzene	Ethylbenzene	Methyl-t-Butyl Ether	Tert-Butyl Alcohol	Toluene	p/m-Xylene	o-Xylene
FP1	13.0	4/30/2019	<20	<1.0	<1.0	<1.0	<10	<1.0	<2.0	<1.0
FP2	10.0	4/30/2019	<20	<1.0	<1.0	<1.0	<10	<1.0	<2.0	<1.0
FP3	10.0	4/30/2019	<20	<1.0	<1.0	<1.0	<10	<1.0	<2.0	<1.0
FP4	8.0	4/30/2019	<20	<1.0	<1.0	<1.0	<10	<1.0	<2.0	<1.0
FP5	9.0	4/30/2019	<20	<1.0	<1.0	<1.0	<10	<1.0	<2.0	<1.0

Notes:

- bgs below ground surface
- Bold** indicates detected concentration
- <0.0 not detected above the indicated reporting limit

All analyses completed using US EPA Test Method 8260B.

All results shown in micrograms per liter (µg/L).

APPENDIX A

BORING CONSTRUCTION PERMIT



PERMIT #: LMWP-003944
A.P.N. #: 433-250-13, 16
EST #: None

**COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION
MONITORING WELL PROGRAM**

BORING CONSTRUCTION PERMIT

SITE NAME: SDCCU STADIUM

SITE ADDRESS: 9449 FRIARS ROAD, SAN DIEGO 92108

PERMIT FOR: CONSTRUCTION OF SOIL BORINGS (5)

PERMIT APPROVAL DATE: 4/23/2019

PERMIT EXPIRES ON: 8/21/2019

RESPONSIBLE PARTY: CITY OF SAN DIEGO

PERMIT CONDITIONS:

1. All borings must be sealed from the bottom of the boring to the ground surface with an approved sealing material as specified in California Well Standards Bulletin 74-90, Part III, Section 19.D. **Drill cuttings are not an acceptable fill material. Bentonite slurries are not an acceptable fill material in the unsaturated zone.**
2. All borings must be properly destroyed within 24 hours of drilling.
3. Placement of any sealing material at a depth greater than 30 feet must be done using the tremie method.
4. This work is not connected to any known unauthorized release of hazardous substances. Any contamination found in the course of drilling and sampling must be reported to DEH. All water and soil resulting from the activities covered by this permit must be managed, stored and disposed of as specified in the SAM Manual in Section 5, II, D-4. In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.
5. Within 60 days of completing work, submit a well construction report, including all well and/or boring logs and laboratory data to the Well Permit Desk. This report must include all items required by the SAM Manual, Section 5, Pages 6 & 7.
6. This office must be given 24-hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at (858) 505-6688.

NOTE: This permit does not constitute approval of a work plan as defined in Section 2722 of Article 11 of C.C.R., Title 23. Work plans are required for all unauthorized release investigations in San Diego County.

APPROVED BY: _____
Jon Senaha
Jon Senaha

DATE: 4/23/2019



**PERMIT APPLICATION
GROUNDWATER
AND VADOSE MONITORING WELLS
AND EXPLORATORY OR TEST BORINGS**

OFFICE USE ONLY	
PERMIT LMWP#	<u>003944</u>
SAM CASE Y/N #	<u>None</u>
DATE RECEIVED:	<u>4/23/2019</u>
FEE PAID:	<u>\$483.00</u>
CHECK #	<u>Online</u>

A. RESPONSIBLE PARTY City of San Diego E-mail ThompsonC@sandiego.gov
 (The person, persons, or company responsible for the construction, maintenance, and destruction of the proposed borings and/or wells.)
 Mailing Address 1200 Third Avenue, Suite 1700 City San Diego State CA Zip 92101
 Contact Person Cybele L. Thompson Phone (619) 236-6145 Ext. _____

B. SITE ASSESSMENT PROJECT NUMBER – IF APPLICABLE # _____

C. CONSULTING FIRM Group Delta Consultants, Inc.
 Mailing Address 9245 Activity Road, Suite 103 City San Diego State CA Zip 92126
 Registered Professional Alexandre Santini Phone 310-310-5686 Registration # C 83963 (RCE, CEG, PG)
 E-mail alexandres@groupdelta.com Circle if applicable
 Contact Person Alexandre Santini Phone 310-310-5686 Ext. _____ Email alexandres@groupdelta.com

D. DRILLING COMPANY Millennium Environmental, Inc. C57# 876595
 Contact Name Andrew Gerardo E-mail agerardo@millennium-env.com
 Mailing Address 2936 East Coronado Street City Anaheim State CA Zip 92806
 Phone (714) 238-1122 Ext. _____

E. CONSTRUCTION INFORMATION

TYPE OF WELLS/ BORINGS TO BE CONSTRUCTED	MATERIALS TO BE USED		PROPOSED CONSTRUCTION		
#	CASING	SEAL/BORING BACKFILL			
<input type="checkbox"/> Groundwater _____	Not Applicable <input checked="" type="checkbox"/> Type _____ Gauge _____ Diameter _____ Well Screen Size _____ Filter Pack _____	<input checked="" type="checkbox"/> Neat Cement <input checked="" type="checkbox"/> Cement & Bentonite <input type="checkbox"/> Sand-Cement <input checked="" type="checkbox"/> Bentonite <input type="checkbox"/> Other Borehole diameter <u>3"</u>	Estimated Groundwater Depth: <u>9 to 12</u> ft.		
<input type="checkbox"/> Vadose _____			Drilling Method <input type="checkbox"/> Auger <input checked="" type="checkbox"/> Direct Push <input type="checkbox"/> Other _____	Estimated Depth of Boring: <u>15</u> ft.	
<input checked="" type="checkbox"/> Boring <u>5</u>				<input type="checkbox"/> Air Rotary	Concrete Seal: <u>0</u> to <u>3</u>
<input type="checkbox"/> Soil Vapor _____				<input type="checkbox"/> Sonic	Annular Seal: <u>3</u> to <u>15</u>
<input type="checkbox"/> Other _____				<input type="checkbox"/> Percussion	Filter Pack: _____ to _____
NUMBER OF WELLS TO BE DESTROYED			Perforation: _____ to _____		
<input type="checkbox"/> Destruction _____			NOTE: Attach a well construction diagram		

I agree to comply with the requirements of the current Site Assessment and Mitigation Manual, and with all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction.

DRILLER'S SIGNATURE  DATE 4/16/19

Within 60 days of completion, I will furnish the Monitoring Well Permit Desk (858) 505-6688 with a complete well/boring log. I will certify the design and construction or destruction of the well/borings in accordance with the permit application.

PG/RCE/CEG SIGNATURE  DATE 4/16/19

F. SITE INFORMATION - A Property Owner Consent agreement is required for all applications, except for onsite, open LOP/SAM site assessment cases, Caltrans properties and military properties. Submit a separate sheet for additional parcels.

1. ASSESSOR'S PARCEL NUMBER 433-250-16-00 & 433-250-13-00

Site Name SDCCU Stadium

Site Address 9449 Friars Road City San Diego Zip 92108

PROPERTY OWNER City of San Diego

Phone (619) 236-6145 Ext. _____ Fax (619) 236-6706

Mailing Address 1200 Third Avenue, Suite 1700 City San Diego State CA Zip 92101

NUMBER OF WELLS 5 **TYPE OF WELLS** Soil borings with Hydropunch (direct push)

2. ASSESSOR'S PARCEL NUMBER _____

Site Address _____ City _____ Zip _____

PROPERTY OWNER _____

Phone _____ Ext. _____ Fax _____

Mailing Address _____ City _____ State _____ Zip _____

NUMBER OF WELLS _____ **TYPE OF WELLS** _____

G. QUESTIONNAIRE: Please answer all applicable questions completely and submit any required supportive documentation.

1. What is the purpose of the well/boring investigation?
 - a. Part of an ongoing site assessment case in which a government regulator is the lead agency. If yes, indicate which government regulator is the lead agency and the case number.

DEH	RWQCB	DTSC
 - b. Part of a Phase I investigation for property ownership transfer.
 - c. Geotechnical investigation for proposed construction or land stabilization.
 - d. Other: Due diligence environmental investigation.

2. If wells are to be destroyed, provide a description of method of destruction NA

3. Are you proposing a variation from current SAM Manual Requirements for the construction or destruction of borings, Vadose and/or Groundwater Monitoring Wells? If yes, specify these variations and include a well construction diagram and all required supporting documentation. Refer to the [SAM Manual Appendix B](#) for monitoring well guidelines. Yes No

H. FEES		
ACTIVITY	FEE SCHEDULE	AMOUNT
Permit for Well Installations Only <i>(Groundwater Monitoring Wells, Vapor Extraction Wells)</i>	\$351.00 for the first monitoring well	\$351.00 _____
	\$224.00 for each additional well installation	___ x \$224.00 _____
Permit for Borings Only <i>(CPT's, Hydropunch, Geoprobes, Temporary Well Points, etc.)</i>	\$235.00 for the first boring	\$235.00 <u>\$235.00</u>
	\$62.00 for each additional boring	<u>4</u> x \$ 62.00 <u>\$248.00</u>
Permit for Well Destructions Only	\$235.00 for the first destruction	\$235.00 _____
	\$143.00 for each additional destruction	___ x \$143.00 _____
Permit for any Combination of Well Installations, Borings, & Destructions <i>(Except Enhanced Leak Detection & Soil Vapor Survey)</i>	First Activity: \$351.00 (if monitoring wells will be installed)	\$351.00 _____
	OR	OR
	\$235.00 (for borings and destructions only)	\$235.00 _____
	\$224.00 for each additional well	___ x \$224.00 _____
	\$62.00 for each additional boring	___ x \$ 62.00 _____
	\$143.00 for each additional well destruction	___ x \$143.00 _____
Permit for Soil Vapor Survey <i>(Vadose Monitoring Wells)</i>	\$388.00 (flat fee per site)	\$388.00 _____
Permit for Enhanced Leak Detection	\$368.00 (flat fee per site)	\$368.00 _____
	TOTAL COST OF PERMIT	\$ \$483.00



County of San Diego

ELISE ROTHCHILD
DIRECTOR

DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
(858)505-6688
www.sdcdeh.org

AMY HARBERT
ASSISTANT DIRECTOR

PROPERTY OWNER CONSENT

Proposed locations for subsurface work:

Property Address:

Assessor's Parcel Number (APN):

9449 Friars Road, San Diego, California 92108-1718

433-250-16-00 & 433-250-13-00

I, Cybele L. Thompson, owner of the property/properties listed above, give my permission to

Group Delta Consultants/Millennium Environmental (consulting company, contractor) to conduct the following work at the locations stated above.

Install _____ monitoring wells Destroy _____ monitoring wells Drill 5 soil borings

I understand that Alexandre Santini (registered professional) of Group Delta Consultants (consulting company) and an authorized signer for Millennium Environmental (drilling company) have submitted a signed application to the Department of Environmental Health in which they have agreed to complete the above-stated work according the requirements of the current SAM Manual, all ordinances and laws of the County of San Diego and the State of California pertaining to well/boring construction and destruction. I have arranged with the Responsible Party, the person who causes to have monitoring wells/borings installed or existing wells destroyed on this property, to ensure proper closure of the monitoring wells/borings.

Property Owner Signature:  Date: 9/19/19

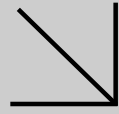
Print Name: Cybele L. Thompson Title: Director of Real Estate Assessts

Company: City of San Diego

Mailing Address: 1200 Third Avenue, Suite 1700, San Diego, CA 92101

APPENDIX B

LABORATORY ANALYTICAL REPORT



WORK ORDER NUMBER: 19-04-2362

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Group Delta Consultants, Inc.

Client Project Name: SDSU Mission Valley / SD605

Attention: Alex Santini
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Vikas Patel

Approved for release on 05/08/2019 by:
Vikas Patel
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience (Calscience) certifies that the test results provided in this report meet all NELAC Institute requirements for parameters for which accreditation is required or available. Any exceptions to NELAC Institute requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.

Contents

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 Work Order Number: 19-04-2362

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Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 04/30/19. They were assigned to Work Order 19-04-2362.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Sample Summary

Client: Group Delta Consultants, Inc.	Work Order:	19-04-2362
370 Amapola Avenue, Suite 212	Project Name:	SDSU Mission Valley / SD605
Torrance, CA 90501-7243	PO Number:	SD605.05
	Date/Time Received:	04/30/19 17:00
	Number of Containers:	67

Attn: Alex Santini

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
TB-043019	19-04-2362-1	04/30/19 08:00	2	Aqueous
FP1-ENV-10	19-04-2362-2	04/30/19 08:30	7	Solid
FP1-ENV-GW	19-04-2362-3	04/30/19 08:40	6	Aqueous
FP2-ENV-8	19-04-2362-4	04/30/19 09:30	7	Solid
FP2-ENV-GW	19-04-2362-5	04/30/19 09:45	6	Aqueous
FP3-ENV-9	19-04-2362-6	04/30/19 10:15	7	Solid
FP3-ENV-GW	19-04-2362-7	04/30/19 10:20	6	Aqueous
FP4-ENV-7	19-04-2362-8	04/30/19 10:45	7	Solid
FP4-ENV-GW	19-04-2362-9	04/30/19 10:50	6	Aqueous
FP5-ENV-8	19-04-2362-10	04/30/19 11:15	7	Solid
FP5-ENV-GW	19-04-2362-11	04/30/19 11:30	6	Aqueous

Detections Summary

Client: Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Work Order: 19-04-2362
 Project Name: SDSU Mission Valley / SD605
 Received: 04/30/19

Attn: Alex Santini

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Client SampleID

<u>Analyte</u>	<u>Result</u>	<u>Qualifiers</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Extraction</u>
FP1-ENV-10 (19-04-2362-2)						
C13-C14	2.8	J	1.2*	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C22 TPH Diesel Range	2.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
FP1-ENV-GW (19-04-2362-3)						
C13-C14	30	J	15*	ug/L	EPA 8015B (M)	EPA 3510C
C15-C16	34	J	15*	ug/L	EPA 8015B (M)	EPA 3510C
C17-C18	15	J	15*	ug/L	EPA 8015B (M)	EPA 3510C
C13-C22 TPH Diesel Range	79		50	ug/L	EPA 8015B (M)	EPA 3510C
GRO (C4-C12) Total	26	J	18*	ug/L	EPA 8015B (M)	EPA 5030C
FP2-ENV-GW (19-04-2362-5)						
C13-C14	27	J	14*	ug/L	EPA 8015B (M)	EPA 3510C
C15-C16	49		45	ug/L	EPA 8015B (M)	EPA 3510C
C17-C18	21	J	14*	ug/L	EPA 8015B (M)	EPA 3510C
C19-C20	16	J	14*	ug/L	EPA 8015B (M)	EPA 3510C
C21-C22	16	J	14*	ug/L	EPA 8015B (M)	EPA 3510C
C13-C22 TPH Diesel Range	130		50	ug/L	EPA 8015B (M)	EPA 3510C
FP3-ENV-9 (19-04-2362-6)						
C21-C22	1.4	J	1.3*	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C22 TPH Diesel Range	1.4		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
FP3-ENV-GW (19-04-2362-7)						
C25-C26	16	J	14*	ug/L	EPA 8015B (M)	EPA 3510C
C27-C28	16	J	14*	ug/L	EPA 8015B (M)	EPA 3510C
FP4-ENV-7 (19-04-2362-8)						
Acetone	46		42	ug/kg	EPA 8260B	EPA 5035
FP5-ENV-8 (19-04-2362-10)						
C13-C14	1.7	J	1.2*	mg/kg	EPA 8015B (M)	EPA 3550B
C21-C22	3.0	J	1.2*	mg/kg	EPA 8015B (M)	EPA 3550B
C23-C24	6.5		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C25-C26	11		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C27-C28	22		5.0	mg/kg	EPA 8015B (M)	EPA 3550B
C13-C22 TPH Diesel Range	4.8		5.0	mg/kg	EPA 8015B (M)	EPA 3550B

Subcontracted analyses, if any, are not included in this summary.

* MDL is shown

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 3510C
 Method: EPA 8015B (M)
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP1-ENV-GW	19-04-2362-3-F	04/30/19 08:40	Aqueous	GC 47	05/02/19	05/03/19 14:23	190502B01B

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	30	46	15	1.00	J
C15-C16	34	46	15	1.00	J
C17-C18	15	46	15	1.00	J
C19-C20	ND	46	15	1.00	
C21-C22	ND	46	15	1.00	
C23-C24	ND	46	15	1.00	
C25-C26	ND	46	15	1.00	
C27-C28	ND	46	15	1.00	
C13-C22 TPH Diesel Range	79	50	16	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	70	68-140	

FP2-ENV-GW	19-04-2362-5-F	04/30/19 09:45	Aqueous	GC 47	05/02/19	05/03/19 14:44	190502B01B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	27	45	14	1.00	J
C15-C16	49	45	14	1.00	
C17-C18	21	45	14	1.00	J
C19-C20	16	45	14	1.00	J
C21-C22	16	45	14	1.00	J
C23-C24	ND	45	14	1.00	
C25-C26	ND	45	14	1.00	
C27-C28	ND	45	14	1.00	
C13-C22 TPH Diesel Range	130	50	16	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 3510C
 Method: EPA 8015B (M)
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP3-ENV-GW	19-04-2362-7-F	04/30/19 10:20	Aqueous	GC 47	05/02/19	05/03/19 18:38	190502B01B

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	45	14	1.00	
C15-C16	ND	45	14	1.00	
C17-C18	ND	45	14	1.00	
C19-C20	ND	45	14	1.00	
C21-C22	ND	45	14	1.00	
C23-C24	ND	45	14	1.00	
C25-C26	16	45	14	1.00	J
C27-C28	16	45	14	1.00	J
C13-C22 TPH Diesel Range	ND	50	16	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	86	68-140	

FP4-ENV-GW	19-04-2362-9-F	04/30/19 10:50	Aqueous	GC 47	05/02/19	05/03/19 15:27	190502B01B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	46	15	1.00	
C15-C16	ND	46	15	1.00	
C17-C18	ND	46	15	1.00	
C19-C20	ND	46	15	1.00	
C21-C22	ND	46	15	1.00	
C23-C24	ND	46	15	1.00	
C25-C26	ND	46	15	1.00	
C27-C28	ND	46	15	1.00	
C13-C22 TPH Diesel Range	ND	50	16	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	102	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 3510C
 Method: EPA 8015B (M)
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP5-ENV-GW	19-04-2362-11-F	04/30/19 11:30	Aqueous	GC 47	05/02/19	05/03/19 15:48	190502B01B

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	45	14	1.00	
C15-C16	ND	45	14	1.00	
C17-C18	ND	45	14	1.00	
C19-C20	ND	45	14	1.00	
C21-C22	ND	45	14	1.00	
C23-C24	ND	45	14	1.00	
C25-C26	ND	45	14	1.00	
C27-C28	ND	45	14	1.00	
C13-C22 TPH Diesel Range	ND	50	16	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	103	68-140	

Method Blank	099-15-542-401	N/A	Aqueous	GC 47	05/02/19	05/02/19 12:16	190502B01B
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	50	16	1.00	
C15-C16	ND	50	16	1.00	
C17-C18	ND	50	16	1.00	
C19-C20	ND	50	16	1.00	
C21-C22	ND	50	16	1.00	
C23-C24	ND	50	16	1.00	
C25-C26	ND	50	16	1.00	
C27-C28	ND	50	16	1.00	
C13-C22 TPH Diesel Range	ND	50	16	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	89	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 3550B
 Method: EPA 8015B (M)
 Units: mg/kg

Project: SDSU Mission Valley / SD605

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP1-ENV-10	19-04-2362-2-A	04/30/19 08:30	Solid	GC 50	05/03/19	05/03/19 21:44	190503B08C

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	2.8	5.0	1.2	1.00	J
C15-C16	ND	5.0	1.2	1.00	
C17-C18	ND	5.0	1.2	1.00	
C19-C20	ND	5.0	1.2	1.00	
C21-C22	ND	5.0	1.2	1.00	
C23-C24	ND	5.0	1.2	1.00	
C25-C26	ND	5.0	1.2	1.00	
C27-C28	ND	5.0	1.2	1.00	
C13-C22 TPH Diesel Range	2.8	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	99	68-140	

FP2-ENV-8	19-04-2362-4-A	04/30/19 09:30	Solid	GC 50	05/03/19	05/03/19 22:04	190503B08C
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	5.0	1.3	1.00	
C15-C16	ND	5.0	1.3	1.00	
C17-C18	ND	5.0	1.3	1.00	
C19-C20	ND	5.0	1.3	1.00	
C21-C22	ND	5.0	1.3	1.00	
C23-C24	ND	5.0	1.3	1.00	
C25-C26	ND	5.0	1.3	1.00	
C27-C28	ND	5.0	1.3	1.00	
C13-C22 TPH Diesel Range	ND	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	93	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 3550B
 Method: EPA 8015B (M)
 Units: mg/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP3-ENV-9	19-04-2362-6-A	04/30/19 10:15	Solid	GC 50	05/03/19	05/03/19 22:24	190503B08C

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	5.0	1.3	1.00	
C15-C16	ND	5.0	1.3	1.00	
C17-C18	ND	5.0	1.3	1.00	
C19-C20	ND	5.0	1.3	1.00	
C21-C22	1.4	5.0	1.3	1.00	J
C23-C24	ND	5.0	1.3	1.00	
C25-C26	ND	5.0	1.3	1.00	
C27-C28	ND	5.0	1.3	1.00	
C13-C22 TPH Diesel Range	1.4	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	68-140	

FP4-ENV-7	19-04-2362-8-A	04/30/19 10:45	Solid	GC 50	05/03/19	05/03/19 22:43	190503B08C
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	5.0	1.2	1.00	
C15-C16	ND	5.0	1.2	1.00	
C17-C18	ND	5.0	1.2	1.00	
C19-C20	ND	5.0	1.2	1.00	
C21-C22	ND	5.0	1.2	1.00	
C23-C24	ND	5.0	1.2	1.00	
C25-C26	ND	5.0	1.2	1.00	
C27-C28	ND	5.0	1.2	1.00	
C13-C22 TPH Diesel Range	ND	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	100	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 3550B
 Method: EPA 8015B (M)
 Units: mg/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP5-ENV-8	19-04-2362-10-A	04/30/19 11:15	Solid	GC 50	05/03/19	05/03/19 23:24	190503B08C

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	1.7	5.0	1.2	1.00	J
C15-C16	ND	5.0	1.2	1.00	
C17-C18	ND	5.0	1.2	1.00	
C19-C20	ND	5.0	1.2	1.00	
C21-C22	3.0	5.0	1.2	1.00	J
C23-C24	6.5	5.0	1.2	1.00	
C25-C26	11	5.0	1.2	1.00	
C27-C28	22	5.0	1.2	1.00	
C13-C22 TPH Diesel Range	4.8	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	68-140	

Method Blank	099-15-582-569	N/A	Solid	GC 50	05/03/19	05/03/19 16:23	190503B08C
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C13-C14	ND	5.0	1.3	1.00	
C15-C16	ND	5.0	1.3	1.00	
C17-C18	ND	5.0	1.3	1.00	
C19-C20	ND	5.0	1.3	1.00	
C21-C22	ND	5.0	1.3	1.00	
C23-C24	ND	5.0	1.3	1.00	
C25-C26	ND	5.0	1.3	1.00	
C27-C28	ND	5.0	1.3	1.00	
C13-C22 TPH Diesel Range	ND	5.0	1.3	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	68-140	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8015B (M)
 Units: mg/kg

Project: SDSU Mission Valley / SD605

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP1-ENV-10	19-04-2362-2-F	04/30/19 08:30	Solid	GC 4	04/30/19	05/01/19 17:13	190501L024

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	0.099	0.057	1.00	
C6	ND	0.099	0.030	1.00	
C7	ND	0.099	0.032	1.00	
C8	ND	0.099	0.033	1.00	
C9-C10	ND	0.099	0.036	1.00	
C11-C12	ND	0.099	0.031	1.00	
GRO (C4-C12) Total	ND	0.099	0.057	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	112	60-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP2-ENV-8	19-04-2362-4-F	04/30/19 09:30	Solid	GC 4	04/30/19	05/01/19 17:46	190501L024

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	0.095	0.055	1.00	
C6	ND	0.095	0.029	1.00	
C7	ND	0.095	0.030	1.00	
C8	ND	0.095	0.031	1.00	
C9-C10	ND	0.095	0.034	1.00	
C11-C12	ND	0.095	0.030	1.00	
GRO (C4-C12) Total	ND	0.095	0.055	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	107	60-126	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8015B (M)
 Units: mg/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP3-ENV-9	19-04-2362-6-F	04/30/19 10:15	Solid	GC 4	04/30/19	05/01/19 18:20	190501L024

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	0.091	0.052	1.00	
C6	ND	0.091	0.027	1.00	
C7	ND	0.091	0.029	1.00	
C8	ND	0.091	0.030	1.00	
C9-C10	ND	0.091	0.033	1.00	
C11-C12	ND	0.091	0.029	1.00	
GRO (C4-C12) Total	ND	0.091	0.052	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	111	60-126	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP4-ENV-7	19-04-2362-8-F	04/30/19 10:45	Solid	GC 4	04/30/19	05/01/19 18:54	190501L024

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	0.097	0.056	1.00	
C6	ND	0.097	0.029	1.00	
C7	ND	0.097	0.031	1.00	
C8	ND	0.097	0.032	1.00	
C9-C10	ND	0.097	0.035	1.00	
C11-C12	ND	0.097	0.030	1.00	
GRO (C4-C12) Total	ND	0.097	0.056	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	60-126	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8015B (M)
 Units: mg/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP5-ENV-8	19-04-2362-10-F	04/30/19 11:15	Solid	GC 4	04/30/19	05/01/19 19:28	190501L024

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	0.10	0.059	1.00	
C6	ND	0.10	0.031	1.00	
C7	ND	0.10	0.032	1.00	
C8	ND	0.10	0.034	1.00	
C9-C10	ND	0.10	0.037	1.00	
C11-C12	ND	0.10	0.032	1.00	
GRO (C4-C12) Total	ND	0.10	0.059	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	110	60-126	

Method Blank	099-13-043-922	N/A	Solid	GC 4	05/01/19	05/01/19 16:05	190501L024
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	0.10	0.058	1.00	
C6	ND	0.10	0.030	1.00	
C7	ND	0.10	0.032	1.00	
C8	ND	0.10	0.033	1.00	
C9-C10	ND	0.10	0.036	1.00	
C11-C12	ND	0.10	0.032	1.00	
GRO (C4-C12) Total	ND	0.10	0.058	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	60-126	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8015B (M)
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP1-ENV-GW	19-04-2362-3-D	04/30/19 08:40	Aqueous	GC 25	05/01/19	05/01/19 17:43	190501L047

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	50	15	1.00	
C6	ND	50	14	1.00	
C7	ND	50	15	1.00	
C8	ND	50	15	1.00	
C9-C10	ND	50	15	1.00	
C11-C12	ND	50	18	1.00	
GRO (C4-C12) Total	26	50	18	1.00	J

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	75	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP2-ENV-GW	19-04-2362-5-D	04/30/19 09:45	Aqueous	GC 25	05/01/19	05/01/19 18:17	190501L047

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	50	15	1.00	
C6	ND	50	14	1.00	
C7	ND	50	15	1.00	
C8	ND	50	15	1.00	
C9-C10	ND	50	15	1.00	
C11-C12	ND	50	18	1.00	
GRO (C4-C12) Total	ND	50	18	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	72	38-134	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8015B (M)
 Units: ug/L

Project: SDSU Mission Valley / SD605

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP3-ENV-GW	19-04-2362-7-D	04/30/19 10:20	Aqueous	GC 25	05/01/19	05/01/19 18:50	190501L047

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	50	15	1.00	
C6	ND	50	14	1.00	
C7	ND	50	15	1.00	
C8	ND	50	15	1.00	
C9-C10	ND	50	15	1.00	
C11-C12	ND	50	18	1.00	
GRO (C4-C12) Total	ND	50	18	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	68	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP4-ENV-GW	19-04-2362-9-D	04/30/19 10:50	Aqueous	GC 25	05/01/19	05/01/19 19:24	190501L047

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	50	15	1.00	
C6	ND	50	14	1.00	
C7	ND	50	15	1.00	
C8	ND	50	15	1.00	
C9-C10	ND	50	15	1.00	
C11-C12	ND	50	18	1.00	
GRO (C4-C12) Total	ND	50	18	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	72	38-134	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8015B (M)
 Units: ug/L

Project: SDSU Mission Valley / SD605

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP5-ENV-GW	19-04-2362-11-D	04/30/19 11:30	Aqueous	GC 25	05/01/19	05/01/19 19:57	190501L047

Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	50	15	1.00	
C6	ND	50	14	1.00	
C7	ND	50	15	1.00	
C8	ND	50	15	1.00	
C9-C10	ND	50	15	1.00	
C11-C12	ND	50	18	1.00	
GRO (C4-C12) Total	ND	50	18	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	72	38-134	

Method Blank	099-13-047-756	N/A	Aqueous	GC 25	05/01/19	05/01/19 13:47	190501L047
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Comment(s): - Results were evaluated to the MDL (DL), concentrations \geq to the MDL (DL) but $<$ RL (LOQ), if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qualifiers
C4-C5	ND	50	15	1.00	
C6	ND	50	14	1.00	
C7	ND	50	15	1.00	
C8	ND	50	15	1.00	
C9-C10	ND	50	15	1.00	
C11-C12	ND	50	18	1.00	
GRO (C4-C12) Total	ND	50	18	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	74	38-134	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
TB-043019	19-04-2362-1-A	04/30/19 08:00	Aqueous	GC/MS PP	05/04/19	05/04/19 22:27	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: SDSU Mission Valley / SD605		Page 2 of 21

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	95	77-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: SDSU Mission Valley / SD605		Page 3 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	100	80-128	
1,2-Dichloroethane-d4	100	80-129	
Toluene-d8	97	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP1-ENV-GW	19-04-2362-3-A	04/30/19 08:40	Aqueous	GC/MS PP	05/04/19	05/05/19 03:10	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	96	77-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: SDSU Mission Valley / SD605		Page 6 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	102	80-128	
1,2-Dichloroethane-d4	97	80-129	
Toluene-d8	98	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP2-ENV-GW	19-04-2362-5-A	04/30/19 09:45	Aqueous	GC/MS PP	05/04/19	05/05/19 03:42	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	95	77-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	100	80-128	
1,2-Dichloroethane-d4	99	80-129	
Toluene-d8	97	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP3-ENV-GW	19-04-2362-7-A	04/30/19 10:20	Aqueous	GC/MS PP	05/04/19	05/05/19 04:13	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	95	77-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	102	80-128	
1,2-Dichloroethane-d4	99	80-129	
Toluene-d8	97	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP4-ENV-GW	19-04-2362-9-A	04/30/19 10:50	Aqueous	GC/MS PP	05/04/19	05/05/19 04:45	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	95	77-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	100	80-128	
1,2-Dichloroethane-d4	98	80-129	
Toluene-d8	98	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP5-ENV-GW	19-04-2362-11-A	04/30/19 11:30	Aqueous	GC/MS PP	05/04/19	05/05/19 05:16	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	94	77-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	101	80-128	
1,2-Dichloroethane-d4	98	80-129	
Toluene-d8	97	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5030C
 Method: EPA 8260B
 Units: ug/L

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-14-001-28690	N/A	Aqueous	GC/MS PP	05/04/19	05/04/19 21:56	190504L016

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	20	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	50	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	5.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	10	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	5.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: SDSU Mission Valley / SD605		Page 20 of 21

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.0	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	10	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	1.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	2.0	1.00	
1,1,2,2-Tetrachloroethane	ND	10	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	1.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
Trichloroethene	ND	1.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	5.0	1.00	
1,2,4-Trimethylbenzene	ND	1.0	1.00	
1,3,5-Trimethylbenzene	ND	1.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	2.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	1.00	
Ethanol	ND	100	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	77-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	101	80-128	
1,2-Dichloroethane-d4	97	80-129	
Toluene-d8	97	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP1-ENV-10	19-04-2362-2-C	04/30/19 08:30	Solid	GC/MS QQ	04/30/19	05/03/19 19:35	190503L015

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	46	1.00	
Benzene	ND	0.92	1.00	
Bromobenzene	ND	0.92	1.00	
Bromochloromethane	ND	1.8	1.00	
Bromodichloromethane	ND	0.92	1.00	
Bromoform	ND	4.6	1.00	
Bromomethane	ND	18	1.00	
2-Butanone	ND	18	1.00	
n-Butylbenzene	ND	0.92	1.00	
sec-Butylbenzene	ND	0.92	1.00	
tert-Butylbenzene	ND	0.92	1.00	
Carbon Disulfide	ND	9.2	1.00	
Carbon Tetrachloride	ND	0.92	1.00	
Chlorobenzene	ND	0.92	1.00	
Chloroethane	ND	1.8	1.00	
Chloroform	ND	0.92	1.00	
Chloromethane	ND	18	1.00	
2-Chlorotoluene	ND	0.92	1.00	
4-Chlorotoluene	ND	0.92	1.00	
Dibromochloromethane	ND	1.8	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.6	1.00	
1,2-Dibromoethane	ND	0.92	1.00	
Dibromomethane	ND	0.92	1.00	
1,2-Dichlorobenzene	ND	0.92	1.00	
1,3-Dichlorobenzene	ND	0.92	1.00	
1,4-Dichlorobenzene	ND	0.92	1.00	
Dichlorodifluoromethane	ND	1.8	1.00	
1,1-Dichloroethane	ND	0.92	1.00	
1,2-Dichloroethane	ND	0.92	1.00	
1,1-Dichloroethene	ND	0.92	1.00	
c-1,2-Dichloroethene	ND	0.92	1.00	
t-1,2-Dichloroethene	ND	0.92	1.00	
1,2-Dichloropropane	ND	0.92	1.00	
1,3-Dichloropropane	ND	0.92	1.00	
2,2-Dichloropropane	ND	4.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.8	1.00	
c-1,3-Dichloropropene	ND	0.92	1.00	
t-1,3-Dichloropropene	ND	1.8	1.00	
Ethylbenzene	ND	0.92	1.00	
2-Hexanone	ND	18	1.00	
Isopropylbenzene	ND	0.92	1.00	
p-Isopropyltoluene	ND	0.92	1.00	
Methylene Chloride	ND	9.2	1.00	
4-Methyl-2-Pentanone	ND	18	1.00	
Naphthalene	ND	9.2	1.00	
n-Propylbenzene	ND	1.8	1.00	
Styrene	ND	0.92	1.00	
1,1,1,2-Tetrachloroethane	ND	0.92	1.00	
1,1,2,2-Tetrachloroethane	ND	1.8	1.00	
Tetrachloroethene	ND	0.92	1.00	
Toluene	ND	0.92	1.00	
1,2,3-Trichlorobenzene	ND	1.8	1.00	
1,2,4-Trichlorobenzene	ND	1.8	1.00	
1,1,1-Trichloroethane	ND	0.92	1.00	
1,1,2-Trichloroethane	ND	0.92	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.2	1.00	
Trichloroethene	ND	1.8	1.00	
Trichlorofluoromethane	ND	9.2	1.00	
1,2,3-Trichloropropane	ND	1.8	1.00	
1,2,4-Trimethylbenzene	ND	1.8	1.00	
1,3,5-Trimethylbenzene	ND	1.8	1.00	
Vinyl Acetate	ND	9.2	1.00	
Vinyl Chloride	ND	0.92	1.00	
p/m-Xylene	ND	1.8	1.00	
o-Xylene	ND	0.92	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	1.00	
Tert-Butyl Alcohol (TBA)	ND	18	1.00	
Diisopropyl Ether (DIPE)	ND	0.92	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.92	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.92	1.00	
Ethanol	ND	460	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: SDSU Mission Valley / SD605		Page 3 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	118	71-155	
Toluene-d8	102	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP2-ENV-8	19-04-2362-4-C	04/30/19 09:30	Solid	GC/MS QQ	04/30/19	05/03/19 20:04	190503L015

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	60	1.00	
Benzene	ND	1.2	1.00	
Bromobenzene	ND	1.2	1.00	
Bromochloromethane	ND	2.4	1.00	
Bromodichloromethane	ND	1.2	1.00	
Bromoform	ND	6.0	1.00	
Bromomethane	ND	24	1.00	
2-Butanone	ND	24	1.00	
n-Butylbenzene	ND	1.2	1.00	
sec-Butylbenzene	ND	1.2	1.00	
tert-Butylbenzene	ND	1.2	1.00	
Carbon Disulfide	ND	12	1.00	
Carbon Tetrachloride	ND	1.2	1.00	
Chlorobenzene	ND	1.2	1.00	
Chloroethane	ND	2.4	1.00	
Chloroform	ND	1.2	1.00	
Chloromethane	ND	24	1.00	
2-Chlorotoluene	ND	1.2	1.00	
4-Chlorotoluene	ND	1.2	1.00	
Dibromochloromethane	ND	2.4	1.00	
1,2-Dibromo-3-Chloropropane	ND	6.0	1.00	
1,2-Dibromoethane	ND	1.2	1.00	
Dibromomethane	ND	1.2	1.00	
1,2-Dichlorobenzene	ND	1.2	1.00	
1,3-Dichlorobenzene	ND	1.2	1.00	
1,4-Dichlorobenzene	ND	1.2	1.00	
Dichlorodifluoromethane	ND	2.4	1.00	
1,1-Dichloroethane	ND	1.2	1.00	
1,2-Dichloroethane	ND	1.2	1.00	
1,1-Dichloroethene	ND	1.2	1.00	
c-1,2-Dichloroethene	ND	1.2	1.00	
t-1,2-Dichloroethene	ND	1.2	1.00	
1,2-Dichloropropane	ND	1.2	1.00	
1,3-Dichloropropane	ND	1.2	1.00	
2,2-Dichloropropane	ND	6.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: SDSU Mission Valley / SD605		Page 5 of 21

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	2.4	1.00	
c-1,3-Dichloropropene	ND	1.2	1.00	
t-1,3-Dichloropropene	ND	2.4	1.00	
Ethylbenzene	ND	1.2	1.00	
2-Hexanone	ND	24	1.00	
Isopropylbenzene	ND	1.2	1.00	
p-Isopropyltoluene	ND	1.2	1.00	
Methylene Chloride	ND	12	1.00	
4-Methyl-2-Pentanone	ND	24	1.00	
Naphthalene	ND	12	1.00	
n-Propylbenzene	ND	2.4	1.00	
Styrene	ND	1.2	1.00	
1,1,1,2-Tetrachloroethane	ND	1.2	1.00	
1,1,2,2-Tetrachloroethane	ND	2.4	1.00	
Tetrachloroethene	ND	1.2	1.00	
Toluene	ND	1.2	1.00	
1,2,3-Trichlorobenzene	ND	2.4	1.00	
1,2,4-Trichlorobenzene	ND	2.4	1.00	
1,1,1-Trichloroethane	ND	1.2	1.00	
1,1,2-Trichloroethane	ND	1.2	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	12	1.00	
Trichloroethene	ND	2.4	1.00	
Trichlorofluoromethane	ND	12	1.00	
1,2,3-Trichloropropane	ND	2.4	1.00	
1,2,4-Trimethylbenzene	ND	2.4	1.00	
1,3,5-Trimethylbenzene	ND	2.4	1.00	
Vinyl Acetate	ND	12	1.00	
Vinyl Chloride	ND	1.2	1.00	
p/m-Xylene	ND	2.4	1.00	
o-Xylene	ND	1.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.4	1.00	
Tert-Butyl Alcohol (TBA)	ND	24	1.00	
Diisopropyl Ether (DIPE)	ND	1.2	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	1.2	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	1.2	1.00	
Ethanol	ND	600	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: SDSU Mission Valley / SD605		Page 6 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	108	79-133	
1,2-Dichloroethane-d4	120	71-155	
Toluene-d8	101	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP3-ENV-9	19-04-2362-6-C	04/30/19 10:15	Solid	GC/MS QQ	04/30/19	05/03/19 20:33	190503L015

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	46	1.00	
Benzene	ND	0.93	1.00	
Bromobenzene	ND	0.93	1.00	
Bromochloromethane	ND	1.9	1.00	
Bromodichloromethane	ND	0.93	1.00	
Bromoform	ND	4.6	1.00	
Bromomethane	ND	19	1.00	
2-Butanone	ND	19	1.00	
n-Butylbenzene	ND	0.93	1.00	
sec-Butylbenzene	ND	0.93	1.00	
tert-Butylbenzene	ND	0.93	1.00	
Carbon Disulfide	ND	9.3	1.00	
Carbon Tetrachloride	ND	0.93	1.00	
Chlorobenzene	ND	0.93	1.00	
Chloroethane	ND	1.9	1.00	
Chloroform	ND	0.93	1.00	
Chloromethane	ND	19	1.00	
2-Chlorotoluene	ND	0.93	1.00	
4-Chlorotoluene	ND	0.93	1.00	
Dibromochloromethane	ND	1.9	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.6	1.00	
1,2-Dibromoethane	ND	0.93	1.00	
Dibromomethane	ND	0.93	1.00	
1,2-Dichlorobenzene	ND	0.93	1.00	
1,3-Dichlorobenzene	ND	0.93	1.00	
1,4-Dichlorobenzene	ND	0.93	1.00	
Dichlorodifluoromethane	ND	1.9	1.00	
1,1-Dichloroethane	ND	0.93	1.00	
1,2-Dichloroethane	ND	0.93	1.00	
1,1-Dichloroethene	ND	0.93	1.00	
c-1,2-Dichloroethene	ND	0.93	1.00	
t-1,2-Dichloroethene	ND	0.93	1.00	
1,2-Dichloropropane	ND	0.93	1.00	
1,3-Dichloropropane	ND	0.93	1.00	
2,2-Dichloropropane	ND	4.6	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.9	1.00	
c-1,3-Dichloropropene	ND	0.93	1.00	
t-1,3-Dichloropropene	ND	1.9	1.00	
Ethylbenzene	ND	0.93	1.00	
2-Hexanone	ND	19	1.00	
Isopropylbenzene	ND	0.93	1.00	
p-Isopropyltoluene	ND	0.93	1.00	
Methylene Chloride	ND	9.3	1.00	
4-Methyl-2-Pentanone	ND	19	1.00	
Naphthalene	ND	9.3	1.00	
n-Propylbenzene	ND	1.9	1.00	
Styrene	ND	0.93	1.00	
1,1,1,2-Tetrachloroethane	ND	0.93	1.00	
1,1,2,2-Tetrachloroethane	ND	1.9	1.00	
Tetrachloroethene	ND	0.93	1.00	
Toluene	ND	0.93	1.00	
1,2,3-Trichlorobenzene	ND	1.9	1.00	
1,2,4-Trichlorobenzene	ND	1.9	1.00	
1,1,1-Trichloroethane	ND	0.93	1.00	
1,1,2-Trichloroethane	ND	0.93	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	9.3	1.00	
Trichloroethene	ND	1.9	1.00	
Trichlorofluoromethane	ND	9.3	1.00	
1,2,3-Trichloropropane	ND	1.9	1.00	
1,2,4-Trimethylbenzene	ND	1.9	1.00	
1,3,5-Trimethylbenzene	ND	1.9	1.00	
Vinyl Acetate	ND	9.3	1.00	
Vinyl Chloride	ND	0.93	1.00	
p/m-Xylene	ND	1.9	1.00	
o-Xylene	ND	0.93	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.9	1.00	
Tert-Butyl Alcohol (TBA)	ND	19	1.00	
Diisopropyl Ether (DIPE)	ND	0.93	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.93	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.93	1.00	
Ethanol	ND	460	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	109	79-133	
1,2-Dichloroethane-d4	119	71-155	
Toluene-d8	101	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP4-ENV-7	19-04-2362-8-C	04/30/19 10:45	Solid	GC/MS QQ	04/30/19	05/06/19 14:16	190506L015

Parameter	Result	RL	DF	Qualifiers
Acetone	46	42	1.00	
Benzene	ND	0.85	1.00	
Bromobenzene	ND	0.85	1.00	
Bromochloromethane	ND	1.7	1.00	
Bromodichloromethane	ND	0.85	1.00	
Bromoform	ND	4.2	1.00	
Bromomethane	ND	17	1.00	
2-Butanone	ND	17	1.00	
n-Butylbenzene	ND	0.85	1.00	
sec-Butylbenzene	ND	0.85	1.00	
tert-Butylbenzene	ND	0.85	1.00	
Carbon Disulfide	ND	8.5	1.00	
Carbon Tetrachloride	ND	0.85	1.00	
Chlorobenzene	ND	0.85	1.00	
Chloroethane	ND	1.7	1.00	
Chloroform	ND	0.85	1.00	
Chloromethane	ND	17	1.00	
2-Chlorotoluene	ND	0.85	1.00	
4-Chlorotoluene	ND	0.85	1.00	
Dibromochloromethane	ND	1.7	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.2	1.00	
1,2-Dibromoethane	ND	0.85	1.00	
Dibromomethane	ND	0.85	1.00	
1,2-Dichlorobenzene	ND	0.85	1.00	
1,3-Dichlorobenzene	ND	0.85	1.00	
1,4-Dichlorobenzene	ND	0.85	1.00	
Dichlorodifluoromethane	ND	1.7	1.00	
1,1-Dichloroethane	ND	0.85	1.00	
1,2-Dichloroethane	ND	0.85	1.00	
1,1-Dichloroethene	ND	0.85	1.00	
c-1,2-Dichloroethene	ND	0.85	1.00	
t-1,2-Dichloroethene	ND	0.85	1.00	
1,2-Dichloropropane	ND	0.85	1.00	
1,3-Dichloropropane	ND	0.85	1.00	
2,2-Dichloropropane	ND	4.2	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.7	1.00	
c-1,3-Dichloropropene	ND	0.85	1.00	
t-1,3-Dichloropropene	ND	1.7	1.00	
Ethylbenzene	ND	0.85	1.00	
2-Hexanone	ND	17	1.00	
Isopropylbenzene	ND	0.85	1.00	
p-Isopropyltoluene	ND	0.85	1.00	
Methylene Chloride	ND	8.5	1.00	
4-Methyl-2-Pentanone	ND	17	1.00	
Naphthalene	ND	8.5	1.00	
n-Propylbenzene	ND	1.7	1.00	
Styrene	ND	0.85	1.00	
1,1,1,2-Tetrachloroethane	ND	0.85	1.00	
1,1,2,2-Tetrachloroethane	ND	1.7	1.00	
Tetrachloroethene	ND	0.85	1.00	
Toluene	ND	0.85	1.00	
1,2,3-Trichlorobenzene	ND	1.7	1.00	
1,2,4-Trichlorobenzene	ND	1.7	1.00	
1,1,1-Trichloroethane	ND	0.85	1.00	
1,1,2-Trichloroethane	ND	0.85	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.5	1.00	
Trichloroethene	ND	1.7	1.00	
Trichlorofluoromethane	ND	8.5	1.00	
1,2,3-Trichloropropane	ND	1.7	1.00	
1,2,4-Trimethylbenzene	ND	1.7	1.00	
1,3,5-Trimethylbenzene	ND	1.7	1.00	
Vinyl Acetate	ND	8.5	1.00	
Vinyl Chloride	ND	0.85	1.00	
p/m-Xylene	ND	1.7	1.00	
o-Xylene	ND	0.85	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.7	1.00	
Tert-Butyl Alcohol (TBA)	ND	17	1.00	
Diisopropyl Ether (DIPE)	ND	0.85	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.85	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.85	1.00	
Ethanol	ND	420	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	100	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: SDSU Mission Valley / SD605		Page 12 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	105	79-133	
1,2-Dichloroethane-d4	115	71-155	
Toluene-d8	101	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
FP5-ENV-8	19-04-2362-10-C	04/30/19 11:15	Solid	GC/MS QQ	04/30/19	05/06/19 14:44	190506L015

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	43	1.00	
Benzene	ND	0.87	1.00	
Bromobenzene	ND	0.87	1.00	
Bromochloromethane	ND	1.7	1.00	
Bromodichloromethane	ND	0.87	1.00	
Bromoform	ND	4.3	1.00	
Bromomethane	ND	17	1.00	
2-Butanone	ND	17	1.00	
n-Butylbenzene	ND	0.87	1.00	
sec-Butylbenzene	ND	0.87	1.00	
tert-Butylbenzene	ND	0.87	1.00	
Carbon Disulfide	ND	8.7	1.00	
Carbon Tetrachloride	ND	0.87	1.00	
Chlorobenzene	ND	0.87	1.00	
Chloroethane	ND	1.7	1.00	
Chloroform	ND	0.87	1.00	
Chloromethane	ND	17	1.00	
2-Chlorotoluene	ND	0.87	1.00	
4-Chlorotoluene	ND	0.87	1.00	
Dibromochloromethane	ND	1.7	1.00	
1,2-Dibromo-3-Chloropropane	ND	4.3	1.00	
1,2-Dibromoethane	ND	0.87	1.00	
Dibromomethane	ND	0.87	1.00	
1,2-Dichlorobenzene	ND	0.87	1.00	
1,3-Dichlorobenzene	ND	0.87	1.00	
1,4-Dichlorobenzene	ND	0.87	1.00	
Dichlorodifluoromethane	ND	1.7	1.00	
1,1-Dichloroethane	ND	0.87	1.00	
1,2-Dichloroethane	ND	0.87	1.00	
1,1-Dichloroethene	ND	0.87	1.00	
c-1,2-Dichloroethene	ND	0.87	1.00	
t-1,2-Dichloroethene	ND	0.87	1.00	
1,2-Dichloropropane	ND	0.87	1.00	
1,3-Dichloropropane	ND	0.87	1.00	
2,2-Dichloropropane	ND	4.3	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	1.7	1.00	
c-1,3-Dichloropropene	ND	0.87	1.00	
t-1,3-Dichloropropene	ND	1.7	1.00	
Ethylbenzene	ND	0.87	1.00	
2-Hexanone	ND	17	1.00	
Isopropylbenzene	ND	0.87	1.00	
p-Isopropyltoluene	ND	0.87	1.00	
Methylene Chloride	ND	8.7	1.00	
4-Methyl-2-Pentanone	ND	17	1.00	
Naphthalene	ND	8.7	1.00	
n-Propylbenzene	ND	1.7	1.00	
Styrene	ND	0.87	1.00	
1,1,1,2-Tetrachloroethane	ND	0.87	1.00	
1,1,2,2-Tetrachloroethane	ND	1.7	1.00	
Tetrachloroethene	ND	0.87	1.00	
Toluene	ND	0.87	1.00	
1,2,3-Trichlorobenzene	ND	1.7	1.00	
1,2,4-Trichlorobenzene	ND	1.7	1.00	
1,1,1-Trichloroethane	ND	0.87	1.00	
1,1,2-Trichloroethane	ND	0.87	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	8.7	1.00	
Trichloroethene	ND	1.7	1.00	
Trichlorofluoromethane	ND	8.7	1.00	
1,2,3-Trichloropropane	ND	1.7	1.00	
1,2,4-Trimethylbenzene	ND	1.7	1.00	
1,3,5-Trimethylbenzene	ND	1.7	1.00	
Vinyl Acetate	ND	8.7	1.00	
Vinyl Chloride	ND	0.87	1.00	
p/m-Xylene	ND	1.7	1.00	
o-Xylene	ND	0.87	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.7	1.00	
Tert-Butyl Alcohol (TBA)	ND	17	1.00	
Diisopropyl Ether (DIPE)	ND	0.87	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.87	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.87	1.00	
Ethanol	ND	430	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	99	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5035
Method: EPA 8260B
Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	107	79-133	
1,2-Dichloroethane-d4	116	71-155	
Toluene-d8	100	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-025-31009	N/A	Solid	GC/MS QQ	05/03/19	05/03/19 11:53	190503L015

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	20	1.00	
Diisopropyl Ether (DIPE)	ND	1.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	1.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	1.0	1.00	
Ethanol	ND	500	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	98	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: SDSU Mission Valley / SD605		Page 18 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	101	79-133	
1,2-Dichloroethane-d4	104	71-155	
Toluene-d8	101	80-120	

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-025-31015	N/A	Solid	GC/MS QQ	05/06/19	05/06/19 11:52	190506L015

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	50	1.00	
Benzene	ND	1.0	1.00	
Bromobenzene	ND	1.0	1.00	
Bromochloromethane	ND	2.0	1.00	
Bromodichloromethane	ND	1.0	1.00	
Bromoform	ND	5.0	1.00	
Bromomethane	ND	20	1.00	
2-Butanone	ND	20	1.00	
n-Butylbenzene	ND	1.0	1.00	
sec-Butylbenzene	ND	1.0	1.00	
tert-Butylbenzene	ND	1.0	1.00	
Carbon Disulfide	ND	10	1.00	
Carbon Tetrachloride	ND	1.0	1.00	
Chlorobenzene	ND	1.0	1.00	
Chloroethane	ND	2.0	1.00	
Chloroform	ND	1.0	1.00	
Chloromethane	ND	20	1.00	
2-Chlorotoluene	ND	1.0	1.00	
4-Chlorotoluene	ND	1.0	1.00	
Dibromochloromethane	ND	2.0	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	1.0	1.00	
Dibromomethane	ND	1.0	1.00	
1,2-Dichlorobenzene	ND	1.0	1.00	
1,3-Dichlorobenzene	ND	1.0	1.00	
1,4-Dichlorobenzene	ND	1.0	1.00	
Dichlorodifluoromethane	ND	2.0	1.00	
1,1-Dichloroethane	ND	1.0	1.00	
1,2-Dichloroethane	ND	1.0	1.00	
1,1-Dichloroethene	ND	1.0	1.00	
c-1,2-Dichloroethene	ND	1.0	1.00	
t-1,2-Dichloroethene	ND	1.0	1.00	
1,2-Dichloropropane	ND	1.0	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	5.0	1.00	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B
 Units: ug/kg

Project: SDSU Mission Valley / SD605

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,1-Dichloropropene	ND	2.0	1.00	
c-1,3-Dichloropropene	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	2.0	1.00	
Ethylbenzene	ND	1.0	1.00	
2-Hexanone	ND	20	1.00	
Isopropylbenzene	ND	1.0	1.00	
p-Isopropyltoluene	ND	1.0	1.00	
Methylene Chloride	ND	10	1.00	
4-Methyl-2-Pentanone	ND	20	1.00	
Naphthalene	ND	10	1.00	
n-Propylbenzene	ND	2.0	1.00	
Styrene	ND	1.0	1.00	
1,1,1,2-Tetrachloroethane	ND	1.0	1.00	
1,1,2,2-Tetrachloroethane	ND	2.0	1.00	
Tetrachloroethene	ND	1.0	1.00	
Toluene	ND	1.0	1.00	
1,2,3-Trichlorobenzene	ND	2.0	1.00	
1,2,4-Trichlorobenzene	ND	2.0	1.00	
1,1,1-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloroethane	ND	1.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	1.00	
Trichloroethene	ND	2.0	1.00	
Trichlorofluoromethane	ND	10	1.00	
1,2,3-Trichloropropane	ND	2.0	1.00	
1,2,4-Trimethylbenzene	ND	2.0	1.00	
1,3,5-Trimethylbenzene	ND	2.0	1.00	
Vinyl Acetate	ND	10	1.00	
Vinyl Chloride	ND	1.0	1.00	
p/m-Xylene	ND	2.0	1.00	
o-Xylene	ND	1.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	1.00	
Tert-Butyl Alcohol (TBA)	ND	20	1.00	
Diisopropyl Ether (DIPE)	ND	1.0	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	1.0	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	1.0	1.00	
Ethanol	ND	500	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.

Analytical Report

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5035
	Method:	EPA 8260B
	Units:	ug/kg
Project: SDSU Mission Valley / SD605		Page 21 of 21

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	102	79-133	
1,2-Dichloroethane-d4	106	71-155	
Toluene-d8	100	80-120	



Calscience

Quality Control - Spike/Spike Duplicate

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
19-05-0206-1	Sample	Solid	GC 50	05/03/19	05/03/19 17:44	190503S08
19-05-0206-1	Matrix Spike	Solid	GC 50	05/03/19	05/03/19 17:02	190503S08
19-05-0206-1	Matrix Spike Duplicate	Solid	GC 50	05/03/19	05/03/19 17:22	190503S08

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	ND	400.0	366.7	92	369.7	92	64-130	1	0-15	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - Spike/Spike Duplicate

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
19-04-2219-1	Sample	Aqueous	GC 25	05/01/19	05/01/19 14:21	190501S020
19-04-2219-1	Matrix Spike	Aqueous	GC 25	05/01/19	05/01/19 14:54	190501S020
19-04-2219-1	Matrix Spike Duplicate	Aqueous	GC 25	05/01/19	05/01/19 15:28	190501S020

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
GRO (C4-C12) Total	ND	2000	2224	111	2238	112	68-122	1	0-25	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 3510C
Method: EPA 8015B (M)

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-542-401	LCS	Aqueous	GC 47	05/02/19	05/02/19 12:36	190502B01B			
099-15-542-401	LCSD	Aqueous	GC 47	05/02/19	05/02/19 12:58	190502B01B			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2150	107	2069	103	69-123	4	0-30	

Quality Control - LCS

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-15-582-569	LCS	Solid	GC 50	05/03/19	05/03/19 16:42	190503B08C
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Diesel		400.0	371.1	93	75-117	

Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5035
Method: EPA 8015B (M)

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-13-043-922	LCS	Solid	GC 4	05/01/19	05/01/19 14:24	190501L024			
099-13-043-922	LCSD	Solid	GC 4	05/01/19	05/01/19 14:57	190501L024			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
GRO (C4-C12) Total	2.000	1.764	88	1.596	80	55-139	10	0-25	

Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-13-047-756	LCS	Aqueous	GC 25	05/01/19	05/01/19 12:07	190501L047			
099-13-047-756	LCSD	Aqueous	GC 25	05/01/19	05/01/19 12:40	190501L047			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
GRO (C4-C12) Total	2000	2232	112	2223	111	78-120	0	0-25	



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Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix		Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-14-001-28690	LCS	Aqueous		GC/MS PP	05/04/19	05/04/19 19:50	190504L016			
099-14-001-28690	LCSD	Aqueous		GC/MS PP	05/04/19	05/04/19 20:21	190504L016			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Acetone	50.00	40.14	80	42.43	85	53-137	39-151	6	0-21	
Benzene	50.00	49.64	99	51.89	104	79-121	72-128	4	0-20	
Bromobenzene	50.00	53.63	107	56.03	112	80-120	73-127	4	0-20	
Bromochloromethane	50.00	54.09	108	54.78	110	80-122	73-129	1	0-20	
Bromodichloromethane	50.00	53.41	107	54.93	110	80-124	73-131	3	0-20	
Bromoform	50.00	49.56	99	51.67	103	73-127	64-136	4	0-20	
Bromomethane	50.00	41.97	84	43.27	87	50-150	33-167	3	0-26	
2-Butanone	50.00	42.60	85	42.79	86	60-126	49-137	0	0-20	
n-Butylbenzene	50.00	49.91	100	52.80	106	72-138	61-149	6	0-20	
sec-Butylbenzene	50.00	48.06	96	51.47	103	77-131	68-140	7	0-20	
tert-Butylbenzene	50.00	52.26	105	56.83	114	80-125	72-132	8	0-20	
Carbon Disulfide	50.00	51.14	102	53.31	107	50-150	33-167	4	0-22	
Carbon Tetrachloride	50.00	48.60	97	50.57	101	65-143	52-156	4	0-20	
Chlorobenzene	50.00	50.70	101	52.54	105	80-120	73-127	4	0-20	
Chloroethane	50.00	46.04	92	48.14	96	62-128	51-139	4	0-20	
Chloroform	50.00	50.19	100	51.79	104	80-120	73-127	3	0-20	
Chloromethane	50.00	42.19	84	43.83	88	43-133	28-148	4	0-20	
2-Chlorotoluene	50.00	52.83	106	55.33	111	80-121	73-128	5	0-20	
4-Chlorotoluene	50.00	49.72	99	52.18	104	80-120	73-127	5	0-20	
Dibromochloromethane	50.00	52.45	105	54.15	108	80-123	73-130	3	0-20	
1,2-Dibromo-3-Chloropropane	50.00	46.56	93	48.43	97	66-126	56-136	4	0-20	
1,2-Dibromoethane	50.00	53.11	106	54.32	109	80-120	73-127	2	0-20	
Dibromomethane	50.00	50.79	102	51.35	103	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	50.00	50.48	101	52.45	105	80-120	73-127	4	0-20	
1,3-Dichlorobenzene	50.00	49.39	99	52.45	105	80-120	73-127	6	0-20	
1,4-Dichlorobenzene	50.00	48.33	97	51.29	103	80-120	73-127	6	0-20	
Dichlorodifluoromethane	50.00	47.81	96	50.93	102	50-150	33-167	6	0-30	
1,1-Dichloroethane	50.00	43.25	86	44.82	90	72-126	63-135	4	0-20	
1,2-Dichloroethane	50.00	55.22	110	57.33	115	76-120	69-127	4	0-20	
1,1-Dichloroethene	50.00	52.71	105	54.87	110	66-132	55-143	4	0-20	
c-1,2-Dichloroethene	50.00	53.75	107	55.25	110	78-120	71-127	3	0-20	
t-1,2-Dichloroethene	50.00	50.84	102	52.55	105	66-132	55-143	3	0-20	
1,2-Dichloropropane	50.00	48.75	98	50.55	101	80-120	73-127	4	0-20	
1,3-Dichloropropane	50.00	49.37	99	50.61	101	80-120	73-127	2	0-20	
2,2-Dichloropropane	50.00	53.69	107	54.77	110	50-150	33-167	2	0-20	
1,1-Dichloropropene	50.00	49.33	99	51.06	102	75-123	67-131	3	0-20	

RPD: Relative Percent Difference. CL: Control Limits



Calscience

Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5030C
Method: EPA 8260B

Project: SDSU Mission Valley / SD605

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Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
c-1,3-Dichloropropene	50.00	50.02	100	51.61	103	77-131	68-140	3	0-20	
t-1,3-Dichloropropene	50.00	47.69	95	48.25	96	76-136	66-146	1	0-20	
Ethylbenzene	50.00	51.78	104	54.31	109	80-120	73-127	5	0-20	
2-Hexanone	50.00	45.44	91	46.59	93	63-123	53-133	2	0-20	
Isopropylbenzene	50.00	52.24	104	55.19	110	80-128	72-136	5	0-20	
p-Isopropyltoluene	50.00	50.61	101	54.03	108	73-133	63-143	7	0-20	
Methylene Chloride	50.00	48.68	97	50.01	100	61-133	49-145	3	0-27	
4-Methyl-2-Pentanone	50.00	45.24	90	47.67	95	65-125	55-135	5	0-20	
Naphthalene	50.00	44.63	89	45.95	92	69-129	59-139	3	0-20	
n-Propylbenzene	50.00	52.66	105	55.90	112	80-128	72-136	6	0-20	
Styrene	50.00	54.18	108	57.03	114	80-126	72-134	5	0-20	
1,1,1,2-Tetrachloroethane	50.00	54.55	109	55.94	112	80-129	72-137	3	0-20	
1,1,2,2-Tetrachloroethane	50.00	46.02	92	47.82	96	74-122	66-130	4	0-20	
Tetrachloroethene	50.00	38.63	77	35.44	71	55-139	41-153	9	0-23	
Toluene	50.00	49.93	100	52.96	106	80-120	73-127	6	0-20	
1,2,3-Trichlorobenzene	50.00	46.57	93	47.97	96	72-132	62-142	3	0-20	
1,2,4-Trichlorobenzene	50.00	48.81	98	51.24	102	74-134	64-144	5	0-20	
1,1,1-Trichloroethane	50.00	50.91	102	52.89	106	76-124	68-132	4	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	50.00	56.18	112	58.61	117	54-150	38-166	4	0-30	
1,1,2-Trichloroethane	50.00	51.18	102	52.41	105	80-120	73-127	2	0-20	
Trichloroethene	50.00	52.51	105	55.47	111	79-121	72-128	5	0-20	
Trichlorofluoromethane	50.00	53.64	107	55.48	111	72-132	62-142	3	0-20	
1,2,3-Trichloropropane	50.00	50.72	101	51.68	103	75-123	67-131	2	0-20	
1,2,4-Trimethylbenzene	50.00	48.99	98	51.87	104	74-128	65-137	6	0-20	
1,3,5-Trimethylbenzene	50.00	52.92	106	54.98	110	77-131	68-140	4	0-20	
Vinyl Acetate	50.00	62.68	125	64.74	129	50-150	33-167	3	0-20	
Vinyl Chloride	50.00	44.09	88	45.57	91	63-129	52-140	3	0-20	
p/m-Xylene	100.0	103.7	104	108.4	108	80-122	73-129	4	0-20	
o-Xylene	50.00	52.20	104	55.12	110	80-128	72-136	5	0-20	
Methyl-t-Butyl Ether (MTBE)	50.00	40.69	81	41.22	82	69-123	60-132	1	0-20	
Tert-Butyl Alcohol (TBA)	250.0	259.6	104	260.3	104	80-124	73-131	0	0-20	
Diisopropyl Ether (DIPE)	50.00	47.29	95	48.51	97	79-121	72-128	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	41.77	84	42.88	86	71-125	62-134	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	46.49	93	48.00	96	70-124	61-133	3	0-20	
Ethanol	500.0	580.3	116	532.3	106	53-149	37-165	9	0-24	

Total number of LCS compounds: 71

Total number of ME compounds: 0

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Group Delta Consultants, Inc.	Date Received:	04/30/19
370 Amapola Avenue, Suite 212	Work Order:	19-04-2362
Torrance, CA 90501-7243	Preparation:	EPA 5030C
	Method:	EPA 8260B
Project: SDSU Mission Valley / SD605		Page 7 of 9

Total number of ME compounds allowed: 4
LCS ME CL validation result: Pass


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Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
370 Amapola Avenue, Suite 212
Torrance, CA 90501-7243

Date Received: 04/30/19
Work Order: 19-04-2362
Preparation: EPA 5035
Method: EPA 8260B

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
095-01-025-31009	LCS	Solid	GC/MS QQ	05/03/19	05/03/19 10:18	190503L015				
095-01-025-31009	LCSD	Solid	GC/MS QQ	05/03/19	05/03/19 10:47	190503L015				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	50.50	101	49.73	99	80-120	73-127	2	0-20	
Carbon Tetrachloride	50.00	54.28	109	52.43	105	65-137	53-149	3	0-20	
Chlorobenzene	50.00	50.08	100	49.26	99	80-120	73-127	2	0-20	
1,2-Dibromoethane	50.00	51.35	103	51.64	103	80-120	73-127	1	0-20	
1,2-Dichlorobenzene	50.00	51.48	103	51.17	102	80-120	73-127	1	0-20	
1,2-Dichloroethane	50.00	51.45	103	50.82	102	80-120	73-127	1	0-20	
1,1-Dichloroethene	50.00	53.05	106	52.63	105	68-128	58-138	1	0-20	
Ethylbenzene	50.00	53.54	107	52.30	105	80-120	73-127	2	0-20	
Toluene	50.00	51.18	102	50.18	100	80-120	73-127	2	0-20	
Trichloroethene	50.00	49.86	100	48.99	98	80-120	73-127	2	0-20	
Vinyl Chloride	50.00	46.57	93	45.24	90	67-127	57-137	3	0-20	
p/m-Xylene	100.0	110.8	111	108.2	108	75-125	67-133	2	0-25	
o-Xylene	50.00	52.51	105	51.49	103	75-125	67-133	2	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	43.68	87	43.85	88	70-124	61-133	0	0-20	
Tert-Butyl Alcohol (TBA)	250.0	258.3	103	248.5	99	73-121	65-129	4	0-20	
Diisopropyl Ether (DIPE)	50.00	50.69	101	50.44	101	69-129	59-139	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	47.40	95	47.72	95	70-124	61-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	51.47	103	51.98	104	74-122	66-130	1	0-20	
Ethanol	500.0	559.0	112	515.2	103	51-135	37-149	8	0-27	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Quality Control - LCS/LCSD

Group Delta Consultants, Inc.
 370 Amapola Avenue, Suite 212
 Torrance, CA 90501-7243

Date Received: 04/30/19
 Work Order: 19-04-2362
 Preparation: EPA 5035
 Method: EPA 8260B

Project: SDSU Mission Valley / SD605

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
095-01-025-31015	LCS	Solid	GC/MS QQ	05/06/19	05/06/19 10:15	190506L015				
095-01-025-31015	LCSD	Solid	GC/MS QQ	05/06/19	05/06/19 10:44	190506L015				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	50.00	48.21	96	49.38	99	80-120	73-127	2	0-20	
Carbon Tetrachloride	50.00	51.78	104	52.95	106	65-137	53-149	2	0-20	
Chlorobenzene	50.00	47.15	94	48.98	98	80-120	73-127	4	0-20	
1,2-Dibromoethane	50.00	47.99	96	50.76	102	80-120	73-127	6	0-20	
1,2-Dichlorobenzene	50.00	48.22	96	50.55	101	80-120	73-127	5	0-20	
1,2-Dichloroethane	50.00	48.21	96	49.00	98	80-120	73-127	2	0-20	
1,1-Dichloroethene	50.00	51.51	103	53.15	106	68-128	58-138	3	0-20	
Ethylbenzene	50.00	50.47	101	52.22	104	80-120	73-127	3	0-20	
Toluene	50.00	48.96	98	50.31	101	80-120	73-127	3	0-20	
Trichloroethene	50.00	47.62	95	49.09	98	80-120	73-127	3	0-20	
Vinyl Chloride	50.00	49.24	98	48.33	97	67-127	57-137	2	0-20	
p/m-Xylene	100.0	104.5	105	107.7	108	75-125	67-133	3	0-25	
o-Xylene	50.00	49.61	99	51.56	103	75-125	67-133	4	0-25	
Methyl-t-Butyl Ether (MTBE)	50.00	42.56	85	44.23	88	70-124	61-133	4	0-20	
Tert-Butyl Alcohol (TBA)	250.0	234.2	94	238.7	95	73-121	65-129	2	0-20	
Diisopropyl Ether (DIPE)	50.00	49.17	98	51.17	102	69-129	59-139	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	50.00	45.86	92	47.73	95	70-124	61-133	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	50.00	49.20	98	51.67	103	74-122	66-130	5	0-20	
Ethanol	500.0	487.5	98	462.0	92	51-135	37-149	5	0-27	

Total number of LCS compounds: 19

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

RPD: Relative Percent Difference. CL: Control Limits

Sample Analysis Summary Report

Work Order: 19-04-2362

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<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8015B (M)	EPA 5035	607	GC 4	2
EPA 8015B (M)	EPA 3510C	972	GC 47	1
EPA 8015B (M)	EPA 3550B	972	GC 50	1
EPA 8015B (M)	EPA 5030C	1161	GC 25	2
EPA 8260B	EPA 5035	486	GC/MS QQ	2
EPA 8260B	EPA 5030C	1191	GC/MS PP	2

Glossary of Terms and Qualifiers

Work Order: 19-04-2362

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
CI	See case narrative.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.
	Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.
	A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.

Vikas Patel

From: Allison Bieda <allisonb@groupdelta.com>
Sent: Wednesday, May 01, 2019 9:50 AM
To: Erick Ovalle; Alexandre Santini
Cc: Vikas Patel
Subject: Re: SDSU Mission Valley / SD605.05 - 19-04-2362 - Sample Receipt Confirmation & COC Document

Hi Eric,
Solid samples are correct for those samples. I mismarked the COC and wrote H2O for all samples which is incorrect.
Thank you.
-Allison

Get [Outlook for iOS](#)

From: Erick Ovalle <erickovalle@eurofinsus.com>
Sent: Wednesday, May 1, 2019 9:48 AM
To: Alexandre Santini; Allison Bieda
Cc: Vikas Patel
Subject: SDSU Mission Valley / SD605.05 - 19-04-2362 - Sample Receipt Confirmation & COC Document

Mimecast Attachment Protection has deemed this file to be safe, but always exercise caution when opening files.

Sample receipt confirmation attached. Please review and advise of any changes required.

Sample 2,4,6,8,10: We received solid samples instead of water samples as listed on the COC.

**(-2), (-4), (-6), (-8), (-10) Matrix is solid.*

Please call with any questions or concerns.

Best Regards,
Erick Ovalle
Project Manager Assistant

Eurofins Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1427
USA
Phone: +1 (714) 895-5494

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Calscience

7440 Lincoln Way, Garden Grove, CA 92841-1427 • (714) 895-5494
For courier service / sample drop off information, contact us26_sales@eurofins.com or call us.

LABORATORY CLIENT: Group Delta Consultants, Inc.

ADDRESS: 9245 Activity Rd, Suite 103

CITY: San Diego

STATE: CA

ZIP: 92126

TEL: 858-536-1000

E-MAIL: alexandres@groupdelta.com

TURNAROUND TIME (Rush surcharges may apply to any TAT not 'STANDARD'):

SAME DAY 24 HR 48 HR 72 HR 5 DAYS STANDARD

COELT EDF

LOG CODE:

SPECIAL INSTRUCTIONS:

For the record ICP IEC concentration exceeds 100 ppb

CHAIN OF CUSTODY RECORD

DATE: 4/30/19 PAGE: 1 OF 2

WO # / LAB USE ONLY
19-04-2362

CLIENT PROJECT NAME / NUMBER:

SDSU Mission Valley

PROJECT CONTACT:

Alex Santini

P.O. NO.:

SD605 .05

SAMPLER(S): (PRINT)

A. Bieda

REQUESTED ANALYSES

Please check box or fill in blank as needed.

LAB USE ONLY	SAMPLE ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH(g) □ GRO	TPH(d) □ DRO	TPH C6-C8 □ C6-C14	TPH	BTEX / MTBE □ 8260	Oxygenates (8260)	Prep (5035) □ En Core □ Terra Core	SVOCs (8270)	Pesticides (8081)	PCBs (8082)	PAHs □ 8270 □ 8270 SIM	T22 Metals □ 6010/747X □ 6020/747X	Cr(VI) □ 7196 □ 7199 □ 218.6
1	TB-043019	4/30/19	0800	H ₂ O	2	X	X	X	X		X							
2	FP1-ENV-10		0830		7	X	X	X	X		X							
3	FP1-ENV-GW		0840		6	X	X	X	X		X							
4	FP2-ENV-8		0930		7	X	X	X	X		X							
5	FP2-ENV-GW		0945		6	X	X	X	X		X							
6	FP3-ENV 9		1015		7	X	X	X	X		X							
7	FP3-ENV-GW		1020		6	X	X	X	X		X							
8	FP4-ENV-7		1045		7	X	X	X	X		X							
9	FP4-ENV-GW		1050		6	X	X	X	X		X							
10	FP5-ENV-8		1115	↓	7	X	X	X	X		X							

Relinquished by: (Signature) *Allyson Bieda* Date: 4/30/19 Time: 13:20

Relinquished by: (Signature) *Danny* Date: 4/30/19 Time: 17:00

Relinquished by: (Signature) _____ Date: _____ Time: _____

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: GROUP DELTA

DATE: 04/30/2019

TEMPERATURE: (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)
 Thermometer ID: SC6 (CF: -0.2°C); Temperature (w/o CF): 3.7°C (w/ CF): 3.5°C; Blank Sample
 Sample(s) outside temperature criteria (PM/APM contacted by: _____)
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling
 Sample(s) received at ambient temperature; placed on ice for transport by courier
 Ambient Temperature: Air Filter
 Checked by: 671

CUSTODY SEAL:
 Cooler Present and Intact Present but Not Intact Not Present N/A Checked by: 671
 Sample(s) Present and Intact Present but Not Intact Not Present N/A Checked by: 1163

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Acid/base preserved samples - pH within acceptable range	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Container(s) for certain analysis free of headspace.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE: (5) (Trip Blank Lot Number: 190422A)
Aqueous: VOA VOAn VOAna₂ 100PJ 100PJna₂ 125AGB 125AGBh 125AGBp 125PB 125PBz₂na (pH__9)
 250AGB 250CGB 250CGBs (pH__2) 250PB 250PBn (pH__2) 500AGB 500AGJ 500AGJs (pH__2) 500PB
 1AGB 1AGBna₂ 1AGBs (pH__2) 1AGBs (O&G) 1PB 1PBna (pH__12) _____ _____ _____
Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (P) EnCores® (____) TerraCores® (6) _____ _____ _____
Air: Tedlar™ Canister Sorbent Tube PUF _____ **Other Matrix** (____): _____ _____ _____
 Container: **A** = Amber, **B** = Bottle, **C** = Clear, **E** = Envelope, **G** = Glass, **J** = Jar, **P** = Plastic, and **Z** = Ziploc/Resealable Bag
 Preservative: **b** = buffered, **f** = filtered, **h** = HCl, **n** = HNO₃, **na** = NaOH, **na₂** = Na₂S₂O₃, **p** = H₃PO₄, Labeled/Checked by: 1163
s = H₂SO₄, **u** = ultra-pure, **x** = Na₂SO₃+NaHSO₄.H₂O, **z₂na** = Zn (CH₃CO₂)₂ + NaOH Reviewed by: smk

SAMPLE ANOMALY REPORT

DATE: 04/30/2019

SAMPLES, CONTAINERS, AND LABELS:

- Sample(s) NOT RECEIVED but listed on COC
- Sample(s) received but NOT LISTED on COC
- Holding time expired (list client or ECI sample ID and analysis)
- Insufficient sample amount for requested analysis (list analysis)
- Improper container(s) used (list analysis)
- Improper preservative used (list analysis)
- pH outside acceptable range (list analysis)
- No preservative noted on COC or label (list analysis and notify lab)
- Sample container(s) not labeled
- Client sample label(s) illegible (list container type and analysis)
- Client sample label(s) do not match COC (comment)
 - Project information
 - Client sample ID
 - Sampling date and/or time
 - Number of container(s)
 - Requested analysis
- Sample container(s) compromised (comment)
 - Broken
 - Water present in sample container
- Air sample container(s) compromised (comment)
 - Flat
 - Very low in volume
 - Leaking (not transferred; duplicate bag submitted)
 - Leaking (transferred into ECI Tedlar™ bags*)
 - Leaking (transferred into client's Tedlar™ bags*)

* Transferred at client's request.

Comments

*(-2), (-4), (-6), (-8), (-10) Matrix is solid.

MISCELLANEOUS: (Describe)

HEADSPACE:

(Containers with bubble > 6 mm or ¼ inch for volatile organic or dissolved gas analysis)

ECI Sample ID	ECI Container ID	Total Number**	ECI Sample ID	ECI Container ID	Total Number**

(Containers with bubble for other analysis)

ECI Sample ID	ECI Container ID	Total Number**	Requested Analysis

Comments: * Matrix

Comments

Reported by: 876
Reviewed by: 1763

** Record the total number of containers (i.e., vials or bottles) for the affected sample.

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